HIV prevention among young people in sub-Saharan Africa the way forward

Report from a workshop held 14-17th September 2009, White Sands Hotel, Dar es Salaam, Tanzania



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HIV Prevention among young people in sub-Saharan Africa: the way forward

Summary

Introduction

Effective interventions are urgently needed to prevent HIV among young people in sub-Saharan Africa, where two-thirds of all HIV-infected people live. Important new findings from trials of the effectiveness of interventions for young people in this region have recently become available, and in the light of this, a workshop was held to synthesize and evaluate lessons learnt and reassess the way forward for HIV prevention among young people in sub-Saharan Africa. This document summarises the findings and recommendations from the workshop, held in Dar es Salaam, Tanzania, from 14-17 September 2009. Key experts from governments, implementing partners, research institutions, international technical agencies, development partners, funding agencies, and young people participated.

Three key topics were discussed:

- Epidemiology of HIV among young people in sub-Saharan Africa
- What do we know about the effectiveness of what has been done to date?
- What more do we need to do?

The full report of this meeting details the discussions on each of these topics, and is available at www.memakwavijana.org. Throughout the workshop, participants developed recommendations on the way forward for preventing HIV among young people in sub-Saharan Africa, which are synthesized in this summary.

The importance of preventing HIV among young people

Young people are particularly vulnerable to HIV, and reducing their risk will be pivotal in determining the future course of the various epidemics in sub-Saharan Africa. Globally, over 40% of all new HIV infections in 2007 were in young people 15-24 years old, with 65% of these new infections occurring in Africa. Given that HIV incidence is so high among young people and that interventions are needed before they enter the high-risk ages, young people need to be a priority for HIV prevention efforts.

The epidemiology of HIV among young people in sub-Saharan Africa

Sub-Saharan Africa bore 1.9 million of the 2.7 million new HIV infections globally in 2007, with 1.5 million of these new infections occurring in East and Southern Africa, and 90% in just eight countries. The epidemiology of HIV among young people varies widely within and between sub-regions and countries, influenced by a variety of biological, behavioural and environmental factors. Disaggregated epidemiological data is therefore critical to "knowing the epidemic" and ensuring that efforts and resources to reduce HIV among young people are targeted appropriately.

What do we know about the effectiveness of what has been done to date?

In 2005-2006, the World Health Organization and the London School of Hygiene & Tropical Medicine led a systematic review of interventions to prevent HIV among young people in developing countries, which was updated to take account of new evidence and presented during the workshop. These reviews utilize a unique methodology known as the Steady, Ready, Go! approach. This methodology assesses the effectiveness of interventions in relation to the UNGASS goals on access to HIV prevention information, skills and services, and reduction in vulnerability and HIV prevalence. Clear recommendations are provided based on the available evidence, which focus on the implications of the results for policies and programming.

What more do we need to do?

HIV is not an isolated issue in the lives of young people, but rather is linked in terms of cause and effect to a range of other health and social determinants and behaviours that undermine, or sometimes protect, young people's health and development. Individual behaviour change interventions can have some success in improving knowledge, self-efficacy, reported behaviours or use of health services, but additionally addressing broader structural determinants may substantially improve efforts to prevent HIV. A range of structural factors are causally linked to HIV risk, including policies, social values and the family and community environment in which young people live and learn. Structural approaches work by altering these factors.

Recommendations

Recommendations to policy makers

Strengthen partnerships and collaboration - An increased emphasis on structural approaches will make it even more important that different sectors and stakeholders work together! This may take place through existing mechanisms in countries that support coordination and accountability in relation to national HIV responses, or it may be necessary to create new collaboration mechanisms and/or involve new partners. Governments need to lead and facilitate this process, though specific mechanisms may differ from country to country.

Implement existing evidence-based policies - We have good evidence for a number of interventions that are effective in terms of achieving global and national targets related to HIV among young people. We need to ensure that there are policies which support the implementation of these evidence-based interventions to scale, and that such policies are implemented! We must disseminate the policies widely, provide guidance for their implementation, hold people accountable for implementing them, and better understand and solve the barriers to their implementation.

Provide political leadership for responding to sensitive issues - There are a number of interventions that are politically sensitive in most countries, but have good evidence of effectiveness and need urgent action if we are to decrease HIV among young people. This will require strong leadership from governments. The two most notable examples of this are relationship and sex education in schools (and for young people out of school), and the promotion and use of condoms by sexually active young people.

