

Workshop Report on Higher Education Science and Curriculum Reforms: African Universities Responding to HIV and AIDS

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African Women
in Science and Engineering

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Executive Summary

The workshop on “Higher Education Science and Curriculum Reform: African Universities Responding to HIV/AIDS” was jointly organized by UNESCO’s Regional Bureau for Science in Nairobi and African Women in Science and Engineering (AWSE). The main purpose of the workshop was to share information and learn from the experiences from different African universities in view of addressing the need for the universities to respond to the impact of HIV/AIDS through curriculum reforms.

The three-day workshop brought together Deans of Faculties of Science and Engineering and coordinators of AIDS Control Units (ACU) from 22 African universities. Participating countries included Botswana, Eritrea, Ghana, Kenya and Rwanda.

The theme of the workshop fell within the wider UNESCO project on Prevention Education for African universities which seek to create awareness among the Faculties of Science and Engineering on the need and importance of responding to the impacts of HIV/AIDS and finding long lasting solutions to the pandemic.

The programme provided a forum where HIV/AIDS response approach measures and the role of African university scientists were shared. The participating universities made presentations on the various activities that they are involved in under their respective AIDS Control Units (ACUs). Universities that had already initiated efforts in integrating and mainstreaming HIV/AIDS common courses into their Biological, Physical and Technical Science curricular also had the opportunity to have their courses reviewed.

List of Abbreviations

ACU	AIDS Control Unit
AIDS	Acquired Immuno-deficiency Syndrome
ARV	Anti-retroviral
ART	Anti-retroviral Therapy
AVU	African Virtual University
AWSE	African Women in Science and Engineering
CBO	Community Based Organization
EDUCAIDS	The Global Initiative on Education and HIV & AIDS
ELWHA	Educators Living With HIV/AIDS
HIV/AIDS	Human Immuno-deficiency Virus
IBE	International Bureau of Education
IIEP	International Institute for Educational Planning
IAVI	International AIDS Vaccine Initiative
IDU	Injection Drug Use
JKUAT	Jomo Kenyatta University of Agriculture and Technology
KENWA	Kenya Women against AIDS
KU	Kenyatta University
NACC	National AIDS Control Council
NASCOP	National AIDS/STDs Control Programme
NGO	Non-Governmental Organization
PEP	Post Exposure Prophylaxis
PLWHA	People Living With HIV/AIDS
PMTCT	Prevention of Mother-to-child Transmission
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
VCT	Voluntary Counselling and Testing
WOFKA	Women Fighting AIDS in Kenya
UCHAS	University Centre for HIV/AIDS Studies
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UON	University of Nairobi

1.0 Introduction

Universities are charged with the responsibility of producing professionals and skilled personnel needed for steering the development process. HIV/AIDS in the society has profoundly affected the education sector and especially the general economies of sub-Saharan African countries. The pandemic has also affected the African university population as a result of deaths from HIV/AIDS related illness. The university student population that largely comprises young people of the age ranging from 19 to 35 years are particularly vulnerable to HIV infection. It is unfortunate that many universities have failed to respond adequately to this alarming situation that confronts them. This is largely due to lack of HIV/AIDS policies, failure to commit sufficient resources to combat the epidemic and remaining silent on the issue.

The existence of HIV/AIDS in our society calls for universities to be pro-active in responding to the pandemic by virtue of the important role they play- producing professionals and skilled personnel through equipping them with knowledge. In order for universities to live up to their responsibilities in a world with AIDS, it requires the leadership to have a clear vision on the need to adjust their curricular with the view of ensuring the production of graduates with the necessary skills to enable them deal with the impacts of HIV/AIDS in the society. This should not only occur during the stay at the university as students but should go beyond in their future professional careers as engineers, mathematicians, scientists and leaders in general.

In cognizance of the above, the UNESCO Office in Nairobi in collaboration with African Women in Science and Engineering (AWSE) is working towards catalyzing a positive response by encouraging the involvement of faculties of Sciences and Engineering in African universities in mainstreaming HIV/AIDS into their programmes. The theme of the workshop fitted within the wider UNESCO's project on prevention education for African universities whose purpose is to create awareness among scientists and in particular within the faculties of Science and Engineering on the important role they have to play in reducing the prevalence of HIV/AIDS both within the university environment and in the wider society. The project also aims at building the university staff capacity in applying the concept of mainstreaming HIV/AIDS into their respective courses.

1.1 Workshop Overview

The three day workshop brought together Deans of faculties of Science and Engineering and coordinators of AIDS Control Units (ACU) from 22 African universities representing five countries- Botswana, Eritrea, Ghana, Kenya, Rwanda and Uganda. The aim of the workshop was to share experiences, learn about the concept of mainstreaming in the context of HIV/AIDS and the university environment, and identify specific entry levels for mainstreaming HIV/AIDS into engineering, physical and biological sciences as a way of enhancing prevention efforts for HIV/AIDS and responding to its impact. The workshop delivery methodology emphasized on interactive learning through presentation of HIV/AIDS activities at the institutions, compulsory university HIV/AIDS courses and the process of mainstreaming HIV/AIDS into their curricular with a focus on integration of HIV/AIDS into the physical, biological and engineering courses.

1.2 Workshop Objectives

The overall objectives of the workshop was to deliberate on how mainstreaming of HIV/AIDS into university curricular can be adopted as a concept and applied in engineering, biological and physical sciences in particular, to identify the most appropriate entry levels for the integration of HIV/AIDS into these courses and to brainstorm on how to enhance prevention and impact mitigation efforts at the universities.

The specific objectives

- To improve science and health education in African universities and communities
- To confront the HIV/AIDS epidemic through curricular review in universities, especially in science and engineering programmes
- To sensitize scientists and engineers on the need for common and mainstreamed undergraduate courses on HIV/AIDS within their faculties
- To build the capacity of scientists and engineers on how to develop common HIV/AIDS undergraduate courses by exposing them to what other universities have done in this area
- To provide a platform for strategic planning by scientists and engineers on the best way of mainstreaming HIV/AIDS into their courses

2.0 Opening Ceremony

Chair of the session, Prof Caroline Lang'at-Thoruwa, Secretary, AWSE

Prof. Caroline Lang'at-Thoruwa, Secretary, African Women in Science and Engineering (AWSE) and the Director, Centre of Linkages & International Programmes at Kenyatta University, gave her opening remarks by welcoming the participants and thanked them for honouring the invitation by attending the workshop.

Prof. Mabel Imbuga, Chairperson of African Women in Science and Engineering (AWSE), also welcomed the guests and participants and acknowledged with appreciation the presence of distinguished guests who included; Prof. Joseph Massaquoi, the Director-UNESCO Office in Nairobi and Regional Bureau for Science in Africa; Prof. Michael Kelly (University of Zambia), a renowned crusader against HIV/AIDS who has published widely on HIV/AIDS and Education; Prof. Crispus Kiamba, Permanent Secretary at the Ministry of Science and Technology, Kenya; and Prof. Miriam Were, Chairperson, National Aids Control Council.

2.1 Workshop Background

The workshop was organized jointly by the UNESCO Office in Nairobi and Regional Bureau for Science in Africa, based in Nairobi, and African Women in Science and Engineering (AWSE). The workshop marked the beginning of the UNESCO/AWSE project on "African Universities Responding to HIV/AIDS through Faculties of Science and Engineering", as well as being a follow-up to two other workshops that had been organized by AWSE in the same context. The first two workshops targeted universities in Kenya and Tanzania.

Phase one of the AWSE project was implemented between 2001 and 2004 in collaboration with the American Association for the Advancement of Science (AAAS), the Association of American Colleges and Universities (AAC&U), International Women in Science and Engineering (IWISE), and Gender and Diversity Programme (G&D). Seven universities participated in this first phase of the project. The objective of this first phase was to discuss the extent and impacts of the HIV/AIDS crisis in East African universities and to review the response of the regional universities in formulating specific proposals to address areas where action by universities was needed most urgently. During that phase, only one university that was in Attendance-Kenyatta University had a curriculum in place. The course was titled HIV/AIDS and Drugs (UCU 105). Its purpose was to introduce the teaching of HIV/AIDS content to undergraduate students enrolled in the education programme.

During the second year of phase one of the project, some university management staff, professionals and lecturers were sponsored to attend the Science Education for New Civic Engagement and Responsibilities (SENCER) Institute at Santa Clara University in California, USA. The major outcome of this phase was the formulation of new undergraduate HIV/AIDS common courses

and the incorporation of HIV/AIDS content into existing courses in a number of universities that participated.

Phase two of the project in the last quarter of 2005 was also implemented by AWSE in collaboration with the Commission for Higher Education (CHE). This culminated in a workshop on “Higher Education Science and Curriculum Reforms: Kenyan Universities Responding to HIV/AIDS”. This second phase aimed at confronting the HIV/AIDS pandemic through integration of HIV/AIDS into common undergraduate courses that were taught in Kenyan universities. Three strategic common courses were identified as the most suitable areas for initiating integration of HIV/AIDS into the university curricular. These were;

- Communication skills
- Development studies
- Entrepreneurial skills

These courses were favoured because they are offered in most public and private universities in Kenya. This was in line with the Ministry of Education’s HIV/AIDS policy that encouraged mainstreaming of HIV/AIDS into the curricular of institutions of higher education. The two workshops under phase one and two provided a forum for universities to discuss their curricula together for the very first time ever and allowed them to identify best practices for curricular reforms.

It was realized during these workshops that confronting HIV/AIDS through curricular reforms was not a silver bullet and should therefore not be adopted in isolation. Other interventions such as innovative prevention methods and sensitisation were also critical for the achievement of positive and effective impact in confronting the AIDS pandemic.

Phase three of the project was designed by UNESCO in collaboration with AWSE. This was primarily to catalyze activities in several African universities in their response to the HIV/AIDS pandemic.

HIV/AIDS is traditionally taught in subjects such as medical courses, microbiology, pharmacy among others in many African universities, however, a large number of students who are not enrolled in these courses, including those in other natural science and engineering subjects are being left out. It is therefore essential to ensure that these students are empowered through curricular reforms that will allow them gain the correct information and facts about HIV/AIDS. This project proposes to introduce HIV/AIDS courses to science and engineering students both as a common undergraduate course and also as an integrated topic within their respective course units.

2.2 Opening Remarks

Prof. Joseph Massaquoi, the Director-UNESCO Office in Nairobi and Regional Bureau for Science in Africa welcomed the invited guests and participants to the workshop and gladly noted the importance of the broad geographical country representation. He congratulated the workshop organizers-AWSE for the initiative to address curricular reforms in institutions of higher education in the region. The Director acknowledged with appreciation the choice of the theme that was described as timely and in line with the research activities and discussions on curricular reforms that were ongoing within the higher education sector. Prof. Massaquoi pointed out that the challenge ahead was to increase the participation of those involved in higher education to maintain high quality to meet international standards and human resource development against the backdrop of the impacts of HIV/AIDS. HIV/AIDS was noted to have the potential of destroying education but in turn, education if properly used had the potential to greatly weaken the pandemic and contribute to its eradication.

The Director reminded the participants that the impacts of HIV/AIDS are experienced daily at the universities and need to be addressed as a matter of urgency. He noted that for a long time, HIV/AIDS had been treated principally as a health problem, a fact that had resulted in excessive focus on medical solutions without putting emphasis on other approaches in the fight against the epidemic.

HIV/AIDS is both an educational as well as an economic issue hence the need to approach finding solutions from different perspectives. Prof. Massaquoi was happy to note that many of the participating institutions of higher education recognized the need to address HIV/AIDS as an institutional problem and had gone ahead to develop clear institutional guidelines and policies to enhance HIV/AIDS prevention and to mitigate its impacts..

The participants were reminded of their fundamental responsibility to prevent the spread of HIV/AIDS, not just in the universities but also in the society at large. The institutions of higher education were urged to consider the following points in their bid to respond to the pandemic:

- No university is immune to HIV/AIDS and therefore no university can consider itself as an AIDS-free enclave. All universities are part of the same society that is living and experiencing the impact of HIV/AIDS. Universities host a tremendous number of young people who are most vulnerable to HIV infections in terms of their age group.
- HIV/AIDS has the potential to impair the institutional functioning of a university in the same way that it undermines the operations of other learning institutions. This is seen in increased student and staff deaths, reduced staff and student productivity in some pertinent areas, and increased financial costs arising from HIV/AIDS related impacts.
- The incubation period between the initial HIV infection and the development of full-blown disease has major implications for universities. Universities may be successful in producing qualified individuals but HIV/AIDS may undermine this accomplishment through the premature deaths of the young graduates.
- Universities have a mandate to serve the society through the generation and provision of knowledge, understandings and expertise that are mandatory and necessary to the needs of the society. This automatically demands their engagement with HIV/AIDS related issues.
- Universities have the special responsibility of developing human resources and must therefore ensure that institutions produce graduates in the areas of expertise needed by an AIDS-affected society. This calls for the introduction of new areas of professional training to respond to emerging needs in such a society.
- As with all other institutions that have a leadership role, universities have a crucial role to play in the eradication of every form of stigma and discrimination in the society.
- Universities have the intellectual resources and traditions to support the development of deeper understandings of HIV/AIDS. Such efforts have led to the understanding of HIV as a virus and AIDS as a biomedical condition. This has led to the development of antiretroviral therapies. However, more still needs to be done in order to save humanity.
- HIV/AIDS is with us, it is here to stay and is devastating Africa. Universities must therefore come to terms with this fact and do all they can to develop the human resources needed to replenish what has been lost to the disease as well as coming up with innovations that are geared towards controlling, preventing and if possible eliminating the disease.

The UNESCO Director pointed out that it was in recognition of these points that UNESCO's Regional Bureau for Science in Africa chose to focus its attention on HIV/AIDS prevention education on the faculties of Science and Engineering and to ensure that these faculties are not left behind in addressing HIV/AIDS issues. He reiterated that the project did not just involve creating awareness in the faculties of Science and Engineering but also building the capacity of the lecturers in HIV/AIDS prevention and impact mitigation, thus enhancing ability to control the epidemic. Universities are thus charged with the responsibility of imparting knowledge and influencing cultures, behaviour and lifestyles that seem to promote the spread of the disease. He appealed for the participants to recall the above points and appreciate the need for their involvement as faculty members. He further urged them to join hands in fighting the scourge, so as to protect themselves, the students and the brains within the universities and thereby ensure sustainability of knowledge transfer.

2.3 Key Note Address

In welcoming the keynote speaker, Prof. Michael J. Kelly, a Zambian Jesuit Priest and a world-renowned expert in addressing HIV/AIDS through the education sector, Prof. Lang'at-Thoruwa congratulated him on his recent award from the Irish Government in recognition of his life contribution in the fight against HIV/AIDS. The keynote address provided an overview of HIV/AIDS issues that formed the basis for discussion during the 3-day workshop.

2.3.1 Renewing the Response Approach to HIV and AIDS

Presenter: Prof. Michael J. Kelly

The keynote address gave an overview of HIV/AIDS issues covering the severity of the AIDS crisis, the global HIV/AIDS dynamics and some statistics of the situation in Kenya. As at 2004, approximately 1.27 million persons in Kenya were estimated to be HIV positive. At almost five percent, the infection rates among young women aged between 15 to 24 years was relatively high as compared to that of their male counterparts of the same ages, which was less than one percent. He commended the achievement that Kenya had made through tirelessly fighting the pandemic that have resulted to the reduction of the prevalence rate from about ten percent in the 1990s to seven percent in 2005. Despite this national decline in prevalence rate, the global pandemic is still out of hand due to its nature and its fast progression than was anticipated. This could be attributed to insufficient leadership, lack of vision, absence of a sense of urgency, and the influence of global factors that compromise national ability to control the spread of the disease. It is important to re-examine the current approaches and begin considering the issues from a broader perspective.

The major factors driving the pandemic are poverty, gender disparities, human rights violation (especially stigma and discrimination), and exploitative global socio-economic structures and practices arising from constraints imposed by international financing institutions, World Trade Organization arrangements such as the Trade Related Aspects of Intellectual Property Rights (TRIPS), youth unemployment, and brain drain. The presenter likened HIV/AIDS to a tree that could not be killed by destroying its surface roots, but only by getting at the deep roots which are the core causes of the disease. In the case of HIV and AIDS, the surface roots include engaging in unprotected sex, direct contact with infected blood, mother-to-child transmission, and intravenous drug use (IDU). These are the areas that have attracted attention since the disease was first discovered about two and half decades ago. It is evident that less attention has been given to the underlying and structural causes of gender inequity, poverty, stigmatization and discrimination, and various global socio-economic structures and practices. This is not to undermine the establishment of effective strategies to address sexual transmission as a way of reversing the trends of the disease in sub Saharan Africa and elsewhere. There is need to go further and understand the nature of the disease- whether it is essentially a health problem, a human behavioural problem, or a development problem to enable staging a successful efforts to combat the disease.

Some of the questions that need urgent answers include; accounting for the difference in mother-to-child transmission rates in Africa and Europe. Prior to the advent of treatment, this stood at 35% in Africa but only 14% in Europe. This suggests that the extensive transmission rate in Africa might be as a result of the conditions of mothers-to-be and not necessarily with sexual practices among the African population. The very low statistical risk of heterosexual transmission also suggests that if there is so much HIV in Africa, sexual practice is not the only contributing factor. In fact it would be hypothetical to assume that Africa's high rates of HIV infections are as a result of poverty than sexual practice. The presenter demystified HIV/AIDS as a disease of poor countries by pointing to Botswana and South Africa, which have very high prevalence rates despite the fact that they are among the wealthiest countries in sub Saharan Africa. The fact still remains that poor people are more vulnerable to the risk of HIV/AIDS and the disease makes the poor poorer. However, poverty should not be used as a blanket term but needs to be unpacked in terms of the health conditions both of the person who is transmitting and the one contracting the virus.

On HIV/AIDS and women, Prof. Kelly stressed that more effort should be directed to women and HIV/AIDS. Statistics place the percentage of women who are infected by the disease at about 57%. The situation in Kenya is even worse with 65% of those infected being women. He noted that injustices to women have helped sustain the epidemic throughout the world and especially in Africa. No response to the AIDS epidemic would succeed until robust, sustained and specific action was taken to reduce and ultimately eliminate the prejudice, discrimination and unjust treatment that women have been subjected to. Without a frontal attack on the injustice of gender inequality, the dominance of the epidemic would certainly continue to affect more women in the society.

The challenge is therefore to encourage institutions of higher education to generate knowledge, undertake research and disseminate information as well as strive to mainstream HIV/AIDS into their policies, research, teaching and service delivery. In addition, as the brain cells of the national think-tanks they must explore every facet of the epidemic and be ready to come forward with new solutions and approaches. Where current approaches have not yielded positive results, higher education institutions must say so and come up with other innovative alternatives. In this way, they would be taking a significant lead in combating the epidemic.

Remark: The presentation was acknowledged as having provoked in-depth thinking thereby setting the pace for discussions during the 3-day workshop.

2.4 Guest Speaker's Address

The guest speaker, Prof. Crispus Kiamba-the Permanent Secretary, Ministry of Science and Technology, Kenya, thanked UNESCO for sponsoring the workshop and welcomed all participants and urged the international participants to feel at home in Kenya.

He reiterated the fact that HIV/AIDS has been acknowledged as one of the challenges that higher education in sub-Sahara Africa is facing. The region is leading in the statistics of prevalence rates in the continent, being home to 60% of all people living with AIDS (PLWA). Institutions of higher education have not been spared by the scourge and have not responded effectively to the pandemic. He expressed confidence that the workshop would give the necessary sensitization to African universities on HIV/AIDS issues.