Develop new and updated polices - There is a need to review existing policies and ensure that they reflect the current evidence on effectiveness and epidemic profile in the country, including adequate attention to data that are disaggregated by key characteristics such as age, sex, marital status, location, wealth and educational attainment. These policies need to inform the prioritization of programmes and the allocation of resources, in order to take effective interventions to scale for those groups of young people that need them most. It will be important to create the space for young people to be involved in the development of policies and in monitoring their implementation.

Tackle new issues - Progress has been made in many countries in relation to HIV prevention among young people, and existing effective interventions need to continue to be taken to scale with quality, in terms of

content, intensity and methods of delivery. However, there is a need to do more: to tackle the structural determinants of HIV that have often not been effectively addressed (e.g. differentials in economic power between young men and young women, interventions to address protective factors such as parents), to tackle new or neglected issues (e.g. alcohol and substance use) and to respond to the changing characteristics of young people (e.g. with an increasing proportion who are urban, educated, and with access to new technologies such as the internet and mobile phones). Policy makers need to be driving the research agenda and ensuring that there is "space" and resources for innovative interventions to prevent HIV among young people (e.g. using new technologies) and respond effectively to the needs of a growing number of young people living with HIV.

Recommendations to programme implementers

Know what the existing evidence-based policies are and implement them - It will be important to hold implementers accountable for operationalising evidence-informed policies, and hold policy makers to account for facilitating and providing the political leadership for their operationalisation.

Implement and sustain the following types of intervention to scale, following good practice and with careful monitoring and evaluating for impact:

- Sexual health education programmes in schools
 that are curriculum-based, led by adults or older,
 well-trained youth, with or without the involvement
 of peer educators from within the same school, and
 that contain essential components of interventions
 previously found to be successful at reducing
 reported risky sexual behaviour (clear health and
 behaviour goals; address multiple sexual and
 psychosocial risk and protective factors; cultural,
 developmental age, and sexual experienceappropriate messages, etc);
- Mass media interventions that deliver the message through radio & other media (e.g. print media), with or without TV, focusing on a mix of audiences, providing age relevant sexual health and HIV prevention information, and designed to challenge and affect social norms which enable or inhibit risk reduction behaviours;
- Interventions in health services that train service providers and include actions in the clinic to make them more "youth friendly", with activities in the community and the involvement of other sectors;

- Interventions in geographically-defined communities that target young people and are delivered through existing organisations, and interventions that target the whole community and are delivered through traditional networks or through communitywide activities;
- Interventions targeting young people most at risk that provide relevant information, skills and capacity development for putting harm reduction and risk reduction behaviours into practice and accessing available services, and the provision of adolescent-sensitive harm reduction HIV prevention services, through facilities and outreach based programmes.

Programme implementers must also identify and solve some clear bottlenecks within programmes in these settings, such as:

- Promotion and provision of condoms for adolescents who are likely to be sexually active (starting at the average age of sexual debut);
- Carrying out and making good use of monitoring, evaluation and operations research within programmes;
- Better differentiated and prioritized interventions, giving adequate attention to characteristics such as age, sex, marital status, urban-rural and educational attainment;
- Stronger coordination that supports interventions which fit into a national plan that has been generated in consultation with civil society, and that is endorsed and steered by government.

Create space for innovation and new approaches, such as:

- Capitalize on the young people involved in programmes by developing a pipeline of leadership for social innovation and providing mechanisms to ensure they keep their focus on influencing those young people (and adults) at high risk of HIV, who will often not be people like themselves;
- Focus on approaches for reaching young people
 who are not at school, not attending clinics, not in
 clubs, etc. as these will likely be the young people
 at highest risk and most in need of effective HIV
 prevention interventions;
- Focus on periods of transition (e.g. leaving school, entering marriage, starting employment) in order to reduce risk tolerance and increase young peoples' resilience;

- Explore and evaluate the use of new technologies (e.g. mobile phones, internet), particularly for urban youth and young adults;
- Strengthen the links between interventions for young people, for example through a branded or franchised programme, that is endorsed by and accountable to government as well as to the intended beneficiaries.

Programme implementers also need to *think structurally* when developing programmes specifically targeted to decreasing the acquisition of HIV by young people (i.e. where the new infections are happening). Programme implementers will need to form alliances and partnerships with researchers and other groups who have not previously been directly involved in HIV prevention programmes, such as community development or microcredit organizations. This will enable them to develop, test and evaluate structural approaches, to:

- Strengthen risk-reduction interventions through supportive policies and the mobilization and empowerment of target populations
- Decrease the structural determinants that increase young peoples' vulnerability to HIV infection.

Examples might include (but definitely not be limited to) interventions that aim to:

- Keep girls in school;
- Develop economic opportunities (e.g. employment, financing for education, volunteer work placements, etc.), disseminate information about them and create links between young people and the opportunities developed;
- Change social values and norms that have a negative impact on HIV transmission and acquisition, focusing on adults, especially adult men (where the virus is coming from).

Insist on AIDS impact assessments for all major new development or economic initiatives such as mines, factories, bridges, and roads.

Recommendations to researchers

Develop a better understanding of the changing dynamics and socio-cultural contexts of local epidemics. This will be achieved though high-quality analysis of epidemiological data triangulated with data collected using other research methodologies.

Identify potential social, psychosocial, cultural and economic determinants of HIV risk, develop better-validated tools to measure these and investigate their importance to epidemic trends. This will help target interventions more effectively, and the measurement tools could be used as complementary measures of intervention effect.

More operations research is required on quality, content, intensity and a range of issues affecting the scale-up and effective delivery of programmes, including the capacity of existing systems, such as schools and health facilities, as well as costing studies.

Evaluate innovative approaches to support existing HIV prevention programmes for young people using the most appropriate mix of evaluation methods. Three key priorities include:

- Interventions focusing on structural change (including "large-scale" and the "upstream" aspects of this);
- New technologies (across the spectrum from microbicides to new information and communication technologies);
- Adaptations of existing interventions specifically for young people (e.g. male circumcision and HIV testing and counselling).

Present results in a clear, user-friendly format and language for programme implementers and policy makers. For example:

- In terms of an investment portfolio or policy brief;
- Making use of people and organizations who are experts at communicating research results.

Recommendations to donors

Support government priorities - Provide technical and financial resources to support those evidence-based interventions that governments have defined as being priorities, and ensure that adequate consideration is given to the long-term time frame of the interventions that need to be delivered.

Support young people - Support platforms for the voices of young people to make substantial inputs into national policies, including support for youth activists (e.g. an ActUp for prevention), and help to strengthen the capacity and coordination among youth organizations.

Ensure intervention rigour - In funding programmes, ensure rigour in the design and implementation of the interventions, including clear modelling of the causal chain of effect, risk analysis, and identification of critical success factors and thresholds of scale.

"Join up" intervention and research funding – including operations research.

Commit! - Recognise that programmes and research can take a long time to be effective.

Fund TEST practice as well as BEST practice – While focusing resources on existing evidence-based interventions must remain a priority, allocate some funds for innovative new approaches that are linked to careful evaluation which is integrated from the intervention design stage.

Retain flexibility - Retain the flexibility and ability to redirect resources based on emerging evidence and ideas.



1. Introduction

Effective interventions to prevent HIV among young people in sub-Saharan Africa are urgently needed. Important new findings from several trials of the effectiveness of interventions in schools, health facilities and/or geographically-defined communities in sub-Saharan Africa have recently become available. In the light of this, a workshop was conducted to synthesize and evaluate findings and lessons learnt and reassess the way forward for HIV prevention among young people. The workshop "HIV prevention among young people in sub-Saharan Africa: the way forward" was jointly organised by the London School of Hygiene & Tropical Medicine (LSHTM) and the Tanzanian National Institute for Medical Research's (NIMR) Mwanza Research Centre. The workshop was organised in collaboration with the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Eastern and Southern Africa Regional Office, with logistic support from Family Health International's Tanzanian office. The workshop was held at the White Sands Hotel in Dar es Salaam, Tanzania, from 14-17 September 2009.

The workshop received financial support from the UK Department for International Development (DFID), Irish Aid and the UNICEF Eastern and Southern Africa Regional Office (ESARO). The workshop organisers were Bruce Dick, John Changalucha, Jane Ferguson, Sue Napierala Mavedzenge, Rick Olson, David Ross, Annabelle South and Barbara Stacey.

1.1 Purpose of this report

This report summarises the key issues discussed at the workshop, and brings together the conclusions and recommendations generated. The structure of the report largely mirrors that of the workshop itself:

- 1. Introduction
- 2. Epidemiology of HIV among young people in sub-Saharan Africa
- 3. What do we know about the effectiveness of what has been done to date?
- 4. What more do we need to do?
- 5. Conclusions and Recommendations
- 6. Action points

The report is aimed at a broad audience of people involved in HIV prevention among young people. A separate, short briefing document has been produced summarising the conclusions and recommendations of the workshop for policy makers, programme implementers, researchers and donors. A series of in-depth articles on key topics discussed at the meeting will be submitted to a peer-reviewed journal early in 2010.