The Permanent Secretary acknowledged UNESCO's efforts in enhancing prevention education. He appreciated the efforts of the University of Nairobi in the development of the Education Sector HIV/AIDS policy through the courtesy of UNESCO. This resulted to the university developing its own institutional guidelines on how to manage and respond to the epidemic. The plenary was informed that the policy on protection of intellectual property rights of research on HIV vaccine initiated by University of Nairobi, had become a major international research project. More collaboration with University of Oxford, UK and other universities in the United States of America and Canada on HIV/AIDS research is ongoing. With Prof. Kiamba lauded the role of the Commission for Higher Education (CHE) in Kenya in coordinating activities geared towards supporting institutions of higher education in their response to HIV/AIDS. These include fund raising and technical support activities. This commitment to HIV/AIDS prevention was demonstrated in the Commission's support for Phase two of the AWSE project that culminated in the workshop on "Higher Education Science and Curriculum Reforms: Kenyan Universities Responding to HIV/AIDS". The objective of the workshop was to sensitize Vice-Chancellors of both public and private universities on the impacts of HIV/AIDS and the integration of the same into the undergraduate curricular.

UNESCO and AWSE's work in curricular development in Africa's universities was commendable and UNESCO was called upon to increase its role in providing further support for similar activities. The strong participation of women and men gave the workshop a fair gender representation that was necessary in building the capacities of the educators. The participants were encouraged to share experiences and pick out best practices during the workshop. Incorporation of HIV/AIDS into the

teaching curricular in the universities would certainly help in equipping students and the entire university personnel with necessary skills to curb the spread of the epidemic thereby reducing its impacts on the universities and the society at large.

As the Permanent Secretary in the Ministry of Science and Technology, Prof. Kiamba highlighted the mandate of the ministry as taking the responsibility of ensuring strategic exploration of science and technology, coordinates research activities in science, technology and innovation, and oversees the total integration of technical expertise in Kenya. The Ministry's commitment to support efforts that are geared towards understanding the dynamics of the disease and learning how to mitigate its impacts was also emphasized. He informed the workshop of the operations of the National Council of Science and Technology (NCST) and the fact that it is charged with the responsibility of ensuring the development of the HIV vaccine in Kenya. He encouraged mid-level and tertiary institutions to form working networks with universities with a view to enhancing possibilities for research, especially with support from organizations such as UNESCO. He also hoped for closer collaboration between the Ministry of Education, the Ministry of Science and Technology, and UNESCO both now and in the future. Prof. Kiamba wished the participants successful deliberations and expressed his optimism for the implementation of the recommendations from the workshop before declaring the workshop officially opened.

2.5 Vote of Thanks



Prof. Miriam Were, the Chairperson of the National Aids Control Council (NACC) thanked all the speakers for their words of wisdom and emphasized the importance of nurturing partnerships in an effort to respond to HIV/AIDS. A challenge was posed to universities to seek solutions to the HIV/AIDS problem. There was also a call for the universities

to change their mind-sets and shift from over-reliance on research grants before undertaking any meaningful research projects. The universities are expected to model a victorious community as far as the fight against HIV/AIDS is concerned in terms of prevention, care, treatment, support and mitigation of its impacts. During the three-day workshop, the abilities and capabilities of the participants were to be utilized to identify and address any other hidden factors affecting the spread of the diseases and those seeking to combat it.

3.0 The Response of African Universities to HIV/AIDS

Chair of session, Dr. Ethel Monda-Senior Lecturer, Kenyatta University

Dr. Monda highlighted the need to empower the youth with information on HIV/AIDS since they constitute the biggest population within the universities.

Presenter: Prof. Michael J. Kelly



The presentation on the response of African universities to HIV/AIDS focused on four major aspects that are:

- a) The mandate of a university in a world with HIV/AIDS
- b) Response by universities to HIV/AIDS globally and in Africa
- c) Lessons that can be learned
- d) Source of material on university responses to HIV/AIDS

It was noted that the global response has exhibited some discouraging findings with little understanding on how HIV/AIDS is affecting the universities, uncoordinated responses, and the assumption that the pandemic is relevant to only a few professional areas and was not impacting on the future professional life of every student. However, some positive developments such as the increase of stimulation from supra-institutional bodies, e.g. the Association of African Universities (AAU) and UNESCO have been taken place. The development of policies, capacities building initiatives, the inclusion of HIV/AIDS in university policies and the introduction of new HIV/AIDS courses in some institutions in Kenya have received assistance from UNESCO, the Commission for Higher Education and the Ministry of Education through AWSE, especially in first and second phases of the project.

A survey of African universities conducted in 2003/04 paints a grave picture. It indicates that many universities are doing virtually nothing or very little to respond to HIV/AIDS. There is a lack of systematic impact and risk assessment strategies and hence failure of effective response due to poor understanding of what the epidemic is doing or could do within Africa's universities. Proactive approaches by universities are lacking and most are reacting through their health services and making condoms available- approaches that may be valuable but are not sufficient to avert the spread of the disease. African universities also lack priority in their institutional response mechanisms. Moreover, the response has a unidirectional focus – focusing much on prevention and very little on care, support and treatment. The universities were urged to focus on involving the university personnel, particularly the academic staff and to aim at informing and protecting the student population. The importance of involving university personnel at all levels was emphasized by giving the example of the University of Zambia where a professor was reported to complain of inability to teach, not because of lack of students or materials, but because there were so few technicians within his department as a result of deaths due to the HIV/AIDS and its related diseases.

Challenges faced by Universities in their effort to respond to HIV/AIDS include:

- The absence of human resource management policies and practices to deal with HIV/AIDS cases
- Intervention measures that are considered a superfluous activity
- A tendency of fire fighting rather than strategic thinking and action focused approaches
- Lack of institutional support and inadequate commitment from management and leadership

The integration of HIV/AIDS into Science and Engineering was commended as a step in the right direction towards mainstreaming HIV/AIDS activities into the university curricular. However, more needs to be done to ensure that mainstreaming yields the required results. Integration in specific courses is not enough on its own. Medical personnel have been found to be very vulnerable despite their extensive knowledge about the epidemic. This is a clear indication that everyone is

at risk irrespective of his or her exposure to knowledge. It takes more than knowledge to fight HIV/AIDS. Course work may be limiting since it exposes the students to the epidemic from an academic viewpoint only rather than including socio-economic impacts. Acquiring the necessary knowledge is quite different from achieving behaviour change. In practice, efforts at curricular integration have yielded a mix of results. There is quite a lot about the disease in medical, pharmacy, nursing, public health and similar programmes. The coursework in these fields deal with HIV and AIDS as a disease, with much focus on the medical, biological and pharmaceutical aspects and leaving out the socio-economic aspects of the disease that are equally important. HIV/AIDS must be given attention also in other university programmes such as law, psychology, sociology, education, theology, counselling, geography, demography and economics. There has been little evidence of HIV/AIDS inclusion in curricular for engineering, architecture, quantity and land surveying, geosciences, physics, mathematics, information communication and technology and other similar “hard” areas. Moreover, it is not clear whether curricular innovations are designed to sufficiently address the future professional roles of students in a world with HIV/AIDS—e.g., dealing with AIDS in the workplaces where they will be managers.

Lessons learned from mainstreaming activities

- Leadership is vital: where VCs and Deans make AIDS a priority, there are immediate and visible results. Sustained advocacy from well placed committed champions can quickly transform the situation.
- Involvement of academic staff is crucial, while student involvement enhances effectiveness.
- Institutionalising an effective AIDS-response in and through universities requires long-term sustained efforts.
- There is need to integrate teaching modules with coherent research and outreach activities.
- Feedback mechanisms should be established through monitoring & evaluation to evaluate the impacts of the courses.

The sources of HIV/AIDS resource materials that can be useful in build the capacity of universities towards responding to the pandemic were shared and the participants were encouraged to access these sites to get information. These are listed at the end of this report.

Remark: It was underscored that universities are slow in instituting response mechanisms and that the horrifying situation resulting from the impacts of HIV/AIDS needs to be salvaged by these response measures.

4.0 The Role of University Scientists in addressing societal needs through the development of HIV/AIDS courses

Presenters: Selina Kibogy and Caroline Kinoti

The National AIDS Control Council (NACC) of Kenya highlighted the statistics and prevalence rates of the disease and the activities undertaken by the council in responding to the pandemic. NACC has developed a strategic plan. Universities and other stakeholders participated in this process. NACC is also commitment to the Three Ones principle whereby countries are expected to have;

- One coordinating body
- One strategic plan
- One monitoring and evaluation framework

The link between the mandate of institutions of higher education and the Kenya National AIDS Strategic Plan (KNASP) is the prevention of new infections among the vulnerable groups including the young population, improving girls’ access to information and protection of the girl child’s rights,

building partnerships with youth based organizations, improving the quality of life for people affected or infected with HIV/AIDS, and mitigating the socio-economic impacts of the pandemic. On the other hand, the monitoring and evaluation framework principle seeks to track the performance and impacts of national response to HIV/AIDS. The M&E framework for Kenya was launched in 2005 and its implementation was expected to begin thereafter.

Some of the activities that NACC is mandated to do are; coordination of research on HIV/AIDS at national level as well as ensuring formulation of HIV/AIDS workplace policies.

Emerging issues relating to the anti-AIDS campaign include the development of appropriate HIV/AIDS curricular and its relevance in Science and Engineering courses in terms of their quality, appropriateness and integration across the board using good examples. While addressing the problem of the challenges facing human resource management in institutions of higher education, NACC noted that the absence of human resources management within the institutions of higher education is as a result of the national legal framework, different structures of universities and occupational health hazards as outlined earlier by one of workshop facilitators - Prof. Kelly. NACC can help universities to harmonize social welfare benefits and policies through assisting universities to harmonize welfare benefit policies if they the universities choose to adopt clear workplace policies on HIV/AIDS. The policies must spell out in detail the responsibilities of all staff members, on the basis of the guidelines established by the International Labour Organization and ill members of staff must be accessible to sick leave without fear of victimization. Such policies would enlighten the universities on the seriousness of addressing the impact of HIV/AIDS and would also stimulate the leadership to take action towards prevention.

The workshop was also informed that Kenya's HIV/AIDS Research Steering Committee (KARSCOMM) is well represented on NACC's committee and is charged with the responsibility of evaluating all university policies. It also provides the mechanism for coordinating HIV/AIDS research in Kenya. KARSCOMM seeks to create a sustainable, participatory and flexible mechanism for promoting and coordinating multi-disciplinary HIV/AIDS research. Institutions of higher education in Kenya were encouraged to establish links with KARSCOMM for more coordinated research on HIV/AIDS.

5.0 University Activities on HIV/AIDS

Chair of the session, Prof. A. Ngowi, University of Botswana

Kigali Institute of Science and Technology (KIST), Rwanda

Presenter: Mr. Augustin Kimonyo

Kigali Institute of Science and Technology (KIST) has developed a HIV/AIDS curricular. In addition it has a group of about 200 women who are undergoing a training programme in HIV/AIDS. Other activities by the Institute include: development of an HIV/AIDS policy; instituting mechanisms for fighting HIV/AIDS (a major item reflected in the Institutes' strategic plan for 2003-2008) and providing voluntary counselling and testing (VCT) services for staff and students. The VCT also serves the neighbouring community. Statistics indicate that 3.5% of the student population at KIST are HIV positive. Training of some medical staff on care for people living with HIV/AIDS also provides information to patients concerning antiretroviral therapy. The Institute recently sponsored six of its staff members to undertake specialized training on HIV/AIDS management in South Africa. Students' anti- AIDS clubs have been established to raise awareness on HIV/AIDS among peers. Awareness creation is done through the use of performing arts such as drama, poetry and music. The Institute is currently developing a sexual harassment policy.



Representatives of Kigali Institute of Science and Technology, Rwanda

KIST has considered some areas for the integration of HIV/AIDS into its curricular. These are in academic and research areas and also relate to involving the management and embodiment of HIV/AIDS in the culture of the Institute. The management has integrated HIV/AIDS into its curricular through a development studies course, which is housed in the newly created Faculty of Professional and General Studies. The research component has been placed in the Centre for Research and Consultancy. The objective of this Centre is to encourage HIV/AIDS oriented research within and outside the Institute. The Institute's management is committed to contributing towards the fight against HIV/AIDS by developing a HIV/AIDS policy and establishing a functional VCT that serves both students and university staff.

Among the challenges that the institution faces are low budgetary allocations for HIV/AIDS activities; difficulty in setting up an advisory committee on HIV/AIDS related activities and monitoring them; difficulty in appointing an HIV/AIDS coordination unit to coordinate all HIV/AIDS activities; providing treatment to infected members of the institution; enhancing VCT services through hiring of staff; and reviewing and strengthening the HIV/AIDS policy, and identification and filling of the existing gaps.

Kigali Institute of Education (KIE), Rwanda

Presenter: Ms. Mary Kampogo

The presentation highlighted the policies and strategies that the Kigali Institute of Education (KIE) has put in place. The Institute has developed an institutional HIV/AIDS policy. The policy has two facets- to promote the dissemination of knowledge on HIV/AIDS and to help people make informed decisions about their personal lives. The Institute's strategy is to initiate and broaden activities that are geared towards fighting the scourge. These activities include the formation of anti-AIDS clubs, using performing arts such as drama and music, undertaking HIV/AIDS research, peer counselling, and engaging volunteer community educators. The Institute also strives to work with the youth. Research activities in HIV/AIDS and peer counselling for staff have not yet been implemented although counselling programmes for students are ongoing. The Institute is also undertaking training for primary school teachers during pre and in-service teacher training courses. Guidance and counselling activities have been established within the Dean of Students' office. The Institute offers a community development course that integrates HIV/AIDS issues. Kigali Institute of Education is also working towards empowering the citizens of Rwanda on HIV/AIDS and conflict resolution. A life skills programme that has a multiplier effect has been developed to integrate the teaching of life skills into the curriculum. The main themes of the life skills programme are HIV/AIDS education, peace education, conflict resolution, guidance and counselling, entrepreneurship and wealth creation, gender education and citizenship. It was noted that HIV/AIDS awareness projects are very important in the developing world.



Representatives of Kigali Institute of Education, Rwanda

The major challenge for the Institute is that HIV-testing activities are greatly hampered by stigmatization at the institution.

National University of Rwanda

Presenter: Dr. Andre Musemakweri

The objective of the National University of Rwanda HIV/AIDS programme is to coordinate and control AIDS activities, bring about behaviour change, reduce stigmatization, promote research on HIV/AIDS and other Sexually Transmitted Diseases (STDs), initiate outreach programmes and build the capacity of the University to cope with the impacts of HIV/AIDS through HIV/AIDS educational groups.

A League has been established to coordinate and monitor all these activities. This League has a permanent secretariat and a strategic plan. The League has so far managed to install an in-campus voluntary counselling centre and to introduce a course on HIV/AIDS and Reproductive Health. Annual training sessions for peer educators have also been held. Research on "Knowledge, attitudes and practices and the prevalence of HIV infection among the University students in Rwanda" has also been undertaken. Other activities include a pilot site for the introduction of a prevention of mother-to-child-transmission programme and establishing associations for people living with HIV/AIDS (PLWHA), free distribution of condoms, and creating awareness through the quarterly production of a journal, "Echo de la LUCS", that communicates HIV/AIDS prevention messages.

Students at the National University of Rwanda have been motivated through drama groups to create sensitization about HIV/AIDS. Information education and communication is being employed as a response mechanism. The major challenges faced by the University are cultural factors, students having multiple sexual partners, resistance to condom use, treating the discussion of sex as taboo and difficulty in mobilizing students.



Representatives of National university of Rwanda

Kwame Nkurumah University of Science and Technology (KNUST), Ghana

Presenter: Dr. Francis Yeboah



Representatives of Kwame Nkurumah University of Science and Technology, Ghana

Kwame Nkurumah University of Science and Technology has recently established a Centre for HIV/AIDS Studies (UCHAS) to respond to the need for a more focused approach to HIV/AIDS. The University's activities seek to address HIV/AIDS through policy development, advocacy and curricular reforms. Student activities are already in place at the University. The concept of trainers of trainers (TOT) has been employed and so far 17 student leaders in the University have gone through the training. Student mobilization is through creative arts with drama and radio shows proving to be very effective mobilization tools. The prevalence rate at the institution has reduced from 3.8% to 3.4% in the year 2006.

Curriculum development at the University targets the students and teaching staff and is currently being extended to vendors who trade within the campus and sometimes end up engaging in sexual activities with the students. The University is employing both formal

and non-formal approaches in its fight against the pandemic. The formal approach assesses the students in the conventional way while the non-formal has the advantage of being flexible and cost effective, e.g. by using the African Virtual University's distance learning methods. The University is responding quite well and there is need for continued efforts to avoid complacency.

The major challenge is identifying practical ways of institutionalizing curricular reforms.

University of Ghana

Presenter: Dr. Daniel Twerefou

The need to accord more attention to gender issues at the University of Ghana was highlighted. This is due to the fact that more females than males are infected. The Ghana AIDS Commission instituted by the government is charged with the obligation of rooting out the pandemic. The University has admitted that the pandemic is indeed a problem and the liberal atmosphere and congestion in the campus are factors that promote its spread. In the Faculty of Science, the department of Chemistry among others have pocket activities to address HIV/AIDS at the University.

The University established in the year 2005 with a grant of has drafted a policy on HIV/ stakeholders were included in for the University will be the of the policy.

The University of Ghana has mainstreaming HIV/AIDS in its and colleges. The Faculty of capacity building programmes aimed at providing counselling at the local level. The University the social aspects of the disease a comprehensive report on achieved through collaboration Department of Social Work that addresses the modalities with AIDS.



Representatives of University of Ghana

AIDS Coordinating Unit in USD10, 000. The University AIDS and views from different the document. The next step adoption and implementation

taken a proactive approach by curriculum in various faculties Social Studies has initiated for students and staff members training to manage the disease has also conducted research on and has recently launched HIV/AIDS in Ghana. This was with UNDP and UNFPA. The has also designed a course of working with people living

The College of Health Sciences is undertaking research on bio-medical and a social science aimed at developing a HIV vaccine and also provides VCT services. Research on the effectiveness of herbal medicine for treatment of opportunistic infections is also underway at the University. The School of Nursing has established a Community- Based Centre for Partners in Health that provides easy access to reproductive health information.

An AIDS Coordinating Unit (ACU) has been established and is charged with the responsibility of coordinating and networking all internal and external HIV/AIDS activities, supporting the implementation of the HIV/AIDS policy and implementing a monitoring and evaluation mechanism to track the impacts of the disease on campus. The ACU has so far achieved the drafting of an HIV/AIDS policy for the University that has been submitted to the University authorities for consideration.

Future plans

- To adopt an HIV/AIDS policy;
- To ensure its implementation in all its campuses.

The University's challenge is the lack of proper coordination of HIV/AIDS activities due to lack of records and support for HIV/AIDS programmes.

Plenary Discussions (on the Rwanda and Ghana Reports)

Question: What kind of people in terms of sexual behaviour are frequent visitors to the VCTs?

Response: It was noted that those who visit the VCT are the ones who are more or less sure about their negative status due to the fact that they do not engage in risky sexual behaviour.

Question: How did Kigali Institute of Science and Technology arrive at the reported prevalence rate of 3.5%?

Response: This figure was arrived at by analyzing data collected from the VCT statistics.

Question: What are the other factors if any that influence gender issues and HIV/AIDS in West Africa?

Response: Confusion between the orthodox traditional and the unorthodox practices are among the factors that influence gender and HIV/AIDS in the West African region. Traditional herbalists are not instilling patience during their traditional therapy. Most patients using herbal medicines are quitting the therapy as soon as they note some improvement in their physical health conditions. However, there is increased recognition of the importance of herbal treatment in Ghana.

University of Eastern Africa, Baraton (UEAB), Kenya

Presenter: Dr. Tabitha Muechees

The University of Eastern Africa, Baraton is a Seventh Day Adventist institution that advocates for a Christian way of living. The University holds an AIDS awareness week one week prior to the International AIDS awareness day that is commemorated on 1st December every year. The University employs drama as a medium for mobilizing and passing information to students. Other awareness activities at the University include the AIDS walk—during this event, T-shirts with anti-AIDS messages are distributed to over 1,000 students and faculty staff members. The university also has a women's group called "Chanuka" which is a Swahili word for "be informed". "Chanuka" consists of women who are infected by HIV/AIDS and serve as anti-AIDS campaigners. The group gets invitations as guest performers during celebrations such as the World AIDS Day. During such functions, the group stages plays with HIV/AIDS educative information to sensitize the community.

A journal called "Christ in the" by the University featured an

The University has established Community Development operates under the development With funding from the National community development services through a trainer of trainers representing about 50 secondary environs attended the training. attendees with basic HIV/AIDS

The Home Economics Programme develop, enhance and empower more productive, self-reliant and society through;



Representatives of University of Eastern Africa, Baraton, Kenya

classroom" that is published article on HIV/AIDS.

the Baraton University Services (BUCODES) that office of the University. AIDS Control Council, the trained teachers and students programme in 2004. Teachers schools from the University's This training equipped the counselling skills.

at the University hopes to women to enable them to be responsible members of the

- The provision of skills, knowledge and right attitudes relating to HIV/AIDS prevention
- The empowerment of tertiary college students, especially females, to fight the disease through peer counselling and education
- Encouraging women in the society by advocating for safe sex, abstinence among the youth and faithfulness among the married
- The introduction of income generating projects for women at community level
- Enhancing self-esteem and social skills for the development of mutually satisfying and supportive relationships
- Strengthening of research background to conduct empirical studies in urgent issues and other concerns affecting communities and societies.

Integration of HIV/AIDS in the curriculum has been done in the Department of Psychology and Counselling, and also in Medical Laboratory Sciences and Biological Sciences

Catholic University of Eastern Africa (CUEA), Kenya

Presenter: Mrs. Catherine Machyo

The Catholic University of Eastern Africa established a HIV/AIDS Control Unit in the year 2002 to spearhead its HIV/AIDS activities. Its activities include peer education programmes; organizing workshops and training seminars and outreach activities that are both on-campus and off-campus. On-campus activities are done in conjunction with the Catholic University Student's Organization (CUSO), the HIV and AIDS club and students' religious movements. Off-campus activities are undertaken in collaboration with the Commission for Higher Education, Constituent Colleges, parishes and schools. Other partners working closely with the University include the Kenya Network of Women with AIDS (KENWA), Women Fighting AIDS in Kenya (WOFAK) and HOPE World Wide.



Representatives of Catholic University of Eastern Africa, Kenya

Accomplishments

- A baseline survey on sexual behaviour has been carried out
- Established HIV/AIDS club and support groups with about 20 students whose status is kept confidential
- Provision of peer counsellors
- University's Senate members have been trained on HIV/AIDS
- Home-based care training has been initiated through community outreach activities.

Future expectations

- Setting up a VCT and a resource centre that will provide literature on HIV/AIDS for students by August 2006
- Introducing university ethics that will enforce behaviour change within the university community

United States International University (USIU), Kenya

Presenter: Dr. Maina Muniafu



Representative of United States International University, Kenya

It was reported that case-by-case treatment had taken off at the University and other activities were still in the formulation stage. A campaign dubbed “the SWAB campaign” had worked perfectly well for the University by providing important baseline information on the infection ratios. The campaign used a simple testing method that was very confidential. Those who turned out to be positive were offered free medication for a period of one year.

The challenges at USIU include stigmatization and problem of having teaching staff doubling up as counsellors too. This has discouraged students from visiting the VCT for testing due to the fear of the teachers knowing their HIV status.

The university hopes to integrate HIV/AIDS in its curriculum with a specific target on the human psychology course. USIU is also working towards changing the negative attitude that biology instructors have. This is a major setback to teaching biological concepts relating to the disease. It is hoped to increase their confidence and skills to enable them to be more comfortable in tackling sensitive issues relating to HIV/AIDS. The institution also seeks to find ways of encouraging male students to go for testing.

Maseno University, Kenya

Presenter: Mrs. Doreen Othero

The activities at Maseno University include the formation of functional partnerships with stakeholder groups. This is important because several players are required to realize a dream. Other activities at the University are; establishment of a VCT centre with two counsellors, a coordinator and a receptionist; undertaking research on HIV/AIDS; free distribution of AIDS drugs supplied by the Ministry of Health; offering training on home-based care to caregivers in the community; offering prevention of mother-to-child-transmission services; organizing a HIV/AIDS day at the University and establishing student support groups. Staff support groups are still lacking at the institution despite having a large number of staff members who are infected and affected by the pandemic.

Maseno University has been successful in creating partnerships, carrying out a baseline survey on HIV/AIDS, training peer educators who are working in the field, starting a group called BLIS, which is composed of 65 peer counsellors, and developing a HIV/AIDS policy, which is ready for publication. The BLIS group is involved in the free distribution of preferred condoms to students. This is because the condoms provided by the Ministry of Health are not the student’s favourites. This helps to meet the different preferences that the youth have in addition to the quality of the condoms which are perceived to be of light material leading to fears that they might tear while in use. A resource centre has been set up with support



Representatives of Maseno University, Kenya

from Centre for Disease Control (CDC) and this has increased the usage of female condoms. The University's management has been committed and has offered the necessary support to implement all the activities at the University.

The challenges include lack of sufficient funding; shortage of educators living with AIDS and the heavy workload on staff members involved in HIV/AIDS activities.

The future plan for the University is to design and adopt a policy addressing educators living with HIV/AIDS (ELWHA). This will ensure that there is a clear framework on how they can be brought on board to share their rich experiences. This might impact on the students more and result in behaviour change.

Western University College of Science and Technology (WUCST), Kenya

Presenter: Mrs. Margaret Immonje

Western University College of Science threatened with the risk of new infections due to its location on the highway. The no permanent VCT centre but operates facility with support from the National Programme (NASCO). UNESCO and urged to come in and assist the institution centre at the College. A common course has already been designed and will be the curriculum in September 2006. The with ACCESS Canada and the Centre for Coventry University. The institution's address the physically challenged and the are groups that have been left out in the AIDS. Trainers have undergone training care, treatment and management and are the courses.



Representatives of Western University College of Science and Technology, Kenya

and Technology is from truck drivers institution has a mobile VCT AIDS/STDsControl other donors were to establish a VCT on HIV/AIDS mainstreamed into institution works Disaster Control at courses will armed forces that response to HIV/ in HIV/AIDS certified to teach

Achievements

- Training of an AIDS Coordinating Unit (ACU) chairperson in a workshop that was organized by UNESCO and AWSE and the Commission of Higher Education (CHE)
- Carrying out a baseline survey for the University
- Preparation of an AIDS handbook that will be used as part of the resource material to teach the course on HIV/AIDS that will be implemented in September 2006

Future plans

- Sourcing for more funds to train lecturers for the common course
- Identifying funds to establish a VCT centre and evaluate the baseline survey that was undertaken
- Develop a WUCST workplace HIV/AIDS policy to addresses stigma and discrimination
- Address HIV/AIDS gender disparities
- Create more collaborative links with both local and international partners

University of Asmara, Eritrea



Representatives of University of Asmara, Eritrea

Presenter: Kahsay Negusse

A national survey on behaviour and biology was carried out in Eritrea and the results indicated that the principal mode of HIV transmission was through heterosexual contact. Others were blood transfusion and contact with contaminated blood as well as mother-to-child transmission and breast feeding. The government of Eritrea has consequently taken measures to combat the pandemic by promoting abstinence, being faithful to one faithful partner and the use of condoms among high-risk groups. Others are maintaining a safe blood supply and the dissemination of information through public campaigns.

The University of Asmara has done virtually nothing so far to respond to the pandemic and there is need to take response measures with urgency so as to address the impacts of the disease within the university community and the larger population as well.

Future plans

- Formulate a HIV/AIDS policy
- Establish a HIV/AIDS coordinating office
- Establish an on-campus VCT centre
- Strengthen outreach programmes such as drama clubs, seminars and summer workshops
- Develop a website to be used as a source of information on HIV/AIDS-related issues
- Publish newsletters and posters to create awareness
- Carry out health behaviour and epidemiological research

In terms of curriculum reforms, the University has designed a course to address HIV/AIDS issues within its teaching programme.

The major challenge for the University is to understand and improve health behaviour among the students, staff and their dependents. Integration of theoretical knowledge, research and health education practices were recommended as the best way forward. In addition, development of sound strategies to confront the pandemic and use of information, education and communication materials as well as training are also fundamental in moving forward with the fight against HIV/AIDS.

University of Botswana, Botswana

Presenter: Dr. Lucky Odirile

HIV/AIDS courses have been integrated into the teaching curriculum at the University and staff members have already undergone training to equip them with skills that will enable them to administer the courses.



Representatives of University of Botswana

HIV/AIDS activities at the University of Botswana include promoting the health, social and spiritual welfare of the university community through the adoption of a range of policies, programmes and diversification of the curriculum. The University conducts internal and external research and offers VCT services for both students and staff. The HIV/AIDS coordinator's office undertakes outreach programmes and schemes. It has also drafted a strategic plan and developed a HIV/AIDS policy. Other activities at the University include integration of HIV/AIDS into the university curriculum, training of staff to teach the course on HIV/AIDS, conducting student lunch hour talks that address HIV/AIDS related topics, training of peer counsellors, using health promoters to disseminate information on HIV/AIDS and distributing condoms, conducting seminars and workshops for both staff and students and commemorating important days relating to HIV/AIDS in March, September and December of every year. The University has also developed outreach programmes for secondary schools.

Challenges

- Methods of formalizing monitoring and evaluation of the courses to ascertain their impact,
- How to respond to people who are in denial concerning their HIV status,
- Lack of disclosure from both students and staff members,
- How to deal with the issue of sex for money in the society
- Lack of proper coordination activities,
- Identifying ways through which knowledge will impact on behaviour change positively,
- Improper handling, distribution and utilization of condoms,
- Lack of interest in HIV/AIDS activities among the staff and
- Addressing the fear of stigmatization.

Moi University, Kenya

Presenter: Dr. Peter Torongoey

Moi University has established an AIDS Control Unit that is charged with the mandate of dealing with HIV/AIDS awareness matters among the students, staff and community. These include peer education and guidance and counselling. An HIV/AIDS policy has been formulated and approved by the senate and is currently awaiting approval from the University Council. VCT centres have been established in each of the campuses and students are encouraged to attend so as to get to know their HIV status.

Student initiatives include associations formed to combat the pandemic. Examples are the Moi University Know AIDS Association (MUKAS), Chepkoilel Health Awareness Club (CHAC) and the Medical Students Society Against AIDS (MSSAA). All these associations and clubs work in close partnership with



Representatives of Moi University, Kenya

the I Choose Life group (ICL) which is a peer educators' group on HIV/AIDS that promotes behaviour change among students and also encourages making informed decisions by making relevant information and facts about HIV/AIDS readily available.

The University is home to the AMPATH project under the Moi University Teaching and Referral Hospital. The project is implemented in collaboration with the University of Indiana, USA. It is an academic model for prevention and treatment of HIV/AIDS. Research on HIV/AIDS is also taking place at the School of Medicine. Research topics include reproductive health and nutrition. Other departments in the Schools of Sciences and Engineering are also involved in extraction and analysis of herbal medicines and their clinical trials.

Challenges

- Acquiring trained staff for the VCT centres,
- Unwillingness of students and staff to disclose their status,
- Difficulty in measuring behaviour change,
- The high cost of ARVs and treatment for opportunistic infections,
- Taking care of the orphaned children, and
- Legal challenges concerning punishing those who spread the disease intentionally/knowingly.

Mainstreaming of HIV/AIDS into the curriculum has taken off with the incorporation of HIV/AIDS topics in some degree programmes. The strategic plan has yielded positive impacts in terms of reviewing the curriculum and designing of introductory courses on HIV/AIDS.

Strathmore University, Kenya

Presenter: Dr. Benedict Maungu

Strathmore University is taking the alternative approach in the fight against HIV/AIDS. Being a secular university but following the Catholic principles, Strathmore is opposed to distribution of condoms to students because this seems to be like encouraging students to engage in sexual activity at the expense of instilling the virtue of abstinence. The participants were urged to study and understand their national governments' policy on HIV/AIDS testing and the workplace that includes the institutions of learning.



Representative of Strathmore University, Kenya

Plenary Discussions

Question: How can an institution cope with the challenge of having VCT counsellors who are also members of staff in academic or administrative positions?

Response: The major challenge of having members of staff doubling up as VCT counsellors is that students shun from seeking counselling services from these counsellors who are also lecturers due to fear of stigmatization. Strict confidentiality should be encouraged among such counsellors so as to improve student confidence in them.

Question: How can institutions get students to disclose their status?

Response: By inviting people living with AIDS to speak to students. This encourages students to disclose their status. The teaching of life skills management also plays an important role in convincing students to disclose their status when the need arises.

Question: To which group of clients is the Post Exposure Prophylaxis (PEP) kit made available?

Response: Post Exposure Prophylaxis services are given to students who are rape victims. Prevention of mother-to-child-transmission service is available to all clients visiting VCT centres.

Question: How can behaviour change be achieved?

Response: Behaviour change is a gradual process that is not achieved overnight. It requires a lot of patience. Attitude change can be achieved through a series of talks and training that address behaviour change issues. At Maseno University students that have undergone such training are commissioned and a candle lighting ceremony is held during their graduation. The efforts are worthwhile since at least half of the students in such a class may end up changing their attitudes.

Behaviour change is indeed a big challenge to students who are very energetic at their youthful age and are prone to engaging in risky sexual behaviour. The youth are also bombarded with strong sex messages from the media in the form of explicit sexual lyrics through music. It is dangerous to criminalize sex as an animal activity. Interactions between the students and staff members helps to identify easily the vulnerable groups amongst the student body before intervention measures can be taken.

There is a need to send the correct messages to students through promoting behaviour change. Advocating for abstinence and at the same time distributing condoms freely are conflicting activities in the fight against AIDS in the universities. Abstinence campaigns need to be taken as an alternative approach in the fight against HIV/AIDS.

Question: What approach is taken by universities enforcing Christian values in as far as condom distribution is concerned?

Response: The Catholic advocates for abstinence and behaviour change rather than promoting use of condoms. This seems to be a quick fix measure and not a long-term solution in the efforts to root out the pandemic. Institutions should avoid failing students by over emphasizing on sex as the main cause of HIV/AIDS and giving the impression that the students are always engaging in risky sexual behaviour.

HIV/AIDS does not discriminate against religion and the institutions must insist on instilling Christian values amongst the students and encourage prayer sessions to bring about behaviour change.

Kenya Methodist University, Kenya

Presenters: Mr. Rehal, Satwinder and Ms. Alice Muriithi

The Kenya Methodist University has established the Kenya Methodist University HIV/AIDS Programme (KEMU-HAP) to coordinate its activities on HIV/AIDS. This was in recognition of the critical and central role that universities must play in responding to HIV/AIDS through prevention measures and grass root level advocacy.

Objectives of the Kenya Methodist University HIV/AIDS programme

- To sensitize the university community and those in its immediate environs on issues pertaining to HIV/AIDS
- To provide leadership and build capacity within and in the surrounding community



Representatives of Kenya Methodist University, Kenya

- To enhance university and community participation in the areas of HIV/AIDS prevention and advocacy, care, support, and treatment
- To analyse the socio-economic impact of HIV/AIDS in the University and community as a whole

The activities coordinated under the university's HIV/AIDS programme include HIV/AIDS peer education counselling workshops for students and staff members, community sensitization seminars that also target primary schools, training of community trainer of trainers through workshops on HIV/AIDS information, education and communication, HIV/AIDS counselling skills trainings, workshops on monitoring and evaluation of HIV/AIDS community-based organisations, commemoration of World AIDS Day, and the establishment of a university HIV/AIDS resource centre.

With funding from the International Conference on AIDS and STIs in Africa (ICASA), KEMU-HAP has been supporting an orphaned and vulnerable children (OVCs) capacity-building project at primary school level.

The programme activities of KEMU-HAP mainly target pupils from primary and secondary schools, community-based youth and women groups, students and employees of the university, faith-based leaders, teachers and orphaned and vulnerable children.

Achievements

- With funding from the Commission for Higher Education (CHE), KEMU embarked on the development and institutionalization of an HIV/AIDS policy. The policy is ready for implementation.

Objectives of the HIV/AIDS Policy

- Locate the institution's response to HIV and AIDS as part of its mission and core business
- Provide an agreed framework within which actions can be taken
- Confirm the rights, roles and responsibilities of all the institution's stakeholders
- Prepare the institution for the presence of HIV and AIDS in the classroom, workplace and in the community
- Demonstrate the organisation's commitment and concern in taking positive steps to preventing, managing, mitigating and planning for the epidemic
- Provide partner organisations and agencies with a framework and a point of access from which to engage with the institution

Summary of Day One

Prof. Kelly gave a summary of Day One's activities that focused on the responses of the universities to HIV/AIDS. The following key points were highlighted as having come out during the presentations and discussions on HIV/AIDS activities at the universities.

- Progress achieved: there is good response by universities in formulating workplace policies, an increase in outreach programmes and established partnerships seem to be working well.
- Limitations and shortcomings noted: focus has mostly been on HIV/AIDS prevention activities at the expense of care, support and treatment of those who have been infected or affected by the disease. There is also too much concentration on student activities but very little is being done about staff in terms of how they can get involved and participate in activities that are geared towards responding to HIV/AIDS in their respective campuses.
- Challenges encountered: the major issue is that of responding to stigmatization and silence about HIV/AIDS, mobilization of staff involvement, and ownership among academic staff.

Another challenge is achieving full mainstreaming with a change to a more all-embracing perspective.

6.0 Common university HIV/AIDS courses

Chair of the session, Prof. Sefa Dedeh, University of Ghana

The outcomes of a workshop held in 2001 for universities in Kenya during phase one of the projects indicated that only one university — Kenyatta University had a HIV/AIDS course in place. This course was being offered to students who were registered in the faculty of education only and other students could not benefit from it. This resulted in the need to assess the developments the universities had made in the area of a common course curricular reforms to integrate HIV/AIDS.

University of Nairobi (UON), Kenya

Presenters: Prof. Nzioka Muthama and Mr. Simeon Dulo



Representatives of University of Nairobi, Kenya

The university's HIV/AIDS policy document was circulated to the participants and briefly discussed. The university is seeking to strengthen wardenship in the students' halls of residence as an important student activity. The University of Nairobi has integrated HIV/AIDS content into its teaching programmes and through a common HIV/AIDS course (CCS 010) that is offered to all first year students.

CCS 010: HIV/AIDS course outline

- Introduction
- Sex and sexuality
- Communicable diseases
- Epidemiology
- Prevention and control of HIV/AIDS
- Management of HIV/AIDS and other opportunistic infections
- Legal ethics and issues in HIV/AIDS
- HIV/AIDS - a national disaster

Common course challenges included the development of teaching materials such as production of eight demonstration videos.

Recommendations

- Ensure that all programmes integrate HIV/AIDS in their curricular so as to complement the common course taken by all freshmen
- Recognise the importance of including a broad range of data sets with respect to gender since experience shows that male statistics are often lacking
- Take steps relating to the teaching of morality and inculcating religious faiths to the students

Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya

Presenter: Dr. Muhia Ndahi



Representatives of Jomo Kenyatta University of Agriculture and Technology, Kenya

The institution developed an undergraduate HIV/AIDS common course (SLZ 2111: HIV and AIDS) during phase one of the AWSE project. The course is compulsory for all first year students.

SLZ 2111: HIV and AIDS course outline

- General introduction: Public health and hygiene, human physiology, sex and sexuality, history of STDs and HIV/AIDS, comparative information on trends, global and local distribution and justification of the course.
- Biology of HIV/AIDS: overview of immune system, natural immunity to HIV/AIDS, cycle of HIV, epidemiology of the disease, transmission and diagnosis.
- Treatment and management of HIV/AIDS: nutrition, prevention and control, abstinence, condom use, antiretroviral therapy drug use, vaccines, pregnancy and HIV/AIDS, and HIV management.
- Social and cultural practices on HIV/AIDS: religion and HIV/AIDS, social stigma, behaviour change, VCT services, drug abuse and HIV/AIDS, poverty and HIV/AIDS, legal rights of HIV/AIDS patients, intellectual property rights and HIV/AIDS vaccine trials, and the impacts of HIV/AIDS on sectors of the economy.
- *Government policies*: global policies on AIDS, legal rights of AIDS patients, intellectual property rights, AIDS impact; family, society, agriculture; education and development and economy and other sectors.