1.2 Rationale

Globally, over 40% of all new HIV infections in 2007 were in youth 15-24 years old, with 65% of these new infections occurring among youth living in Africa.¹ There have been huge strides in the provision of HIV treatment in the high-prevalence countries of sub-Saharan Africa over the past five years. However, the number of new cases each year will continue to exceed the number of people started on HIV treatment unless there is a dramatic reduction in new HIV infections. Given that a substantial proportion of HIV incidence is among young people, they need to be a priority for HIV prevention efforts.

There have been an increasing number of HIV prevention programmes focusing on young people in sub-Saharan Africa since the start of the pandemic. However, many of them have been small-scale initiatives, and quality, coverage, assessment, and linkages are an issue. If HIV prevention among young people is to be effective, there is an urgent need for better-quality, multi-sectoral and multifaceted HIV prevention programmes focussing on young people.

A systematic review of HIV prevention interventions among young people in developing countries was carried out in 2005/6 using an innovative methodology.² This was led by WHO and the LSHTM for the Interagency Task Team on Young People (IATT/YP), and has been influential in guiding policy and programmes. Since then, the results of several important randomized controlled trials of adolescent HIV prevention interventions conducted in Africa have been reported. The findings and lessons learnt from these intervention trials were synthesized and evaluated at the workshop and in this report, and have been supplemented by a preliminary exploration of additional types of interventions that might be important for HIV prevention among young people in sub-Saharan Africa. The aim is to guide policy makers, programme implementers, researchers and funders as they try to

take the most promising interventions to prevent HIV among young people to scale in sub-Saharan Africa.

1.3 Objectives of the workshop

The **overall goal** of the workshop was to provide clear guidance and support for the development of evidence-informed programmes for HIV prevention among young people in sub-Saharan Africa.

The specific objectives were to:

- Review the epidemiology of HIV among young people in sub-Saharan Africa, in order to provide a basis for better targeting of interventions
- 2. Review the evidence on the effectiveness of interventions to prevent HIV and improve the sexual and reproductive health of young people, and to learn from recent research and programmatic experiences, in order to prepare:
 - clear recommendations for policy makers, programme implementers and funders on the way forward for HIV prevention among young people in sub-Saharan Africa
 - a research agenda to strengthen or refine these recommendations in the future

In the *longer term*, the success of the workshop and of this report will depend on the degree of uptake of the recommendations by governments, development partners, funding organisations and research institutions. This will require extensive endorsement and effective communication of the findings of the workshop, through multiple channels reaching a range of audiences. A plan for carrying this out was agreed at the workshop and comprises approximately 18 months of dissemination activities.

1.4 Participants

Participation in the workshop was by invitation only, and was extended to individuals with specific expertise in the prevention of HIV among young people. The workshop included key experts from governments, implementing partners, research institutions, international technical agencies, development partners, funding agencies, and young people. Lead investigators from major recent intervention programmes were present to provide valuable insights on intervention development, study design, intervention implementation and outcomes. All the participants were either based in, or actively involved in, research, policies



or programmes for preventing HIV among young people in sub-Saharan Africa. A full list of workshop participants can be found in Annex A.

1.5 Workshop methodology

The workshop was a highly participatory forum, designed to maximize input from the high level of expertise present through plenary discussion and group work. The agenda was adjusted during the workshop to allow new issues to be incorporated as the workshop progressed. The final workshop agenda can be found in Annex B.

Prior to the workshop the following background documents were circulated to all participants:

- An overview of the epidemiology of HIV among young people in sub-Saharan Africa;
- An updated systematic review of the effectiveness of HIV prevention interventions in schools, health facilities and for geographically-defined communities in sub-Saharan Africa;
- An overview of other types of interventions that may have an important role in HIV prevention among young people in sub-Saharan Africa, including structural approaches and interventions to improve young people's agency;
- A preliminary communications strategy and action plan for dissemination of workshop outcomes.

The overarching methodology of the workshop consisted of brief presentations on topics pertinent to HIV prevention among young people in sub-Saharan Africa, which were largely based on the background documents distributed prior to the workshop. These presentations served as a basis for plenary discussions, as well as for intensive group work which was

then fed back into the larger group for further discussion and synthesis of ideas. Throughout the workshop, draft conclusions, recommendations and action points were recorded which helped facilitate the final summary and synthesis of key recommendations. The final session of the workshop consisted of active contribution and commitment by participants to a plan for communication and dissemination of recommendations generated from the workshop proceedings.