The course is taught as one unit with 35 lecture hours for one semester of 16 weeks. It comprises lectures with teaching aids such as audiovisual and print material and live discussions, seminars, talks and assignments.

The institution offers certificate and diploma courses on HIV/AIDS as well as those integrated into the degree programme. Jomo Kenyatta University has staff/students awareness programmes such as Quality Life Team (QUALTE) and Staff AIDS Control Team (SACT) as unique activities that seek to reduce the disease's prevalence rate.

Daystar University, Kenya

Presenter: Dr. Jon Masso

Mainstreaming of HIV/AIDS into existing courses at Daystar University is underway. Daystar has four compulsory courses with HIV/AIDS content that are taken by all students. These are:

- General Biology (BIO 111)
- Communication and Culture I (INS 111)
- Communication and Culture II (INS 112)
- Environmental Science (ENV 112)

Other courses with HIV/AIDS within specific majors include Biology where topics on HIV/AIDS are covered. The topics include; definitions, historic perspectives, theories of origin, types, structure, retrovirus, life cycle, activation of provirus, results of HIV/AIDS infection, methods of transmission, infection of full blown AIDS, pre and post-testing counselling, prevention, care & treatment and anti-retroviral therapy (ART).

Communication and Culture I and II are introductory courses aimed at showing how integration of culture, communication and the Bible can address HIV/AIDS issues and evaluate the impact of communication and cultural patterns upon various aspects of personal life in areas of HIV/AIDS, socio-economic issues, politics, education, history and religion.

Other common courses with HIV/AIDS content

- Christian Social Ethics (CHM 325)
- Development of Modern Africa and Christian Values (INS 412)
- Communication for Development (DEV 213)
- HIV/AIDS Crisis Counselling (ICM 65)
- HIV/AIDS and Development (DEV/PSY/SWK 408)
- Christian Guidance and Counselling (PSY 312)
- Community Health (SWK/RUD 312)
- Medical Information and Social Work (SWK 316)

The university's AIDS and Drug Control Unit (ADCU) formulated a HIV/AIDS policy that is currently waiting Senate approval. I Choose Life group developed a curriculum that is also being used at the institution as part of its wider programmes with HIV/AIDS mainstreaming.

Western University College of Science and Technology (WUCST), Kenya

Presenter: Mrs. Margaret Immonje

Western University College of Science and Technology has designed a common course on HIV/AIDS Prevention and Management coded as CDM 100. The course is administered under the Centre for Disaster Management and Humanitarian Assistance (CDMHA) and the AIDS Control sub-Unit. It consists of three lecturer hours per week for one semester. The common HIV/AIDS course seeks to ensure that students are well equipped to deal with HIV/AIDS in terms of reducing the prevalence rates, at the individual level and among their peers, by adopting best practices such as behaviour change and responsible lifestyles while in campus and after they graduate. The course also aims at increasing students' theoretical and practical understanding of the pandemic. It was noted that in the near future, HIV/AIDS knowledge and a documented transcript to prove this might be a mandatory requirement for university graduates entering the job market in East Africa. This is already being experienced in Southern Africa.



Representatives of Daystar University, Kenya

Objectives of the common course, CDM 100: HIV/AIDS Prevention and Management

- To facilitate the acquisition of professional and personal HIV/AIDS knowledge and competency for survival.
- To provide a broad framework for prevention of HIV/AIDS and mitigation of its impacts.
- To facilitate knowledge creation through learning, teaching, research and extension.
- To build the capacity to implement the Dakar Framework for Action (Education For All) and the Kenyan National Response to the HIV/AIDS pandemic.
- To help develop human resources and management policies at the University to be proactive in dealing with the disease.
- To help resolve the “AIDS fatigue” which seems to be creeping into learning institutions in Africa and contributing to the vulnerability of the continent.

The teaching strategy is a multi-disciplinary and multi-departmental approach that infuses and integrates HIV/AIDS issues across the entire curriculum. The course comprises interfaculty and interdepartmental consultation that gives input both at the design and implementation stage. The teaching methodology includes interactive and participatory modes.

CDM 100: HIV/AIDS Prevention and Management course content

- HIV/AIDS concepts: epidemic, endemic and pandemic occurrences, epidemiology and virology, HIV and STD structures and their relationship, modes of transmission, diagnosis, treatment and prevention, anti-retroviral therapy (ART), the use of herbal remedies, and good diet and nutrition.
- HIV/AIDS origin theories: racial and political dimensions of global HIV/AIDS, global distribution, demography and HIV/AIDS populations, global policies arising from the Cairo Conference (1994), Dakar Conference (2000), Bangkok Conference (2004) and Abuja ICASA (2005).
- Mitigation of HIV/AIDS Impacts: role of behaviour change, ethics, immorality and HIV/AIDS, deaths and funerals from HIV/AIDS, faith-based organizations and palliative care, HIV/AIDS widows, widowers and orphans, HIV/AIDS symbolism (Red Ribbon), cultural festivals, Gospel concerts (drama and music) and abstinence programmes.
- *Vulnerability to HIV/AIDS*: risk behaviour, attitudes and practices, vulnerable groups (orphans, women, youth and men, physically challenged) and other special groups such as people living with HIV/AIDS.
- HIV/AIDS counselling: sickbed psychology and palliative care, PLWHA’s adjustment mechanisms and children with HIV/AIDS development issues.
- Workplace HIV/AIDS Policy: illness and invalidation of educators, staff productivity, recruitment service terms and employee benefits (sick leave, medical care, insurance, termination of services on medical grounds), confidentiality, social stigma and discrimination, moral, ethical and legal issues, epistemological issues, mental issues and sound decision making.
- Communication and Technical issues in HIV/AIDS: behaviour change communication, ICT learning materials for preventive education, production and use of audiovisual aids, website design, performing arts and advertisements.
- HIV/AIDS and the Media: reporting of HIV/AIDS by print and electronic media, investigative journalism, cross analysis of HIV/AIDS issues and role of media in HIV/AIDS related issues.
- Economic Issues in HIV/AIDS: funding of HIV/AIDS projects, role of Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs), donors and other interest

groups such as UNAIDS, the World Bank, the European Union, National AIDS Control Councils, KENWA, WOFAK, and NASCOP.

- HIV/AIDS Equipment: VCT equipment such as testing kits and demonstration equipment. Use of appropriate technology, care and support equipment, occupational health safety and HIV/AIDS, sanitary and waste disposal equipment.
- Mathematics of HIV/AIDS: global and local statistics, surveillance and data collection, sources of error on data, error reduction techniques, efficacy of data on drug use.
- Capacity building efforts: training workshops, seminars, conferences, talks and field trips.

Assessment is through continuous assessment tests, written theoretical exams and inter-disciplinary research and project work. The university regulations that govern the general grading systems apply and result transcripts are issued upon meeting the set requirements satisfactorily. Certificates of attendance and completion are to be awarded to students after completion of the courses.

Plenary Discussions

Question: Is the CCS 010 common course offered at University of Nairobi an elective or a mandatory course and where is it housed and how is it delivered?

Response: The common course is a compulsory unit that must be done by all undergraduate students as part of the fulfilment of their bachelors degree programme. It is offered to all first year students during their first semester in campus. The course is housed in the Department of Community Health.

Question: How many credits are awarded for the common course?

Response: The course is awarded a total of 12 credits during evaluation.

Remark: The major challenge that Moi University is faced with is the lack of confidentiality in issues touching on HIV/AIDS and especially for VCT services and at the treatment facility which results in stigmatization.

Kenyatta University (KU), Kenya

Presenter: Dr. Philip Owino

Kenyatta University has designed two undergraduate courses; HND 313: Nutrition Management of Disease and UCU 105: HIV/AIDS and Drugs.

UCU 105: HIV/AIDS and Drugs course content

- Adolescent development and adolescent problems
- Fertility and abortions
- Pre-marital pregnancies
- Sexually Transmitted Diseases
- Drug use and abuse; hard drugs
- Sex tourism and trade
- Child marriage
- Definitions and demystifying of AIDS
- Origin and Nature of AIDS
- Classification and spread of the virus
- Management of AIDS and living with AIDS



Representative of Kenyatta University, Kenya

- Impact of AIDS on families, organizations and institutions
- Social and cultural beliefs and practices
- HIV/AIDS and the law
- HIV/AIDS, poverty and urbanization
- Participatory education mode
- Communication skills and mass media
- Preventative counselling and services
- Storage and use of condoms

The university also offers certificate and diploma courses in HIV/AIDS for continuing students enrolled in the education department. There are also postgraduate courses that have research components touching on HIV/AIDS-related issues in the curriculum. The University works in collaboration with the I Choose Life Organization (ICL). The university has community outreach programmes to reach to high school students. The commendable efforts by AWSE and partners to promote curriculum reforms in the area of HIV/AIDS in African universities from the inception of phase one in 2001 to the current programmes in 2006 were acknowledged.

The university has the following stand-alone courses

- ECM 010: Introduction to human anatomy, physiology and immunity
- ECM 012: Sexually transmitted infections including HIV/AIDS
- ECM 013: Socio-economic and cultural factors in HIV/AIDS
- ECM 017: Ethical and legal issues in HIV/AIDS

Postgraduate Course Units

- ECM 501: Medical microbiology and parasitology
- ECM 502: Advances in sexually transmitted infections and HIV/AIDS
- ECM 507: Ethical and legal issues in HIV/AIDS (similar to ECM 017)
- ECM 510: General research and reporting methods
- ECM 511: Introduction to statistical data processing
- ECM 512: Research project (2 units)

Maseno University, Kenya

Presenter: Mrs. Doreen Othero

Maseno University has made the first step in mainstreaming HIV/AIDS courses into its curriculum. The University has designed two courses with the aim of responding to the needs of an AIDS affected society and world the world at large by producing graduates who are competent to manage and control HIV/AIDS within their respective professions. The courses are; PMT 112: Basic Knowledge on HIV/AIDS and Sexually Transmitted Infections and PMT 123: HIV/AIDS Management and Society will be offered in the first and second semesters of the first year for all academic programmes in Maseno University. The courses will be coordinated through the department of Biomedical Sciences in the School of Public Health and Community Development. The university intends to offer a general course describing and highlighting basic facts about HIV/AIDS. In addition, each academic programme will be allowed to make amendments to suite the interests of professionals in the respective programmes. Programme staff will do teaching of the developed course after undergoing the necessary training.

Course description

PMT 112: Basic Knowledge on HIV/AIDS and Sexually Transmitted Infections

- The human male and female reproductive systems
- Human immunology and immune system
- Categories of sexually transmitted diseases and their relationship with HIV
- Management of sexually transmitted infections
- Historical background of HIV/AIDS
- Types of HIV/AIDS
- Virus replication
- HIV epidemiology, HIV transmission and modes of infection, high risk persons, factors enhancing HIV/AIDS spread, culture and HIV/AIDS
- HIV/AIDS prevention and management
- Opportunistic infections and infectious co-factors
- HIV/AIDS projections

PMT 123: HIV/AIDS Management and Society

- National and international initiatives to combat HIV
- Information, Education, Communication (IEC) for HIV/AIDS
- Voluntary counselling and testing (VCT)
- Home-based care for people living with HIV/AIDS (nutrition, counselling, physical care, spiritual care, clinical care)
- CD4 and viral load counts
- Antiretroviral therapy
- Post-exposure prophylaxis
- Prevention of mother-to-child transmission of HIV (PMTCT)
- Management of stigma and discrimination
- Poverty and AIDS
- Orphans, vulnerable children and widows- community support systems for widows and orphans
- Peer education for HIV/AIDS behaviour change communication
- Collaboration and networking for HIV/AIDS
- Greater involvement of people living with HIV/AIDS (GIPA)

Students are expected to visit an institution or community implementing HIV/AIDS activities as part of their research work and write a term paper on the experience gained as part of their course work.

Other Courses

PHT 827: Community Based Health Care

This is a postgraduate course offered to Master of Public Health students. It covers several aspects of HIV/AIDS including;

- Epidemiology of HIV/AIDS
- HIV/AIDS and structural adjustment policies

- Management and preventive strategies- voluntary counselling and testing, prevention of mother-to-child transmission, home-based care, orphan care and community support systems, management of STIs, management of ARVs, post-exposure prophylaxis, and legal aspects of HIV/AIDS
- Nutrition for people living with HIV/AIDS
- Role of community based organizations, faith based organizations, funding partners and non-governmental organizations in the management and prevention of HIV/AIDS

Kenya Methodist University, Kenya



Representatives of Kenya Methodist University, Kenya

Presenters: Mr. Rehal, Satwinder and Ms. Alice Muriithi

The University has mainstreamed and integrated HIV/AIDS courses into its curriculum in various departments such as Nursing Sciences which offers NRSG 324: HIV/AIDS Palliative Care and Counselling. The course aims at preparing in-service nurses to be involved at all levels in the care of terminally ill persons and their families. This is achieved through the provision of a thorough understanding of what palliative care is capable of offering, and being involved in giving palliative care in different settings.

The Department of Education & Counselling offers COUN 250, a HIV/AIDS seminar course whose purpose is to provide both the learners and the course coordinators with opportunities to explore recent advances, developments and concerns on HIV/AIDS prevention, care and mitigation, especially in the sub-Saharan Africa region. The course is designed to impart knowledge and skills in basic research methodology, seminar facilitation and presentation. It involves proactive engagement by both the learner and course coordinator on issues of HIV/

AIDS through classroom debates and seminar participations.

The Department of Applied Biology has integrated HIV/AIDS topics into various courses such as;

- General Botany
- General Microbiology
- Cell Biology and Genetics
- Immunology
- Biotechnology

Future plans

- In line with its HIV/AIDS Policy, the University will endeavour to ensure that HIV/AIDS education is mainstreamed in all student and employee activities, including the teaching curriculum.
- To redesign existing university courses to allow full integration in all its courses.

The way forward for the university is to achieve mainstreaming of HIV/AIDS in its science curriculum.

Egerton University, Kenya

Presenters: Dr. Rose Odhiambo and Dr. Richard Sang

Common university courses on HIV/AIDS were developed at Egerton University during the first phase of the AWSE project. The courses include one that deals with the biology of HIV/AIDS. HIV/AIDS content has also been integrated in other courses such as; Wormology and HIV/AIDS. The course gives background information on HIV/AIDS to first year students and deals with myths about the pandemic. The mode of delivery is multi-disciplinary and participatory. It is examined by continuous assessment tests and final examination. The students are also given assignments to research from sources such as the internet and seminars. About 28 faculty staff members have been trained on the design and formulation of common courses and teaching methodologies of such courses. People living with HIV/AIDS are also engaged as resource persons during course administration. They are a source of very important information relating to HIV/AIDS, especially on aspects of management, responding to stigma, medicinal care and support. Non-Governmental Organizations working on human health and HIV/AIDS are also partnering with the institution in terms of course design and delivery methods. This course targets students who take non-science courses as majors. The students are also expected to come up with proposals for their civic engagements. Apart from first year students, the final year students also take the course. The course is currently due for review.



Representatives of Egerton University, Kenya

Mainstreaming of HIV/AIDS into the curriculum is ongoing in the Departments of Zoology, Agriculture, Food and Nutrition and Curriculum & Instruction. The Faculty of Health Sciences and the Institute of Gender, Women and Development have also integrated HIV/AIDS into the courses that they are offering. The University plans to begin disseminating HIV/AIDS information during orientation week and introduce an AIDS Awareness Week. Mainstreaming of HIV/AIDS into online learning programmes is also being considered.

7.0 Mainstreaming of HIV/AIDS in Institutions of Higher Education

Chair of the session, Dr. Daniel Iyamuremye, Kigali Institute of Education

Presenter: Prof. Michael Kelly

The presentation outlined the importance of giving the necessary attention to HIV/AIDS, the concept of mainstreaming in the context of HIV/AIDS, the implications of HIV/AIDS to teaching, training and learning, and how to mainstream HIV/AIDS into the curriculum.

Mainstreaming is defined as a process involving instituting radical changes or modifying operational practices to address an environmental challenge that in this case is HIV/AIDS. Mainstreaming goes beyond integration of HIV/AIDS into courses. It calls for creating a strong foundation and building or developing on this. Activities that only offer lip service to HIV/AIDS issues by adding on to what is already in existence and not changing core function and responsibilities are not part of mainstreaming. On the contrary, mainstreaming looks at the functions from a different perspective.

Mainstreaming HIV and AIDS means every programme identifying how it contributes to the spread of HIV, how the epidemic is likely to affect the programme's goals, objectives and activities. Where

the programme has a comparative advantage to respond (by limiting the spread of HIV and mitigating the impacts of the epidemic), action ought to be taken.

In Science and Engineering, there is a great scope for mainstreaming through the use of information communication technology (ICT), water and sanitation engineering, food security, road construction. Other strategies are to train agricultural extension officers to include HIV/AIDS education in their meetings with farmers and community groups, to ensure that the Ministry of Justice institutes laws and policies to protect the rights of people living with AIDS and that of Education allows flexible timetables in response to the needs of orphaned and vulnerable children.

Mainstreaming by institutions of higher education should aim at producing a pool of graduates who are AIDS competent and appreciate the implications of HIV/AIDS in the area of their future work and in development activities. Mainstreaming HIV/AIDS into curricular involves academic leadership from a broad perspective purposes. The rationale for curricular mainstreaming is based on personal, professional and institutional reasons. Mainstreaming can either take the non-formal or formal approach.

Mainstreaming challenges

- Perceptions that HIV/AIDS is mainly a health issue
- Lack of knowledge
- People living in a state of denial
- Limited human resource capacity
- Reluctance to undertake unfunded initiatives
- Leaving the responsibility of HIV/AIDS to focal point persons
- Inability to identify HIV/AIDS as a strategic priority
- Inadequate political, public and organizational demands

Fundamental principles to observe when mainstreaming

- Openness and breaking of silence
- Promotion of gender equity and empowerment
- Adoption of a strong human rights approach
- Inclusion of people living with HIV/AIDS at all levels
- Ownership and acceptance of the problem across the entire institution
- Ensuring that HIV/AIDS issues fit well within the framework of other national development policies and strategies gearing towards economic development of all sectors

Question: Where can a university get resource materials to use for mainstreaming purposes?

Response: Resource materials on HIV/AIDS that Universities' can access in an effort to learn more about the disease and give useful information on mainstreaming. The following websites were recommended;

- UNESCO Nairobi Office HIV/AIDS Clearinghouse: <http://hivaids.nairobi-unesco.org>
- United Nations AIDS (UNAIDS) – www.unaids.org
- International Bureau of Education (IBE)- www.ibe.unesco.org
- International Institute for Educational Planning (IIEP) <http://hivaidsclearinghouse.unesco.org>
- International AIDS Vaccine Initiative (IAVI) – www.iavi.org

Plenary Discussions

Question: What approach is recommended for mainstreaming? Should one start with university departments with expertise in HIV/AIDS issues, then gradually spread to other departments?

Response: The universities should take their own prerogative depending on what works well for them then adopt the best workable modalities on which way to go, either department by department or the whole institution at once.

Question: How can institutions convince engineering departments to accept the need for the integration of HIV/AIDS?

Responses: Presenting the courses from a human relation perspective and responsibility rather than concentrating too much on biology would assist to warrant positive response from the engineers. Good methodologies should be taken into consideration to deal with resistance from the engineering departments.

Innovation of new ideas in mainstreaming of HIV/AIDS is important in overcoming bureaucracy in universities. The Deans of Civil Engineering and Architecture are responding quite well at JKUAT. Most mainstreaming efforts at the institutions in the Department of Agriculture are in horticulture. However, mainstreaming has not yet gone through the formal channels. JKUAT collaborates with the students' attachment/placement office to achieve mainstreaming. The course should be evaluated during the last semester so that it follows the industrial experience in quick succession.

Maseno University has not yet implemented the two courses it has so far designed. These are PMT 112: Basic Knowledge on HIV/AIDS and Sexually Transmitted Infections and PMT 123: HIV/AIDS Management and Society which are awaiting approval in September of 2006. The two common courses are a general requirement at the university and they are housed in the biomedical department, School of Public Health. The courses are general in nature but more specific matters are addressed to specific professions. The university has been given the mandate to tailor-make courses to be offered. This ensures that other areas added to the course make HIV/AIDS relevant to different professions.

Moi University has mainstreaming of HIV/AIDS in the Communication Skills course offered to first year students, who are an easier group to teach. Those in authority were challenged to come out and declare their status.

Integration of HIV/AIDS at Daystar University is in the communication course through coping mechanisms and counselling relationships. They are also encouraging interaction with those infected/affected and community support group activities. Communication increases commitment while biblical and cultural studies are aiding in the mainstreaming process. Conflicting policies should be avoided and the role of the media needs to come out strongly in the fight against HIV/AIDS. Departments need to review their course contents regularly so as to capture emerging issues.

Question: How does Daystar University respond to non-Christian students?

Response: Daystar is registered as a chartered Christian University and students who are admitted are informed that Biblical Christian values are practiced at the institution.

Question: What would work better for the institutions, to integrate HIV/AIDS content into existing courses or to have stand-alone courses?

Response: Integrated courses and stand-alone ones have their merits and demerits. An institution should therefore employ what is best for its needs. Common courses should lay a solid foundation and other courses can build up on the elements. The university senates have the right to decide how long mainstreaming activities should take.

Undergraduate students are the target group in mainstreaming of HIV/AIDS at the institutions of higher education because they are young and lack necessary knowledge, thus becoming very vulnerable. However, there is need for mainstreaming to target continuing students who enrol for studies as adults.

Question: How can the courses be evaluated?

Response: The courses are examinable and the results appear on the student transcripts. Deans of faculties should also assist to evaluate the courses.

Question: How can behaviour change be measured?

Response: It can be measured through increased abstinence rates although this cannot be achieved by all.

Remark: The universities are doing a commendable job and they are on the right path as was evident in their brilliant presentations. Incorporation of HIV/AIDS component into the curriculum will be successful eventually.

8.0 Integration of HIV/AIDS into Engineering and Sciences

Chair of the session, Mr. Kalsay Negusse, University of Asmara

8.1 Integrating HIV/AIDS into Biological and Physical Sciences

Presenter: Dr. Zipporah Ng'ang'a

HIV/AIDS has a multi-sectoral effect on households, demography, education, industry, health, culture and agriculture and hence the need for its integration into the Biological and Physical Sciences. This is warranted by the need to;

- Provide factual information on HIV/AIDS
- Enable learners to make informed decisions about their behaviour
- Enable the reduction of stigma and discrimination
- Improve HIV/AIDS management
- Bring about a multiplier effect

Behavioural science as a common course for Biological and Physical Science learners is a good example of integration. The scope of the course includes; Human Biology/development, Human reproduction systems- conception, pregnancy & growth, health and disease, human behaviour, models of behaviour change communication, life skills, counselling and counselling skills, communication skills, peer education, gender and stigma & discrimination.

Specific fields with opportunities for integrating HIV/AIDS into Biological and Physical Sciences include;

- Physiology / histology and cell biology
- Laboratory methods and techniques
- Medical microbiology
- Disease association
- History and philosophy of Biology
- Nutritional Biochemistry
- Biotechnology/Molecular Biology/Genetics
- Plant breeding
- Parasitology/ Entomology
- Plant Biochemistry and Physiology
- Economic botany

- Biostatistics
- Immunology
- Ecology
- Limnology
- Separation techniques in Chemistry
- Chemistry of carbohydrates and proteins
- Natural products Chemistry
- Radiochemistry
- Environmental Chemistry
- Medicinal Chemistry
- Medical Physics
- Computer applications

Plenary Discussion

Discussant: Prof. Horace Ochanda

The following points were brought to the attention of the plenary;

- The need for mainstreaming/integration should be a priority in all professions since HIV/AIDS touches on all aspects of human life. Issues of ecological impacts in the disposal of syringes, taking advantage of the tremendous number of windows of opportunities and time for courses also needs serious considerations.
- There is need for common graduate courses in areas of research methodology to address HIV/AIDS issues, field work and industrial attachment
- Consideration should also be given to course content logistics, such as the course coverage, the risk of duplication of teaching and the danger of AIDS fatigue among the students
- The implications in terms of time, cost per unit, description of common undergraduate courses and the need to consider trade offs

Emerging Issues

- What are the scientific and technological issues relating to HIV/AIDS?
- What is the role of circumcision in promoting or preventing new HIV/AIDS infections?
- Are there any genetic predispositions that may cause genetic susceptibility or protection against the virus?
- What is the role of micronutrients such as selenium in fighting the pandemic?

8.2 Integrating HIV/AIDS in Engineering and Technological Sciences

Presenter: Prof. Japheth Magambo

Emerging questions relating to integration of HIV/AIDS into engineering academic programmes are;

- Is teaching of HIV/AIDS part of the engineering academic programmes?
- Is this the responsibility of engineers?
- Where do the courses fit within the engineering curriculum?
- Is there space in the curriculum for HIV/AIDS?
- Is there time and are resources available?

- What is the motivation for including HIV/AIDS in the engineering curriculum?
- Who is going to teach the courses?

Despite the above, engineering lecturers have made considerable advances and more windows of opportunities are now available to them.

There is need for university leadership to support integration efforts and formulate and operationalize policies on HIV/AIDS. This should begin at senior administrative levels, and then flow to academic leadership at the faculty level. Communication skills, development studies and entrepreneurial studies are seen as good entry points for integration among the first year students.

Remarks: The plenary felt that a one-week training seminar/workshop might not be effective in imparting knowledge. Formal training should go hand in hand with informal activities off the campus. The challenge in implementation of proposed courses with an effort to integrate HIV/AIDS into the curriculum appeared to be time constraints since faculty members spend most of their time in the field. Nevertheless, the participants agreed that it is important for engineers to protect themselves and others from the epidemic.

There is need to review university policies to ascertain the appropriate time for teaching the courses. Caution should be taken to avoid overloading students since this may result in burnouts. The fear of the biology involved in teaching HIV/AIDS courses should be resolved since it is hampering integration in engineering and technological courses. This could be attributed to the fact that many engineers have difficulty in understanding biology as a subject and thus end up performing poorly in that area. Biological sciences are also not featured prominently within the engineering curriculum. Basic biology, however, is usually mandatory at secondary school level of education. The participants were also urged to consider diploma, certificate and pre-university courses targeting the large number of post-high-school students, especially those who do not get admission into universities.

9.0 Break-out Group Discussions

Chair of the session, Dr. Ethel Monda, Kenyatta University

Three working groups representing the Biological, Physical, and Engineering & Technical sciences were formed. They exhaustively deliberated on potential entry levels for integrating HIV/AIDS into their respective disciplines. The group discussions took an innovative approach that focused on identifying the courses that do not seem to have easy entry levels. The groups later made presentations on the courses that they identified for integration giving clear recommendations for each. This was to be used in helping other universities to learn from each other's experiences as far as mainstreaming and best practices acquisition is concerned.

Summary of Day Two

The following important issues emerged during presentations from Day Two of the workshop which focused on common courses, mainstreaming and integration of HIV/AIDS into Biological, Physical, and Technological Sciences.

- Considerable competencies in terms of what is being done and what is yet to be done were exhibited in the presentations by the universities.
- Impressive mainstreaming activities were showcased by universities such as Maseno University.
- There is a great variation of common courses found in universities in terms of content and personnel.

- Rich integration, mainstreaming, infusion activities amongst different institutions was presented.
- Different levels of mainstreaming at various institutions came out clearly.
- Common courses emerged as the way to go in the early training program and probably in-depth mainstreaming could follow later on during the programme.
- Competency and comfort of trainers is a challenge in many institutions.
- There is the challenge of capacity building in terms of staff training, mobilizing commitment from higher administrative and managerial leadership and financial resources.
- Outreach activities are still scanty in many institutions, although Maseno and Kenyatta universities have more organized activities.
- Care, support and treatment services for staff and students are quite impressive at Maseno University.
- Much focus is on students while the teaching personnel have been left out — there is need to involve academic, administrative and support staff. People living with HIV/AIDS also need to be involved.
- It was agreed that a clear way forward be identified and the work to be carried out through network formations for purposes of research.

9.1 Engineering and Technological group

Presenter: Prof. Samuel Sefa-Dedeh, University of Ghana

The Engineering and Technological group consisted of university representatives specializing in Agricultural Engineering; Biomedical Sciences; Electronic Engineering; Mechanical; Civil, Water and Environmental Engineering; Agriculture and Biosystems; Textile Computer and Food Processing Engineering; Telecommunications and Information and Mining and Mineral Processing.

The group suggested courses that would span between 1 to 6 years. Earliest possible entry levels were preferred to take advantage of comradeship attitude among the students. The institutions need to adopt what works well for them. The group recommended four options on the nature of the courses.

- Stand-alone course for one semester
- Introductory course for first years with follow-up on subsequent years with an option of having a modular form approach or one module per year
- Incorporation of HIV/AIDS issues into different common courses such as mathematics and communication skills
- Mainstreaming into core engineering courses

The following courses within the engineering and technological sciences were recommended as viable integration areas; industrial law and ethics, engineering management, entrepreneurship, water resource management, computer engineering, engineering and society, HIV/AIDS for engineers, engineering design courses and industrial safety.

Other mainstreaming options recommended were research projects for final year students relating to HIV/AIDS, pursuing research option links between engineering and HIV/AIDS, internship programmes and the establishment of specialized centres such as a disaster management centre.

Conclusions

- There is need to incorporate issues of HIV/AIDS in training engineers as professionals.
- The workshop's experience should be utilized and translated into making a positive impact on engineering.
- Post-workshop networking of engineering faculties in relation to mainstreaming HIV/AIDS into the science should be pursued.

Plenary Discussions

Questions: There is a belief that engineering students lack interpersonal skills as a result of interacting too much with machinery. How can this be addressed?

Response: To tackle the challenge that engineering students are unsociable due to too much interaction with machines/equipments, internships and practicum should be employed.

Engineering products can be a good source in making use of knowledge through designing sanitation systems and housing plans and the impacts of these on HIV/AIDS. As far as condom marketing is concerned, the condom material (material science) and usage are good areas to tap into engineering knowledge. The courses should be designed to be compulsory and not elective.

9.2 Biological Sciences group

Presenter: Dr. Benedict Maungu, Strathmore University

The importance of biology was emphasized since almost everything can be defined from a biological point of view. There are many obvious courses for mainstreaming but emphasis needs to be laid on the non-obvious ones such as;

- Conservation and biodiversity
- Wildlife management
- Sustainable resource management
- Natural product chemistry
- Entomo-botany (relationship between plants and insects)
- Phytomedicine
- Community nutrition
- Biogeography to look into different strains of the disease in various regions of the world
- Bio-organometallic chemistry
- Forestry (medicinal plants and indigenous trees)
- Plant anatomy and physiology

Recommendations

- The most appropriate entry level would be in first year since the students have not developed a bias towards any discipline and are more receptive to what is taught.
- Duplication of taught content in HIV/AIDS should be avoided.
- Need to appoint a coordinating committee to coordinate HIV/AIDS activities at faculty level.
- Create interest in biology as a science.
- Address staffing issues such as who and how to teach what.
- Utilize students' professional skills.

- Address issue of fatigue/boredom that may creep in.
- Break monotony by using dance, songs, peer group activities, and media mobilization.

Remark: Mainstreaming must not be assumed to have taken place in the obvious courses such as pharmacy, medicine and nursing. Engineering and Biological science faculties should liaise in areas such as condom use demonstrations where the engineers can come up with designs while Biologists can give realistic sizes that are biologically acceptable for the exercise.

9.3 Physical Sciences group

Presenter: Dr. D.K Twerefou, University of Ghana

It was reported that the group's small size in terms of representation could be attributed to the nature of Physical sciences that are perceived to be difficult. The group suggested common courses on HIV/AIDS as the most appropriate way to initiate integration efforts. There is also a need to orient trainers on how to achieve integration of HIV/AIDS into Physical sciences.

Recommended courses

- *Industrial and Environmental Chemistry: waste disposal management and water and sanitation with respect to condom disposal.*
- Analytical Chemistry and organic separation techniques: focusing on biomedicine extraction, natural products and drug synthesis, nutrition management and control of diseases focusing on opportunistic infections, monitoring toxic levels in patients and disease monitoring.
- Pure & applied mathematics, applied statistics and operation research: in teaching research methodology and risk modelling, testing frequency based studies, correlation, regression and hypothesis testing
- Physics and electronic materials: offers areas such as production of electronic training resources such as videos; material design, biophysics techniques such as ultrasound and protective wear for those handling samples during testing of HIV/AIDS.
- *Climatology and weather meteorology: windows of opportunity lie in climate change and its impact on opportunistic infections with respect to HIV/AIDS. Natural weather related disasters such as floods and droughts and human behaviour at camps hosting those displaced by the disasters also has an opportunity for integration within the physical sciences.*

10.0 UNESCO'S Strategy for HIV and AIDS Prevention

Presenters: Ms. Alice Ochanda and Ms. Julia Hasler, UNESCO

UNESCO's Programme on HIV/AIDS focuses on prevention of HIV/AIDS and mitigation of its impacts based on its areas of competence which are education, natural sciences, social & human sciences, culture, communication & information. The approach is prevention education, limiting the impacts of HIV/AIDS and empowerment of the policy arm.

UNESCO'S core tasks include high level advocacy, customizing HIV/AIDS messages and capacity building to reduce vulnerability, safeguarding the rights of the affected and infected, and reducing institutional impact. All these are geared towards mitigating the impacts of HIV/AIDS and providing prevention measures. The guiding principle behind this is expanding education opportunities in line with Millennium Development Goal 3, which seeks to promote human rights and a multifaceted approach on risk.

A global initiative on HIV/AIDS prevention dubbed EDUCAIDS was launched in 2004 by UNAIDS to strengthen the education approach to HIV/AIDS prevention. UNESCO's programme sectors and institutes are charged with specific mandates. Important institutes are the International Institute for Educational Planning (IIEP) and the International Bureau of Education (IBE). While IIEP focuses on educational planning, IBE is a curriculum- centred institute.

UNESCO has field offices which are either regional or cluster. The UNESCO Office in Nairobi which is also a Regional Bureau for Science in Africa has the double responsibility of being both a cluster office for a grouping of 6 countries (Burundi, Eritrea, Kenya, Rwanda, Uganda and Somalia), and a regional office for science and technology activities in 47 African member states. The UNESCO Office in Dakar, Senegal, coordinates education activities at the regional level while the Maputo Office coordinates cultural activities.

The HIV/AIDS activities of the UNESCO Office in Nairobi are based on prevention education and are in response to the Millennium Development Goals, the Education For All initiatives and the UNGASS Declaration of Commitment. The activities include focus on the increased demand for education and the need to ensure quality in spite of the high prevalence of HIV/AIDS in most of the African countries and the ever increasing need for Ministries of Education to manage their response to the impact of the AIDS pandemic on the education sector. In its effort to respond to the needs of the member states in the region, the UNESCO Office in Nairobi has emphasized the need for the education sectors to have HIV/AIDS policies that would guide them in their response to the impact of HIV/AIDS and has supported policy development activities in 5 of the 6 countries within its cluster. The outcome has been HIV/AIDS policies developed in the education sector in countries like Kenya, Burundi, Uganda, Rwanda and Eritrea. The Office has also supported activities in capacity building for teachers in HIV/AIDS prevention education in the same countries.

UNESCO has a clear and concise strategy for the natural sciences in response to HIV/AIDS. The organization has 192 member states and has a budgetary allocation of 50/50 between the headquarters in Paris and the field offices. The natural sciences sector has the following divisions

- Basic and Engineering Sciences
- Water Sciences
- Ecological and Earth Sciences
- Science Policy and Sustainable Development

The natural sciences sector seeks to build capacity for human resources through workshops and research fellowships, information dissemination and promotion of scientific cooperation. Research fellowships are limited due to financial constraints. The science sector plays a crucial role in developing the framework for UNESCO's role in the UNAIDS programme on preventive education. The science sector is involved in regular programmes and extra-budgetary activities. Families First Africa Project is a beneficiary of such extra-budgetary activities with funding from the Italian government. UNESCO and UNAIDS work in collaboration in the science sector. This collaboration has resulted in the Africa Regional Projects on HIV/AIDS based in Nairobi and at UNESCO's headquarters in Paris. The project is entitled "Building research, technical and educational capacities in HIV/AIDS in Africa". The project has the overall objective of bringing scientists on board and increasing their capacity in HIV/AIDS research and diagnostic technologies. Activities under the project include; identifying the countries and scientists to be involved in the process, developing a network of scientists involved in HIV/AIDS research, conducting workshops that bring together scientific, medical, communication and education components of HIV/AIDS, and finally monitoring and carrying out follow-up on network activities. The implementation period of the project is 2006-2007 and its executing partners are ICGB, UCT Medical School, ASM, AWSE and other networks and associations of African scientists.

Question: Does UNESCO's programme work with persons who are infected with the virus?

Response: UNESCO works with infected people in its consultative meetings and encourages its partners, such as institutions to do the same in their HIV/AIDS prevention efforts. The organization also works at a level lower than universities in its prevention education activities.

Question: How does UNESCO fund AIDS activities at university campuses?

Response: UNESCO supports multi-country projects in an effort to provide funds for HIV/AIDS activities in universities. This calls for scientific and engineering groups to network and develop regional projects that could attract funding. Multi-country project proposals can be presented to UNESCO through national commissions. UNESCO is however not a donor institution but plays a crucial role in mobilizing funds for its member states. It can however give a little finance as a seed grant. The participants were encouraged to exploit the workshop forum to the maximum as an opportunity for initiating partnerships and networks that can formulate funding proposals.

UNESCO has undertaken activities at lower levels than the universities and a number of workshops have been held in the past. Under the cluster coverage, the ministry of education has conducted training of teachers in both secondary and primary schools as well as for Principals of Teacher Training Colleges.

11.0 Workshop Recommendations

The workshop came up with the following recommendations after the two and half days of rich presentations and deliberations;

- There is need for a continual feedback mechanism to keep track of what is happening concerning the workshop's theme, in order to keep all institutions represented and other partners informed.
- Workshop participants should work together and develop HIV/AIDS resource materials such as publications.
- Mainstreaming should not be viewed as a silver bullet that solves all HIV/AIDS problems. Work on HIV/AIDS should be a continuous process with emphasis on developing networks and bringing about behaviour change.
- There is need to integrate HIV/AIDS in all activities at the universities
- HIV/AIDS research must be strengthened.
- A curriculum on HIV/AIDS for distant learners needs to be developed and interactive programmes initiated.
- Institutions need to collaborate with other partners towards achieving the goal of stemming HIV/AIDS.
- Mainstreaming activities should have an aspect of sustainability.
- HIV/AIDS activities at universities must involve workers and encourage academic staff participation.
- A top-down sensitization approach should be employed and other university members not represented at the workshop should be brought on board.
- Goals and time frame need to be pegged to all activities.
- There is need to strengthen networking at regional level and involve as many universities as possible. This should be coordinated through a forum like the one initiated by UNESCO in conjunction with AWSE.
- There is need to access more factual knowledge about the prevalence rates in the universities through surveys.

- There is need to develop a common framework for common courses targeting incoming students in the first semester.
- Universities need to set budgetary allocations for HIV/AIDS activities in their respective campuses.
- There is need to build the capacity of academic staff for easier delivery of the common courses.
- Model syllabuses and curricular for science programmes need to be developed.
- There is need to develop common HIV/AIDS courses to be taught in all African universities.
- Courses that target final year students should be designed. Their research projects need to touch on HIV/AIDS related issues.
- Monitoring and evaluation systems need to be instituted.
- Youth friendly VCT centres need to be developed to attract university students.
- Outreach programmes need to be strengthened to address care for the affected and infected in the society through community involvement.
- Universities should work closely with local communities especially in terms of indigenous knowledge for herbal treatment.
- Lobbying and advocacy must influence national policies and decisions, universities, donors and all other stakeholders such as policy makers.
- The role of guidance and counselling must be taken seriously.
- There is need for faculty members to lead by example through modelling behaviour change.
- A code of ethics needs to be spelled out for all within the university community.
- Gender dimensions should be considered when mainstreaming, especially bearing in mind the gender biases against women in different cultures.
- There is need for greater commitment to effect implementation of the HIV/AIDS work policies developed in universities.
- Strategic plans for implementing HIV/AIDS policy issues need to be established.
- The issue of fatigue among students must be addressed to ensure they remain interested in learning more about HIV/AIDS.
- There is need to include people living with HIV/AIDS in university activities on HIV/AIDS.
- The workshop proceedings, recommendations and outputs should be disseminated.

12.0 Way Forward

Presenter: Prof. Caroline Langat-Thoruwa, AWSE

Those in attendance should prioritize sensitization on the workshop outcomes and recommendations.

UNESCO announced the call for proposals to fund curricular reform activities in their respective institutions. UNESCO would offer mini-grants of USD 2,000 through AWSE on a competitive basis to the universities that participated in the workshop. It was emphasized that the grant would be fairly competitive and that only 17 out of the 21 participating universities would qualify for funding.

Preparation of grant proposals

Participating institutions were given guidelines on how to write winning proposals. While working on their proposals, universities were encouraged to consider the following;

- Need to capture enthusiastic people in developing the proposal and bring others on board
- Need to sensitize the university management concerning the proposed activities to be funded by the grant
- Identify student needs and bear them in mind during the proposal preparation
- Devise methods of implementing the proposed curriculum
- Indicate realistic time frames for activities to be funded
- Need to forecast any challenges and how they will be addressed
- Identify best practices in the proposal that will be adopted
- Employ innovative education approaches
- Clearly outline the expected objectives and outputs
- Suggest monitoring and evaluation procedures that will measure progress and performance of the activities to be carried out.

Submission procedure

- The universities were expected to submit their proposals through e-mail to the AWSE secretariat within a month after the workshop.
- Proposal assessment will take place between 21st May and 16th June 2006
- Successful applicants would be notified as soon as the assessment was over.

Requirements

- Country workshops for in-country training were proposed to commence in August and continue till the end of 2006. The objectives of these workshops would be to; disseminate information, evaluate university projects, provide guidance to the project activities and offer on-site training to the participating universities.
- Monitoring and evaluation was set to start in November 2006 and to be concluded by February 2007. This is to be done by UNESCO and AWSE.

13.0 Closing Ceremony

13.1 Closing Remarks

The Chairperson of AWSE, Prof. Mabel Imbuga gave the closing remarks on behalf of the organizing committee. She informed the participants that AWSE was glad to see representation from their male counterparts, which showed that the venture was highly professional, and not just as a women's affair. The good participation and rich contributions at the workshop was noted with great gladness. There was a call for all universities and campuses to participate in every way possible in responding to HIV/AIDS and form working networks. In conclusion, the participants were thanked for their dedication during the workshop and were called upon to have AWSE at heart as they returned to their respective countries and universities.

Mrs. Ochanda of UNESCO took the opportunity to thank the participants for their rich deliberations and the universities for not only nominating participants at such short notice but also for giving them time off their official duties to participate in the workshop. Appreciation was also extended to all presenters for their fantastic work with specific thanks to Prof. Michael Kelly for having accepted to be the international resource person and main facilitator for the workshop. The participants were asked to show their commitment further by acting upon the recommendations that emerged from the workshop and develop networks with strong scientific foundation. Participants were advised to use the workshop as a stepping-stone to bring about other ways of effecting integration activities and for bringing out the potential that lies with the scientists and engineers as the brains of Africa.

13.2 Vote of Thanks

Prof. Sefa Dedeh, University of Ghana, gave a vote of thanks on behalf of the participants. The participants expressed their appreciation for being invited to attend the workshop and reiterated the need for scientists and engineers to devote the necessary attention to HIV/AIDS and bring about a paradigm shift on the same. Indeed, the workshop offered a new impetus to all the participants who will use its deliberations and recommendations to address wider societal issues that emanate from HIV/AIDS. Finally UNESCO and AWSE were recognized for having organized the workshop. All hoped for continual networking with their respective universities.

Dr. Victoria Ngumi, JKUAT, thanked the participants for representing their institutions well at the workshop. Special thanks went to Prof. Michael Kelly, Prof. Kiamba, Prof. Were, and Prof. Massaquoi for their distinguished presence; and to Ms. Alice Ochanda, Ms. Julia Hasler, Prof. Magambo and Dr. Zipporah Ng'ang'a for serving as resource persons and facilitators during the workshop. She also expressed gratitude to the AWSE Chairperson, Prof. Imbuga, to the AWSE committee members, Prof. Caroline Lang'at-Thoruwa, Ms. Mary Mwangi, Dr. Ethel Monda, Ms. Alice Ochanda, Ms. Janet Kisio and Ms. Monica Gammimba for their dedication towards ensuring the success of the workshop. Finally, the input of all rapporteurs and technical support persons through capturing the events and providing technical assistance during the workshop was recognized.

ANNEXE 1

14.1 Workshop Programme

DAY ONE Tuesday, 11 April 2006		
8.00 – 9.00	Registration	Mawingo Conference Hall Entrance
Ushers: Dr. Ethel Monda, Ms. Alice Ochanda Dr. Victoria Ngumi and, Ms. Mary Mwangi		
Session I		
Chair of Session: Prof. Caroline Lang'at-Thoruwa(AWSE)		
Rapporteurs: Dr. Victoria Ngumi/ Daystar University		
9.00 – 9:20	Opening remarks and Background to the workshop	Prof. Mabel Imbuga (Chairperson – AWSE) Prof. Joseph Massaquoi (Director – UNESCO Nairobi Office)
9.20 – 9:50	Keynote address: Renewing the response approach to HIV and AIDS	Prof. Michael Kelly University of Zambia
	Guest Speaker	Prof. Crispus Kiamba Permanent Secretary – Ministry of Science and Technology
9.50 – 10:20	Vote of Thanks	Prof. Prof. Miriam Were – Chairperson, National AIDS Control Council
10.20 – 11:00	Tea Break	
Session II		
Chair of Session: Dr. Ethel Monda(AWSE)		
Rapporteurs: Ms. Mary Mwangi / Catholic University		
11:00 – 11:45	The response of African Universities to HIV and AIDS	Prof. Michael Kelly University of Zambia
11:45 – 12:00	Discussion	
12:00-12:45	The Role of University Scientists in addressing societal needs through the development of relevant HIV and AIDS courses	Prof. S.S.A. Orago Acting Director, National AIDS Control Council (NACC)
12:45 – 1:00	Discussion	
1.00 – 2.00	Lunch Break	
Session III		
Chair of Session: Botswana		
Rapporteurs: Dr. Ethel Monda/ University of Asmara		
2:00– 3.15	University presentation:- (Activities): -	Rwanda: <ul style="list-style-type: none"> • Kigali Institute of Science, technology and Management • Kigali Institute of Education • National University of Rwanda

		Ghana: <ul style="list-style-type: none"> • Kwame Nkurumah University of Science and technology • University of Ghana • University of Cape coast Kenya: • University of Eastern Africa – Baraton
3.15- 3:30	Discussion	
3.30– 4:00	Tea Break	
4.00 – 5:00	University presentation (Activities)	Kenya: <ul style="list-style-type: none"> • Catholic University of Eastern Africa • United States International University • Maseno University • Western University College of Science and Technology
5:00 – 5.15	Discussion on presentations	
DAY TWO Wednesday, 12/04/2006		
Session IV		
Chair of Session: Ghana		
Rapporteurs: Ms. Juliet Macharia / University of Ghana		
8.30 – 9.00	University presentation (Activities)	<ul style="list-style-type: none"> • University of Asmara • University of Botswana • University of Nairobi
9.00 – 9:15	Discussion	
9.15 – 9.45	Common University HIV and AIDS Courses University presentation	Kenya:- <ul style="list-style-type: none"> • Kenyatta University • Jomo Kenyatta University of Agriculture and Technology • Egerton University • University of Nairobi
9.45 – 10.00	Discussion on presentations	
10.00 – 10.30	Tea Break	
Session V		
Chair of Session: Rwanda		
Rapporteurs: Prof. Caroline Lang'at-Thoruwa / Kwame Nkurumah University of Science and Technology		
10.30 – 11.15	Mainstreaming of HIV and AIDS in institutions of Higher learning	Prof. Michael Kelly University of Zambia
11:15 – 11:30	Discussion	
11:30 – 12:00	University presentations on mainstreamed courses	<ul style="list-style-type: none"> • Jomo Kenyatta University of Agriculture and Technology • Maseno University • Moi University • Daystar University
12:00 – 12:30	Discussion	
12.30 – 2.00	Lunch Break	

Session VI

Chair of Session: Eritrea

Rapporteurs: Dr. Rose Odhiambo / Kigali Institute of Education

2.00 –2:45	Integrating HIV and AIDS in Biological, and Physical Sciences	Dr. Zipporah Ng'ang'a Kenyatta University
2:45-3:00	Discussion	Discussant: Prof. H. Ochanda
3:00 -3:45	Integrating HIV and AIDS in engineering and technological courses	Prof. J. Magambo Jomo Kenyatta University of Agriculture and Technology
3:45 – 4:00	Discussions	Discussant: (to be identified)
4:00 – 5.00	Break-out Group Discussion	Discussant : Group (i) Biological Sciences Group (ii) Physical Sciences Group (iii) Engineering and Technological courses
5.00 – 5.15	Tea Break	
7.00 – 8.30	Workshop Dinner	Prof. Mabel Imbuga (Chairperson – AWSE) Prof. Joseph Massaquoi (Director – UNESCO Nairobi Office)

DAY THREE Thursday, 13/04/2006

Session VII

Chair of Session: Prof. Weshitemi

Rapporteurs: Ms. Patricia Jane Ochieng / Kigali Institute of Science & Technology

8.30 – 9.30	Presentations from Group Discussions	
9.30 – 10.00	Plenary Discussions	
10:30 – 11.00	UNESCO's Strategy for HIV and AIDS prevention	Ms. Alice Ochanda Ms. Julia Hasler
11.00 – 11.15	Discussions	
11.15 – 11.30	Tea Break	

Session VIII

Chair of Session: AWSE/UNESCO

Rapporteurs: Ms. Juliet Macharia / University of Eastern Africa- Baraton

11.30 – 12.30	Immediate follow-up action plan	Prof. Mabel Imbuga
12.30 – 1.00	Closing session	
1.00 – 2.00	Lunch break	
	Free afternoon	

ANNEXE 2

14.2 Speeches

Speech by Prof. Joseph Massaquoi - Director, UNESCO Office in Nairobi and Regional Bureau for Science in Africa

The Permanent Secretary, Prof. Crispus Kiamba,
The Director of Higher Education, Mr. David Siele,
The Chairperson of AWSE, Prof. Mable Imbuga,
Ladies, and Gentlemen,

The all-pervading impact of the AIDS epidemic is experienced daily as universities in Africa strive to come to terms with the fact that they are living in a world with HIV/AIDS, as they lose not just students but highly qualified and hard to replace academic members of staff and administrators. For a long time, the institutions of higher education have continued to regard HIV/AIDS as essentially a health problem that focuses more on students. This approach has tended to direct the focus of interventions to support services and campus health clinics as the solution to this very persistent problem.

Fortunately, the past two or so years have seen notable changes from the traditional concentration of education and communication efforts into the brief orientation period for first year students, to the development of clear institutional guidelines on HIV/AIDS prevention activities. This has come as a result of Ministries of Education taking the initiative to develop sector policies on HIV/AIDS which are aimed at guiding the response to the impact of the disease on the entire education sector. These sector policies on HIV/AIDS have put a lot of emphasis on the development of institutional guidelines for the prevention of HIV/AIDS and the mitigation of its impact. I am happy to note that some of the universities that have made significant progress in efforts to institutionalize the issue of HIV/AIDS prevention, like the University of Botswana, University of Nairobi, Maseno, Egerton and Kenyatta Universities from Kenya are here with us today. I believe other amongst you have moved in that same direction within your institutions.

The reality is that HIV/AIDS is here with us and is having a devastating effect on the African continent. As they drag their feet in deciding what course to take in the fight against HIV/AIDS, institutions of higher education must take the following points into consideration:

1. No university is immune to HIV/AIDS – No University can consider itself as an AIDS-free enclave. They are part of the same societies that are living and experiencing the impact of HIV/AIDS. They host young people who are the most vulnerable group to HIV infection.
2. HIV/AIDS has the potential to impair institutional functioning of a university in the same way that it undermines the operations of other learning institutions. This is seen in increased staff deaths, reduced staff and student productivity, increased financial costs, etc...
3. The incubation period between the initial HIV infection and the development of full-blown AIDS has major implications for universities. Universities may be successful in producing qualified individuals but HIV/AIDS may undermine this accomplishment through premature deaths of the young graduates.
4. Universities have a mandate to serve society - through the provision of knowledge, understandings and expertise that the society needs. This automatically demands their engagement with HIV/AIDS.
5. Universities have the special responsibility for the development of human resources. They must therefore ensure that institutions continue to produce graduates needed by an AIDS-

affected society. This calls for the introduction of new areas of professional training to respond to emerging needs in such a society.

6. Universities are the source of new knowledge, understandings and skills - therefore, they have a crucial role to play in the eradication of stigma and discrimination.
7. Universities have the intellectual resources and traditions to support the development of deeper understanding of HIV/AIDS. Such efforts have led to the understanding of HIV as a virus and AIDS as a biomedical condition. This has led to the development of Anti Retroviral Therapies. However, more still needs to be done in order to save humanity.
8. HIV/AIDS is with us and it is here to stay. Universities must therefore come to terms with this fact and do all they can to develop the human resource needed to replenish what has been lost to the disease.

It is by taking cognizance of the above points that UNESCO Regional Bureau for Science in Africa has decided to focus its attention on the Faculties of Science and Engineering and to emphasize the important role that they can play in this fight against HIV/AIDS. The aim is not just to create awareness amongst you on your role as scientists and engineers on how you can contribute to preventing the prevalence of the disease among young people in your faculties, but also to build your capacity in HIV/AIDS prevention education. It is indeed within this context that the workshop that you are attending today has been organized.

Ladies and Gentlemen, fellow scientists, you are endowed with the responsibility to pass on knowledge to a community that is young and highly at risk of HIV infection. The risks are also enhanced by the liberal atmosphere that tends to characterize universities, and by a culture that may be open to behaviours and life styles that increase the possibility for HIV transmission. There is no doubt that you have an important role to play not just in responding to the needs of the society, but by saving that same society from extinction.

As you plan and strategize during the next 3 days on how to mainstream HIV into your specific programmes, I would like to appeal to each one of you to remember the 8 points which detail why you should all be involved in HIV/AIDS prevention as academic members of staff in from universities in Africa.

Let us save Africa's children, Let us save Africa's brains!!

THANK YOU

Keynote Address

Renewing the Response Approach to HIV and AIDS

M. J. Kelly, Lusaka, Zambia

mjkelly@jesuits.org.zm

The Current Domination of HIV and AIDS

Almost twenty-five years have passed since the publication of the first report on what has since developed as the AIDS epidemic. During those years, the world has observed, almost with disbelief, the spectacular growth of the epidemic. HIV and AIDS have now extended to every country in the world for which information is available and in several countries their spread continues almost unchecked. “Rapidly growing epidemics in newly affected regions and populations, such as among injecting drug users in Eastern Europe, and uncontrolled ‘mature’ epidemics combined with population growth, have contributed to the net overall increase in HIV incidence worldwide” (UNAIDS). Antiretroviral therapy (ART) has brought the singular benefit of averting between 250,000 and 350,000 deaths in 2005, but providing ART on the scale that is required and sustaining it for decades into the future pose massive social, medical, financial, and logistical problems. Comprehensive and long-term prevention programmes are beginning to bear fruit in a few isolated areas, but the majority of prevention strategies lack the scale, intensity and long-term perspective needed for success against the epidemic.

The first twenty-five years of HIV and AIDS have shown that the epidemic has progressed faster than anybody expected. In 1996, it was estimated that globally approximately 20 million people were living with HIV or had AIDS; twenty years later, this estimate had almost doubled to just 40 million. Moreover, straightforward measures that can prevent transmission receive very little coverage. For instance, prevention of mother-to-child transmission reaches less than nine percent of the global number of mothers in need and less than five percent of mothers in need in African countries. While achievements must be acclaimed, it is also necessary to acknowledge that globally the epidemic remains out of control.

But there are areas of hope and instances of success in confronting the disease. Kenya is one of these. National prevalence rates dropped from over 10% in the 1990s to 7% in 2003. This decline has been accompanied by a dramatic drop in the prevalence rate among pregnant women in urban areas, from 28% in 1999 to 9% in 2003. There is sound evidence that Kenyans are adopting safer sexual behaviour, with fewer sexual partners and increased condom use. But there are no grounds for complacency. Declines in prevalence are not found uniformly across the country and in many antenatal clinics rates remain high (above 10%). Moreover, there is the disturbing fact that HIV infection among girls aged 15–24 is more than five times higher than among young men in the same age range (4.9% for young women and 0.9% for young men).

Accounting for Failure to Respond to HIV and AIDS

There are several factors that have contributed to the epidemic getting out of hand. Important ones include:

- Insufficient leadership, vision, sense of urgency, and commitment at all levels, coupled with global structures that enhance the scale and intensity of the epidemic and reduce in-country potential to deal with it.
- The silent epidemic that, in its early stages, is unnoticed and most often denied.

- The way in which attention focuses on the immediate causes and manifestations of the problem but fails to address the contexts of poverty and gender.
- Insufficient attention to youth needs.
- Lack of sensitivity to and conflict with cultural and religious perceptions and values.
- Pervasive stigma and offensive discrimination.

The framework for the current global response to HIV and AIDS has three elements:

1. Narrowly conceived prevention policies and failed efforts;
2. Excessive attention to sex;
3. Inadequate and problematic care, support and treatment efforts.

Although this response framework makes some provision for the major forces that drive the epidemic, it does not pay sufficient attention to the way the epidemic flourishes in an environment characterized by poverty; gender disparities and unequal gender-related power structures; human rights violations, especially stigma and discrimination; and exploitative global socio-economic structures and practices. Instead it has focused almost exclusively on the immediate causes of HIV transmission—sexual contacts, mother-to-child transmission, transfusions of infected blood, and sharing of infected needles or contaminated scarification instruments.

The strategies adopted for maximizing HIV preventive efforts, and thereby enhancing control of the epidemic, depend to a considerable extent on one's understanding of the epidemic. The way in which the problem is perceived determines, to a large extent, the mode of response. Basically, two approaches can be adopted when dealing with HIV and AIDS. The first, which has dominated in practice, is to stay close to the issue, keeping the virus sharply in focus, and developing strategies that deal more or less directly with it, with a view to counteracting its negative capabilities. The second, which has been acknowledged in theory but much less so in practice, is to focus on the context within which the virus functions, recognizing the symbiotic relationship between virus and context—while the virus remains an ever-present object of interventions, strategies are equally (if not more) concerned with addressing and modifying the context in which the virus flourishes and exercises its destructive potential.

This understanding of different ways of responding to the epidemic emerges clearly when certain questions are asked about the epidemic, especially as it manifests itself in sub-Saharan Africa:

1. Is HIV/AIDS essentially a medical problem that requires a biomedical response?
2. Is it a problem resulting from human behaviour practices and hence one requiring a response that focuses essentially on aspects of human behaviour, be they sexual or drug injecting?
3. Is the epidemic a problem of the underdeveloped conditions in which human behaviour takes place?

Responding to HIV/AIDS as a Biomedical Issue

From the time of its first appearance HIV/AIDS has been dealt with principally as a health issue. This was understandable; given the way that in its progression untreated HIV could devastate the human body and lead to painful morbidity and almost inevitable mortality. But medical interventions that deal with an already acquired infection do not appear on the scene early enough. The damage has been done and the task of medical science is to repair it, if possible, to delay its negative impacts on the individual's health system, or to alleviate what the individual must experience as the condition progresses. The ability of medical science to respond to the disease has been greatly extended by the development of antiretroviral drugs that inhibit the proliferation of the immuno-deficiency virus in the human body. As of June 2005, approximately one million infected persons were being treated with these drugs, out of a potential 6,500,000 who were in need. Ethical perspectives, human rights, social and economic considerations, all underline the importance of extending this treatment to as

many as possible and as quickly as possible. The emerging target of universal access to treatment by 2010 is a major challenge to the conscience of the world.

Success in the development of a vaccine and of a microbicide would see biomedical interventions coming at a much earlier stage. "As with other infectious diseases, the best approach to control in the long term will be an effective vaccine that prevents infection when a person is exposed to the virus" (UNAIDS). It is significant that among its programmatic actions for HIV prevention UNAIDS has included preparation for vaccine and microbicide access (and use) by immediate attention to issues related to financing, intellectual property rights, manufacturing, procurement, logistics, delivery, and provider and consumer education. But having to respond to the thousands of genetic variants of HIV that arise within an infected individual makes the development of a vaccine an almost intractable scientific problem. Gross under-funding also hampers vaccine development: "Just €430–470 million is invested worldwide in vaccine research and development... less than 1% of spending on all health and pharmaceutical-related research and development (over €58.68 billion) (European Commission). Sustaining funding for vaccine research over a long period is a very real problem, given that the prospects for results are so slender. Scientists believe that there is little likelihood of a preventive vaccine being discovered within the next decade, and many are of the view that an even longer time frame would be more realistic.

A microbicide is a topical formulation designed to block HIV infection when applied vaginally or anally prior to intercourse. A major feature of microbicides is that they allow women to adopt personally controlled risk-reduction measures. Progress is being made in this area and candidate formulations are currently undergoing field-testing in Uganda, Zambia and other countries. It seems possible that a viable and effective microbicide will be developed and launched on to the market within the coming few years. Progress would be quicker if this field were better funded. At present it receives about \$140 million a year, which is only about half the investment it needs.

The Behaviour Change Approach to HIV Prevention

Changing human behaviour has long been a central plank of programmes addressing both sexual practices and injecting drug use. When the AIDS epidemic began to command global attention in the 1980s, the world was deeply engaged with the problem of how to control the upward spiral in global population. Since sexual activity was the principal route through which both population growth and HIV transmission occurred, there was logic in entrusting responsibility for HIV prevention to organizations that were already dealing with population issues. The result was that global HIV/AIDS policy came to be "dominated by organizations whose institutional mission for nearly a half-century was population control in developing countries through behaviour change" (Stillwaggon, 2006). This approach has been well captured by the World Bank in its statement that "the greatest hope for combating HIV/AIDS in the foreseeable future is that of helping people to choose safer behaviour so that they will be less likely to contract and spread HIV".

As a response to HIV and AIDS, changing individual behaviour raises several problems, both as an approach and as a policy. Its successes after more than two decades of very heavy investment are quite limited. Uganda, Senegal and Thailand, with the recent tentative inclusion of Kenya, Zimbabwe and urban Haiti, provide some evidence of successful behaviour-based prevention programmes. But apart from the success with the well-defined commercial sex industry in Thailand, and with segments of the population in Senegal and Uganda, what is known about the successes elsewhere does not allow for unqualified affirmation that they were due to behaviour change.

As an approach, behaviour change interventions also suffer from the limitation that essentially they are "end-game tactics" that try to prevent HIV infection at the last minute (Stillwaggon, 2006). In many respects they are similar to seat belt measures in driving, denoting actions for adoption throughout the period of immediate engagement to reduce the risk of unwanted outcomes. But just as seat belts have not delivered all the safety benefits expected of them, so also behaviour change

interventions may fail because they take little account of the way subjects may take heightened risks (such as increased recourse to commercial sex workers) if they perceive that individual encounters involve reduced risks.

A further problem with the behaviour change perspective is the way it is rooted in a rational, linear, individualistic model. The approach is governed by logic, as if individuals were in full control of their choices, HIV risk-reducing decisions were always based on reason and every sex or injecting drug use activity was fully free and rational. The tendency has been to follow what, in a different context, George Bernard Shaw referred to as the “brute sanity” approach—one that stresses the logical rationality of avoiding recognized risk but fails to make due allowance for the context of impulse, passion and power structures in which sexual activity and drug abuse often occur.

Turning to behaviour change as a policy, major problems are its implicit disowning of the epidemic and its difficulty in prescinding from stigmatizing and moralistic connotations. By placing responsibility for HIV transmission at the level of individuals, it affirms that the discourse about AIDS is a discourse about others who are personally accountable for contracting or transmitting the virus. This “otherisation” makes the epidemic somebody else’s problem “out there”, something belonging to “them” but not to “us”. In the process of creating this distinction, the policy reinforces hierarchical patterns of privilege, where those at the top of a stratified society are pre-eminent over, and sometimes predatory upon, others at lower levels. In practice, this heightens perceptions of individuals and regions as sexually promiscuous or drug prone, leading to the entrenchment of stereotyped images and further alienation from the problem.

Further, though questions of responsibility and accountability are important, very little effort has been invested in ensuring that AIDS messages “communicate the importance of taking responsibility for one’s own safety from HIV (e.g., through practicing safer sex) without also communicating the idea that people with HIV are blameworthy for their condition and, therefore, deserving of stigma”. The bizarre fact is that international HIV prevention policy falls into this trap and thereby institutionalizes at its heart the stigma that is acknowledged to be a very powerful force in sustaining the epidemic. Moreover, the idea that people with HIV are somehow blameworthy for their condition has moralistic overtones that lead many to outright rejection of the behaviour change approach, as evidenced by the strident objections of activists at the 2004 Bangkok AIDS Conference to the A – B – C paradigm (abstinence, be faithful, use a condom).

Addressing the Epidemic as a Development Issue

The third scenario asks whether the AIDS epidemic is a problem of the underdeveloped conditions in which human behaviour takes place. If so, the focus should be on transforming these conditions and thereby changing circumstances that contribute to HIV transmission. The UNAIDS prevention policy position paper clearly affirms that “prevention efforts will not be successful unless the underlying determinants of vulnerability to infection are addressed and the rights of all people are respected, promoted and protected” (UNAIDS). Unfortunately, however, the paper does not frame any of its programmatic actions in terms of this perspective. Instead, the proposed actions ring the changes on addressing the immediate causes of HIV transmission (sexual practices, mother-to-child transmission, injecting drug use, and contaminated blood supplies), on information and education campaigns, and on technological interventions. Apart from speaking about preparing for access and use of vaccines and microbicides, these programmatic actions are the ones that have been proposed and followed for almost two decades. And while they have brought gains in the areas of safe blood supplies and mother-to-child transmission, they have not radically altered the progress or dynamics of the epidemic. Yet the world is being encouraged to continue to invest its resources in what is fundamentally “more of the same”. The “same” was not good enough in the past. There is no guarantee that it will be good enough in the future.

What is needed is much more radical commitment, in principle and in practice, to addressing the underlying determinants of vulnerability. This entails going beyond sexual practices and the other surface and immediate drivers of the epidemic and reaching down to such underlying and structural causes as gender inequalities; poverty and the unequal distribution of wealth; economic stagnation; food insecurity; joblessness; the circumstances surrounding the internal and international movement of people; legal systems; war and conflict; corruption; north-south trade, social and cultural relations; structural adjustment and externally imposed conditionalities; and ecological abuse. Addressing these and similar factors is synonymous with addressing underdevelopment.

The roots of the AIDS epidemic lie deep within the fabric of society. Unless it is integrated into a programme aimed at eradicating these roots, head-on confrontation with the virus will fail to bring the epidemic under control. What is needed is a comprehensive development agenda that addresses the broad spectrum of underdevelopment as an issue in its own right and as the context within which HIV/AIDS flourishes. Success in responding to HIV/AIDS will come only through the implementation of such an agenda. Dealing with each one of the developmental factors that enhances vulnerability to HIV infection is in effect dealing with the AIDS epidemic, whether this is recognized or not. The UNAIDS Scenarios Project for AIDS in Africa took account of this perspective when it stated that “the shape and extent of the AIDS epidemic is determined by a range of powerful forces, outside of the areas in which HIV and AIDS programmes normally respond. Addressing HIV and AIDS may act as a catalyst for addressing these broader socio-economic and political dynamics. Equally, addressing HIV and AIDS effectively requires a consideration of these broader forces” (UNAIDS).

AIDS and development issues are so closely intertwined that the promotion of development almost automatically implies action against the epidemic. Replacing the undeveloped situations characterised by poverty, the low status of women, food insecurity, poor health and education systems, urban congestion, rural neglect, and discriminatory global economic practices, with something that better reflects human worth and dignity will create a terrain in which the human immuno-deficiency virus can no longer flourish.

Equally, action against the epidemic should be action that leads to enhanced human, social and economic development. As noted already, the shape and extent of the AIDS epidemic is determined by various anti-developmental forces, many of them outside the areas normally addressed by HIV and AIDS programmes. Addressing HIV and AIDS serves as an entry point and catalyst for addressing these broader issues. Briefly, then, one can say that the more HIV/AIDS, the less development, and the more development, the less HIV/AIDS.

What Drives the AIDS Epidemic in Sub-Saharan Africa?

What this means in practice appears in an examination of the triptych of HIV/AIDS, poverty, and sexual practices in Africa. Because heterosexual sex is the dominant mode through which HIV transmission occurs in sub-Saharan Africa, it is frequently inferred that the way to turn the epidemic round is to adopt strategies that directly address the sexual transmission of the virus. The logic is that if sexual practices are driving the epidemic in sub-Saharan Africa then the response should address and somehow neutralize these practices. But because it leaves so many questions unanswered—even unasked—this is not a very satisfactory approach. A number of these submerged, but troublesome, questions deserve consideration.

First, how does one account for the differences between Africa and Europe in the extent of HIV transmission from mother to child? Prior to the advent of antiretroviral drugs, infected mothers in Europe transmitted the infection in some 14 percent of the cases, whereas in sub-Saharan Africa transmission from an infected mother occurred (and continues to occur) in 25–40 percent of the cases. Even if transmission through breast-feeding, which is more common in Africa than in Europe, is discounted, the rates of vertical transmission are considerably higher in sub-Saharan Africa than in Europe or other developed parts of the world. Clearly, in this instance the virus is not being

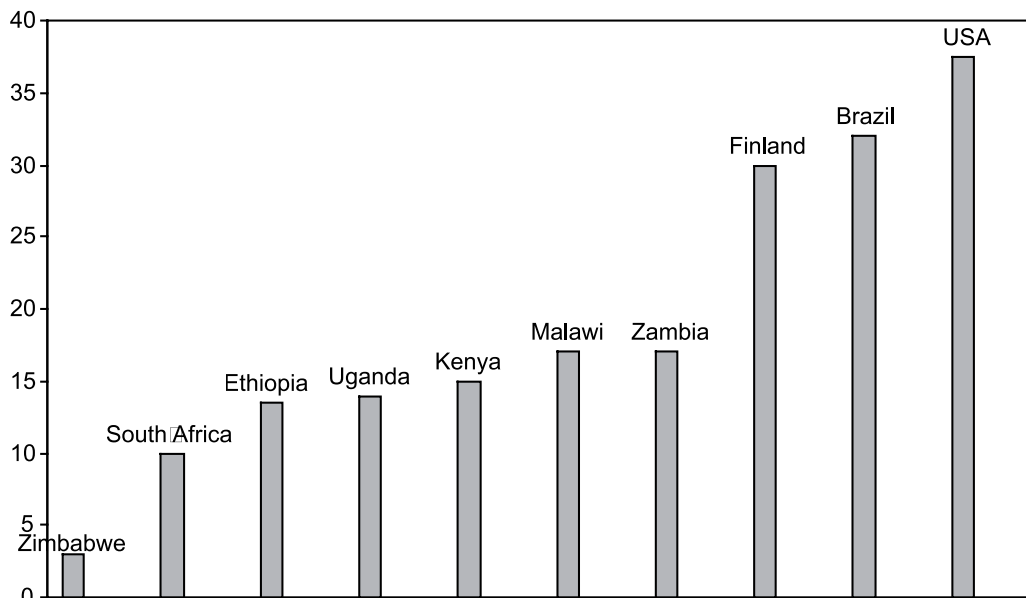
transmitted through sexual activity. One asks, then, why there should be such a difference in transmission rates.

Second, why did a major African-style AIDS epidemic not occur in Western Europe and North America? In the early years of the epidemic, the stage was set for the transmission route to change from homosexual to heterosexual sex. But even though this occurred to some extent, it did not lead to anything like the calamitous epidemic that almost simultaneously engulfed Africa. What factors inhibited the development of a gigantic epidemic in the developed countries, or, conversely, facilitated such a development in sub-Saharan Africa?

Third, the statistical risk of heterosexual transmission of HIV is acknowledged to be very low. For South Africa, the risk is stated to be three per 10,000 contacts for the male partner and twenty per 10,000 contacts for the female partner. This being so, why does so much transmission occur in Africa? With such low levels of statistical risk, it is inconceivable that in and of itself sexual activity could account for the amount of HIV that has transfixed Africa. Some other factors must be at play.

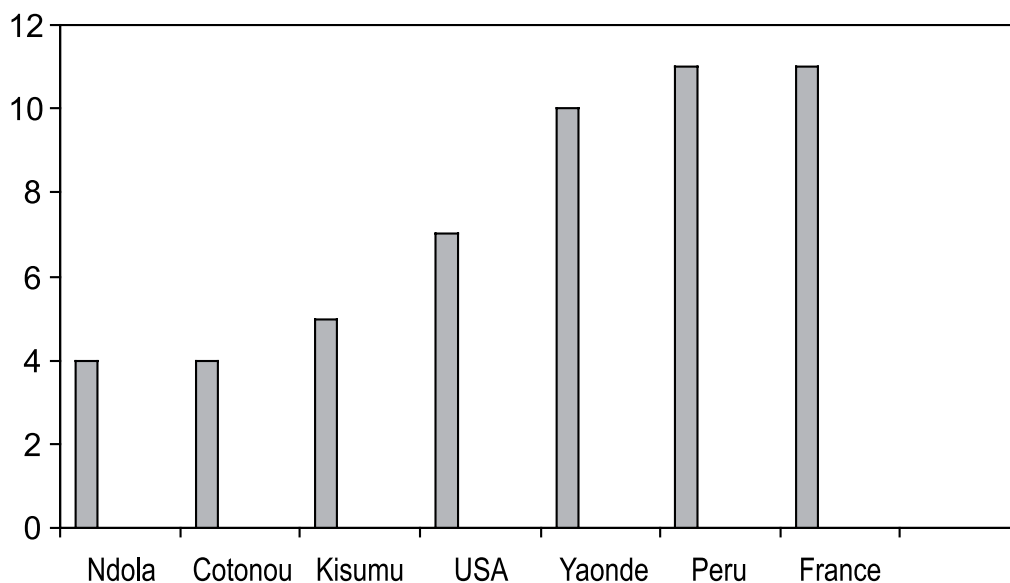
Fourth, over 100 million new sexually transmitted infections (STIs), excluding HIV, occur each year among young people under 25 years of age. Further, in the United States, STDs are the most common diseases reported to the Centres for Disease Control and Prevention with 12 million new cases annually, of which 3 million are in teenagers (Stillwaggon). These figures indicate extensive unprotected sexual activity, especially among young people. This activity has contributed to an aggressive HIV epidemic in some parts of the world, especially in sub-Saharan Africa, but not in other parts. While the reason for the difference may lie partly with the type of STI experienced in different parts of the world, it is necessary to ask whether there are other contributing factors, as also to ask why STIs that increase the risk of HIV infection should occur more frequently in sub-Saharan Africa (and South-East Asia) than in other parts of the world.

Figure 1: Percentage of Girls aged 15–19 who say they had sex before their 15th birthday



Data Source: *Young People and HIV/AIDS. Opportunity in Crisis.* UNICEF/UNAIDS/ WHO, 2002: 12.

Figure 2: Number of lifetime partners reported by men in four African cities and three non-African countries.



HIV Rate: 23% 3% 20% 0.6% 4% 0.3% 0.4%

Source: *Differences in HIV spread in four sub-Saharan African cities*, UNAIDS, 1999a; *AIDS and the Ecology of Poverty*, E. Stillwaggon, Oxford University Press, 2006: 22–25.

Conceiving of sex as the principal driving force of the epidemic in Africa suggests that people in Africa are engaging in sexual activities more frequently and according to different patterns than people elsewhere. Sexual practices that add considerably to the risk of HIV infection include early age of sexual debut among girls and multiple sexual partners among men. However, there is no evidence that girls in African countries initiate sex at earlier ages than girls elsewhere (Figure 1). Neither is there evidence that African men have more lifetime sexual partners than men elsewhere (Figure 2). In fact, in both cases the evidence would appear to be in the opposite direction—sexual behaviour in Africa tends to be less risk-prone than in other parts of the world¹.

Clearly, early sexual debut and multiple partners are universal phenomena. But they do not themselves account for the development of an AIDS epidemic on the scale experienced in much of sub-Saharan Africa. Neither can differences in HIV prevalence found in different parts of Africa be accounted for by the frequency or nature of sexual practices. Careful studies have shown that risky sexual behaviour patterns, such as high rates of partner change, frequency of contacts with sex workers, or maintaining several sexual partners at the same time, are just as likely in West Africa, where HIV prevalence is low, as in Zambia and Kenya, where it is high.

Poverty as the Driver of the AIDS Epidemic in Sub-Saharan Africa

This suggests that the AIDS epidemic in Africa is being driven by some factor other than, or in addition to, sex. The fact that HIV infection involves the transmission of an infectious disease throws light on the nature of that factor. Infection with HIV needs conditions that facilitate the transmission of the virus. In the absence of the required conditions, transmission will not take place or the rate of transmission will be low. This is not something unique to HIV but is a feature common to every infectious condition, with transmission from individual to individual depending on three things: the characteristics of the virus, the characteristics of the person transmitting the virus, and the characteristics of the person to whom the virus is transmitted.

Regarding the characteristics of the virus, the question is whether the HIV virus that infects people in Southern Africa is more virulent and can be transmitted more easily than the type that occurs in other

parts of the world. HIV is a member of a family of viruses in which there are two types, HIV-1 and HIV-2. Both types consist of groups of viruses, and within HIV-1 one of these groups is subdivided into a number of subtypes. Viruses within the HIV-1 group are primarily responsible for the global AIDS epidemic, while the epidemic in southern Africa is principally due to subtype C of the HIV-1 group of viruses. It is sometimes asserted that subtype C is more aggressive than other subtypes, but there is no strong evidence that supports this assertion. While “some evidence exists that progression to AIDS occurs more quickly with certain subtypes than it does with others, no convincing evidence has yet been obtained to prove that one subtype is significantly more virulent than another”.

There is, however, extensive evidence to show that individual characteristics affect HIV transmissibility. Anything that boosts an individual’s immune system strengthens against HIV infection, while anything that weakens the immune system increases susceptibility to HIV infection. Exposure to potential HIV infection is less likely to lead to actual HIV infection in individuals whose immune systems are in a healthy condition. Conversely, if an individual’s immune system is in a weak, rundown condition, then there is a greater likelihood that exposure to potential HIV infection will lead to actual infection. A weakened immune system increases susceptibility to HIV infection.

Once again, this is not something unique to the human immuno-deficiency virus. The fact of having a depressed immune system renders an individual susceptible to any infectious condition, HIV included. The factors leading to such a depressed system are well known.

An established literature in public health and a century of clinical practice demonstrate that persons with nutritional deficiencies, with parasitic diseases, whose general health is poor, who have little access to health-care services, or who are otherwise economically disadvantaged have greater susceptibility to infectious diseases, whether they are transmitted sexually or by food, water, air, or other means (Stillwaggon, 2006: 5–6).

These various conditions characterise the poor. In other words, the poor are more susceptible than the non-poor to HIV infection and it is their material poverty that makes them so. The conditions of their poverty result in the poor having weakened immune systems and in consequence being more susceptible to HIV as well as to other forms of infection. Sexual activity may cause the introduction of HIV into their bodies, but it is their weakened immune systems, arising from their poverty, that enables the virus to take hold, develop and gradually further undermine their already debilitated immune systems.

The situation in which the poor live in much of southern Africa goes a long way to explaining why their immune systems are weak and hence why they are especially susceptible to HIV infection. They are malnourished because of too small an intake of food, because of an unbalanced diet, or because their diet lacks essential micronutrients (such as vitamin A, iron, zinc, or selenium). They carry a heavy load of parasites and worms, because at one time in their lives they experienced malaria, or because their poverty situation prevents them from taking measures to protect themselves against infestation with roundworms, whipworms, hookworms, amoebae, and the ubiquitous bilharzia parasite. They also carry a heavy load of untreated sexually transmitted infections (STIs) because their poverty blocks their access to treatment and the lack of safe water and sanitary conditions makes it difficult to maintain personal hygiene. In addition, tuberculosis (TB) tends to be concentrated among the poor, because of their crowded living conditions, poor nutritional status, and inability to protect themselves against adverse weather conditions.

Each one of these seven conditions—malnutrition, micronutrient deficiency, a personal history of malaria, worm infestation, bilharzia, untreated STIs, and TB—weakens the immune system and thereby increases an individual’s susceptibility to infection by HIV or any other virus that may be in the offing (Stillwaggon, 2006: 45–66). These conditions operate independently of one another, but their impact on an individual is particularly damaging when a number of them are present, working together in synergy.

This is the situation for millions of people in southern Africa. They are experiencing a massive HIV and AIDS epidemic because their poverty has left their immune systems so weak that they are almost defenceless against viral infection. Moreover, their already compromised situation is made even worse because the same seven poverty-related conditions also render a person who is already infected with HIV more potent as a transmitter of the virus. Anything that increases the HIV viral load (the concentration of HIV in the blood and other body fluids) increases the potency to transmit infection. Apart from other effects, each of the conditions that have been named—malnutrition, micronutrient deficiency, a personal history of malaria, worm infestation, bilharzia, untreated STIs, and TB—does precisely this. It increases the viral load.

Hence, a person living with HIV who also experiences any one of these seven conditions will be a more effective transmitter of the virus than an infected person who is free from the condition in question.

It should be noted that this is the situation with both horizontal (heterosexual) and vertical (mother-to-child) transmission. In this light, it is easier to understand why mother-to-child transmission rates should be high in sub-Saharan Africa, where mothers are exposed to so much malaria, malnutrition, parasite infestation and tuberculosis—expectant African mothers who are HIV infected are more effective transmitters of the infection than their counterparts in the developed countries where these conditions are relatively rare.

The overall conclusion, therefore, is that the poor are vulnerable to HIV on two fronts. Because of what poverty means for them in the concrete circumstances of their lives, they are more susceptible to HIV infection if they are exposed to the virus. And again because of what it means to be poor, if they are already infected with HIV, they are more effective transmitters of the disease. The HIV vulnerability of the poor in sub-Saharan Africa, whether as receivers or as transmitters of infection, differs from that of the non-poor.

This is undoubtedly a major reason why the widespread AIDS epidemics in sub-Saharan Africa are occurring principally among the poor. They are being driven primarily by poverty. Poverty is not the cause of AIDS. That role is reserved for HIV. But poverty establishes the circumstances and creates the environment that makes the rapid spread of the epidemic possible and even likely. Without subscribing to the non-scientific views on the cause of AIDS expressed by President Thabo Mbeki of South Africa, it would still be broadly correct to say that, while HIV infection causes the medical condition that is AIDS, poverty causes the AIDS epidemic. Stillwaggon (2006: 6) reminds us of the saying attributed to Louis Pasteur, “The microbe is nothing, the terrain everything”. Poverty establishes an ideal terrain or context for the rapid spread of HIV. In the absence of the type of poverty experienced in sub-Saharan Africa, and especially in southern Africa, it is not certain that a major HIV epidemic of the dimensions currently being experienced would occur. Seeing the issue from this perspective clarifies the role played by sex. Because HIV transmission occurs mostly through heterosexual contact, sexual contact is a necessary condition for the physical transmission of the virus. But it is not a sufficient condition for the transmission of HIV infection and even less so for the major AIDS epidemic being experienced in sub-Saharan Africa.

Women, Gender Disparities and the AIDS Epidemic

Gender disparities and unequal gender power structures also play a hugely important role in the transmission of HIV. Unhappily, there are many reasons why women are more vulnerable to HIV infection than men.

On physiological grounds, the risk of HIV infection is greater for women and girls than for men and boys. In addition, women’s risks are increased by a wide array of social, cultural, economic and legal factors, all of which are embedded in extensive theoretical and practical gender inequalities. In particular, at the sexual level, unequal power-relations give women a subordinate position and make them submissive to men. Several established practices in society also have the twofold outcome of demeaning women and enhancing their risk of HIV infection. These include various forms of sexual

violence in the home, community and workplace; indulgence towards men who take sexual liberties; and the practice of older married men of having a “girlfriend” on the side. Further, some customary practices, such as early marriage, widow inheritance, ritual cleansing, and dry sex, have the same double effect of treating women as chattels and making them more vulnerable to HIV infection.

The message that women are there to be at the service of men, in sexual and other ways, is transmitted from an early age through child-rearing practices that form girls to be non-assertive and to accept subordinate status in relation to men. The insistence at times of initiation and pre-marital “kitchen parties” that the prime responsibility of a woman is to please her husband at all costs reinforces the message of her inferior status. Effectively this leaves many women psychologically powerless to take steps to protect themselves against possible HIV infection from their husbands.

In African society, as in many other parts of the world, married women often face violence and abuse if they demand condom use or refuse sex from their husbands or long-term partners. While many women are vulnerable to HIV because they are single or without a partner, the disturbing fact is that even more of them are vulnerable to infection because they are married and remain faithful to a partner who does not reciprocate this trust.

Economic factors further accentuate women’s vulnerability to HIV infection. “A woman’s access to property usually hinges on her relationship to a man. When the relationship ends, the woman stands a good chance of losing her home, land, livestock, household goods, money, vehicles, and other property. These violations have the intent and effect of perpetuating women’s dependence on men and undercutting their social and economic status.”

Compounding all these restrictions and limitations is the heavy HIV and AIDS burden that women must bear. The burden of care that they already carry is greatly increased by additional responsibilities in caring for sick family members and for orphans from their own or their husbands’ extended families. Even if personally HIV infected, or ailing from some other illness, women must continue to manage a household, provide care, produce food and generate income. Access to ARVs is problematic for many women who feel disempowered by a culture that gives priority to the health needs of men. “On top of this, women are often daunted by the bureaucracy surrounding (the delivery of antiretroviral therapy). There are official documents to sign and many women cannot read or write, so they feel intimidated.”

For the greater part, this stalking of women by HIV and AIDS arises from society’s unjust allocation to them of an inferior status. Were it not for the unjust treatment and exploitation that women experience, the epidemic would not have its current worldwide grip. It would not have its current stranglehold on southern Africa. Fewer men would be infected. Far fewer women would be infected, and because this would reduce the incidence of parent-to-child transmission, fewer children would be infected.

Responding to the AIDS epidemic, in terms of prevention, treatment, and impact mitigation, will only succeed when robust, sustained and specific action is taken to reduce and ultimately eliminate the prejudice, discrimination and unjust treatment that women experience. Without a frontal attack on the injustice of gender inequality, the dominance of the epidemic will continue.

Gender equality is necessary in the light of what HIV and AIDS can do to women. But even more fundamentally it is necessary in its own right. AIDS or no AIDS, women and men are essentially equal. Making that equality a lived reality is a major challenge for every individual, community, institution and country.

Global Economic Structures and Practices

The years during which globalization worked its way down into the lives of communities and individuals have seen an increase in poverty and inequity. The extent to which it can be said that globalization is directly

responsible for the increased poverty of individuals and countries and for growing income inequalities is not clear. But globalization as practised has resulted in wealth, prosperity, influence and future promise for the few; poverty, exclusion, voicelessness, and stagnant hopelessness for the many. The emergence of such situations has considerably increased the susceptibility of countries, communities and individuals to HIV and AIDS, especially when it is recalled that poverty and inequity, working together, provide a fertile breeding ground for the continuation and spread of the epidemic. In this sense, it has to be acknowledged that global economic structures and practices have facilitated the continued domination of the AIDS epidemic and in some circumstances have made their own direct contribution to this dominance.

Notwithstanding increased worldwide concern about the AIDS epidemic, the broad global approach, especially as embodied in behaviour change policies, seems to be a combination of containment and what might be called “otherisation”: do not let the epidemic extend beyond the world’s current hotspots; confine it to the marginalized groups (commercial sex workers, men who have sex with men, injecting drug users, the poor in developing countries); make it somebody else’s problem, “out there”, elsewhere, belonging to “Them” but not to “Us”. Inevitably, of course, this institutionalizes stigma and discrimination at the heart of global policy. In practice, it means denying HIV and AIDS as a global disease and ultimately as a global concern. But, a global society is too porous, too flexible, too changeable, too interconnected for this to work.

More specifically, the World Bank and the International Monetary Fund (IMF) have come in for stringent criticisms in recent years because of the adverse impacts of their structural adjustment policies on health and education systems. Critiques, ranging from sharp disparagement to carefully worded academic evaluations, link these policies to the spread of the AIDS epidemic. Thus, Stephen Lewis writes that “one of the critical reasons for Africa’s inability to respond adequately to the pandemic can be explained by user fees in health care ... and user fees in education”. The essential basis for the criticisms is the way both institutions gave first priority to economic stability, far ahead of every social need and human right, including the right to life and to good health.

Global trade structures are relevant to the AIDS epidemic on two grounds: first, trade structures have much to do with maintaining a country in or freeing it from poverty; and second, the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement has much to do with the availability and flow of antiretroviral drugs and other technologies for responding to HIV and AIDS.

HIV/AIDS prevention efforts need to be grounded in the broader struggle for social and economic rights for the poor. But international trade relations currently do not favour poor countries in Africa or elsewhere in the world. Instead they are heavily weighted in favour of the wealthier countries, while simultaneously creating barriers to the market access of goods from poorer countries. This unfair global process serves to maintain countries in their poverty and by that very fact to maintain the AIDS epidemic that ravages them. Much the same could be said about debt, with many countries spending as much or more on debt servicing than they do on their health services. The limits that the never-ending servicing of debts places on a country’s ability to pull itself out of poverty are also limits on its ability to respond to the AIDS epidemic.

The TRIPS Agreement covers all areas of technological innovation, transfer and dissemination. Its relevance to the AIDS epidemic is that the TRIPS Agreement covers access to the life-preserving antiretroviral drugs that have been developed by a small number of pharmaceutical giants in Europe and the United States. The Agreement also covers access to other important epidemic-related technologies, such as tests for the diagnosis of HIV in very young infants.

The World Trade Organization has acknowledged the public health problems coming from HIV/AIDS and other epidemics and encouraged member states to make full use of the flexibilities built into the TRIPS Agreement. But while there has been some progress, the consensus of practitioners

is that, even with the most recent amendments of December 2005, the regulations still do not allow drugs, especially those that are being newly developed, to be made readily available at affordable prices. Little has been done to open the door to provide a legal way for poorer countries to develop, manufacture or import life-preserving drugs.

The Movement of People

Large-scale population movements contributed to the early explosive spread of HIV and AIDS. They continue to do so. It is estimated that some 150 million individuals are living permanently or for extended periods in a country other than their own. In addition there are the millions who migrate from rural to urban areas within their own countries, in addition to other internal migrants. Economic reasons are at the root of much migration, both internal and international. Usually, migrants are looking for work or better-paid work. There is also much involuntary migration. This includes refugees from situations of conflict or civil strife, and displacement due to conflict or natural disasters.

Factors such as much mobility, separation from protective customary norms, working in high risk situations, working in isolated situations, protracted border formalities, and transactional sex, increase the vulnerability of mobile populations to HIV. Because their concerns are with the more immediate challenges of physical survival and financial need, most individuals on the move regard HIV as a distant risk. But during their travels or at their destinations, many of them experience conditions that provide an optimal context for HIV transmission.

Numerous equity and justice concerns arise from the HIV vulnerability of mobile populations: the crying need to see an end to all forms of human trafficking; ensuring that all migrants have access to health, testing, care, treatment and support services, and that they are encouraged to make full use of these services; the protection of migrants with HIV or AIDS from discrimination and xenophobia when they are in another country; ensuring that infected migrants can continue to live where their access to ARVs commenced; establishing immigration regulations that do not block entry (or require deportation) on grounds of HIV infection; accelerating the issue of visas and goods documentation at borders, so as to reduce HIV-risk delays; establishing better living and working conditions for seasonal agricultural and fishery workers, domestic workers, and transient mine workers; developing local work opportunities so that there will be less migration on economic grounds.

Brain Drain

Many severely affected countries, especially the poorer ones, find that their ability to respond to HIV and AIDS is being hampered by the loss of their skilled health and other professionals to wealthy industrialized countries. Responding to the epidemic is further hampered by the considerable movement of health care professionals within countries (from rural to urban areas, from the public sector to private practice, and from primary health care to secondary and tertiary provision) and from poorer to wealthier developing countries (such as from Zambia to Botswana).

This “brain drain” of health care workers from Africa is further crippling already fragile health care systems throughout the continent, as they struggle to provide ART to hundreds of thousands of people. An anomaly in this situation is the readiness of countries that support developing countries’ training programmes to bleed away many of the best products of these programmes once training has been completed and some experience garnered.

A further anomaly is that the provision of ART within countries is exacerbating the shortage of personnel for other basic health care services. Externally funded HIV/AIDS programmes usually offer better salaries and conditions than ministries of health. These are attracting doctors, nurses, pharmacists and technical staff away from public-sector positions to work in these foreign-funded programmes. The result is a further weakening of already fragile health care systems.

The Challenge for Universities in Africa

The heart of a university's business is knowledge. Its teaching and research functions are both essentially concerned with knowledge. Its ability to serve society is based ultimately on its knowledge. Society invests heavily in its universities so that they may accumulate knowledge, transmit it through teaching and training, develop, elaborate and evaluate it through study, expand and generate it through research, disseminate and spread it through publications and conferences, promote its utilization through engagement with institutions and individuals within and outside the university world. Although the emphasis may vary from one university to another, each of these knowledge-oriented endeavours is found in every university worthy of the name.

The Mandate of a University in an AIDS-affected Society:

1. Respond to the needs of an AIDS-affected society.
2. Do so through HIV/AIDS-informed knowledge and training.
3. Protect, transmit and expand the storehouse of wisdom and knowledge.
4. Adapt what is best from outside.
5. Generate further knowledge, understanding, wisdom and practice.
6. Engage with society by applying old and new knowledge to the identification and solution of problems occasioned by HIV and AIDS.

The presence of HIV and AIDS in a society does not change this mandate. However, the imperious demands of such a pernicious disease necessitate that a university in a society affected by AIDS recognize that the epidemic adds specific qualifications to its mandate. It is frequently stated that in a world with AIDS it can no longer be business as usual. Similarly, in a university that serves a society with AIDS it can no longer be university business as usual. The HIV and AIDS dimension must enter into every facet of the university's business, especially its core business of knowledge transmission (teaching), knowledge generation (research), and knowledge sharing (engagement with society).

In view of this, universities, such as those throughout much of Africa, that serve societies where HIV and AIDS have become crucial public concerns, must interpret their basic mandate in terms of the epidemic and its many implications. Such universities could express the key task that has been entrusted to them by society as being to respond to the needs of an AIDS-affected society through HIV/AIDS-informed knowledge, training, research and engagement with external agencies and individuals (Box 1).

Since all of the countries represented here are affected to a greater or lesser degree by HIV and AIDS, the challenge to the universities is clear: they must mainstream AIDS into their policies, research, teaching, and the services they offer to society. As the brain cells of the national think-tanks in their respective countries, they must explore every facet of the epidemic and be ready to come forward with new solutions and approaches. And where current approaches are not succeeding, the universities must say so—and suggest alternatives. The purpose of this workshop is to deepen awareness among the participating universities of their great responsibility and to help them so that they may see the way forward, towards successfully discharging this responsibility.

The investigations conducted in Africa are unanimous in reporting that committed leadership at a sufficiently high level is the most critical factor for driving a strong university response to HIV and AIDS. Given the right leadership it is possible to inspire key stakeholders, mobilize resources, establish policies, and establish management structures. Above all, it is possible to demonstrate that until the disease has been overcome, responding creatively and proactively to it will stand at the heart of a university's business.

Finally, the strategic approach of a university to responding comprehensively to the AIDS epidemic needs to be informed by certain fundamental principles:

1. The importance of getting HIV and AIDS out into the open and breaking every form of silence, secrecy and shame that surrounds them.
2. Recognition of the extent to which HIV and AIDS have been feminized and thrives in situations where women are subordinate to men socially, culturally and economically, and in particular where they do not have an equal say with men in sexual decision-making. Hence, there is need to act urgently to promote greater gender equity within universities, to overcome the social and other constraints to enhance female participation, and to lead by word and example in transferring power and responsibility to women. The convening of this workshop by AWSE (African Women in Science and Engineering) suggests that considerable progress has already been made in this direction. But this does not take away the need for even greater progress and more determination in ensuring that greater gender balance and equity prevail in all our institutions.
3. Ensuring that the entire university culture is enlightened by human rights principles so that, by deliberate and conscientious adherence to these, vulnerability to HIV and AIDS may be reduced, those infected or affected by the disease may live in dignity, and no form of stigma or discrimination may find a haven within the institution.
4. Acknowledging that persons living with HIV or AIDS are among the most important actors in any programme to contain and control the disease. Without in any way using or manipulating them, the university should draw upon their unique expertise and insights, and fully involve them in every aspect of its HIV and AIDS campaign.
5. The importance of coordinating university plans and programmes with those at national level so as to ensure greater synergy, unity of direction, complementarity of activities, access to resources, and more efficient use of these resources.

Conclusion

The bottom line for the higher education sector in a world with AIDS is that it should care about the epidemic within its own situation and in the world it serves. It should also show that it cares. It is against these criteria that history will judge the adequacy of its response in the face of what has become the most devastating and fastest-growing catastrophe that humanity has ever experienced. The challenge to this workshop is to show that universities in Africa care, and care greatly, so that on the basis of this concern they may initiate action that will contribute to rolling back the epidemic.

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5. Study of African Universities' Response to HIV/AIDS: the Case of Kenya (Sept, 2004. ADEA)

6. African Universities' Response to HIV/AIDS in the Global AIDS Initiative Countries: A Synthesis of Country Reports (Sept, 2004. AAU)
7. Directory of Higher Education Institutions in Africa Responding to HIV/AIDS (Nov, 2004. ADEA)
8. Expanding the Field of Inquiry: A Cross-Country Study of Higher Education Institutions' Responses to HIV and AIDS (Forthcoming, 2006. UNESCO, Paris)

Note: These and some other documents will be included in the forthcoming UNESCO EDUCAIDS overview on *Tertiary Education Responses to HIV and AIDS*

(Footnotes)

¹ Two features of sexual activity in many African societies, should, however, be considered. One is age-mixing, with young women having sexual relationships with men who may be several years older than them (and in consequence, that much more likely to be HIV positive). The other is the practice of concurrent relationships, with men (especially) having many partners at the same time; in such circumstances, the infection of any one party quickly spreads to others in the network.

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ANNEX 4

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