1.6 Frameworks for discussing HIV prevention

There are numerous perspectives from which one can think of HIV prevention. For example, an epidemiologist will probably consider HIV prevention interventions in a different way from government policy makers, as their perspective and priorities vary. The various perspectives can be categorized into different 'frameworks'. An understanding of these frameworks, or ways to categorise interventions, lends greater understanding to approaches to HIV prevention and control across disciplines. These frameworks were discussed briefly at the start of the workshop to provide a broad context within which interventions were discussed, and are summarized in Table 1.1. A more detailed description of these frameworks is found in Annex C.

Table 1.1. Potential frameworks for categorising interventions to prevent HIV among young people

	Framework	Perspective
Α	By Mechanism	Epidemiology
В	By Sector	Government policy maker
C	By Setting	Programme Managers
D	By the composition and number	Sociologist
	of the group targeted	
Ε	By whether young people are	Theoretician
	targeted directly or indirectly	

- A. By mechanism: This is a common way for epidemiologists to structure interventions. It has the advantage of focussing on the epidemiological mechanisms by which HIV might be prevented: biomedical, behavioural, and structural interventions.
- B. By sector: Key sectors include Education, Health, Social Welfare, Information and Communications, etc. This framework is how many government policy makers and programme managers will

- think about interventions, since governments are structured along these lines through Ministries and Departments. Some donor agencies partially mirror these government structures.
- C. By setting: Examples of categorisation by "settings" are schools, health facilities, mass media or geographically-defined communities. This may be one of the most useful frameworks for programme managers to categorise interventions, as it focuses on the particular setting or context in or through which the specific interventions will be delivered.
- D. By the composition and number of the group targeted: This framework, which reflects a sociological perspective, focuses on the nature of the group to whom the interventions are delivered, ranging from the individual, couples, sub-groups of young people or all young people as a subgroup within the general population.
- E. By whether young people are targeted directly or indirectly: Some interventions that aim to reduce the risk of HIV among young people may not be targeted directly at the young people themselves, but at gatekeepers and influencers of young people. Some of these indirect interventions may be targeted to specific influential groups (e.g. celebrities or parents), while others will be more general (such as interventions that try to change population-wide social and sexual norms or beliefs).



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2. The epidemiology of HIV among young people in sub-Saharan Africa

The epidemiology of HIV among young people varies widely across regions, countries, and even within countries in sub-Saharan Africa. Policy makers and programme implementers need an understanding of the epidemiology to ensure that HIV prevention efforts are targeted appropriately. John Changalucha, Rick Olson and David Harrison gave presentations exploring the epidemiology of HIV in young people, highlighting the importance of going beyond aggregated prevalence data to include consideration of both HIV prevalence and HIV incidence data disaggregated by:

- Sub-Region
- Country
- Sex
- Narrower age bands
- Rural versus urban residence
- Ethnic group
- Marital status
- Educational attainment and whether still in school or not
- Socio-economic group
- Behavioural sub-groups of the population (eg. young commercial sex workers, injecting drug users (IDUs), and men who have sex with men (MSM)).

Such a disaggregation is essential to allow rational targeting and prioritization of interventions.

2.1 Types of epidemics within sub-Saharan Africa

The estimated adult (15-49y) prevalence of HIV in sub-Saharan Africa was 5% in 2007.¹ It is estimated that there are 22 million people living with HIV in the sub-continent, which is two thirds of the global total.¹ However these figures mask important differences in the prevalence between sub-regions within sub-Saharan Africa.

- <1% to 5% in Western Africa</p>
- <5% to >10% in Central Africa
- <1% to 8% in Eastern Africa</p>
- 10% to <30% in Southern Africa

Box 1: Types of epidemics in sub-Saharan Africa^{3, 4}

Within sub-Saharan Africa, countries have different types of HIV epidemics, which can be classified as follows:

Low-level epidemics: Prevalence has not consistently exceeded 5% in any sub-population

Concentrated epidemics: HIV is well established in sub-population(s) with high risk behaviours (such as men who have sex with men (MSM), commercial sex workers (CSWs) or injecting drug users (IDUs)), with prevalence above 5% in at least one of these groups, but has not spread substantially beyond these groups

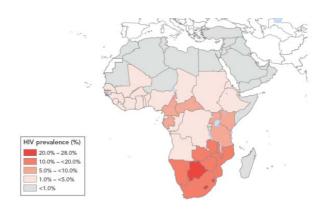
Generalised epidemics: HIV has spread to the general population, with a prevalence of more than 1% in pregnant women

Hyperendemic: HIV prevalence exceeds 15% in the adult population

In 2007 there were seven countries with HIV prevalence over 15%:

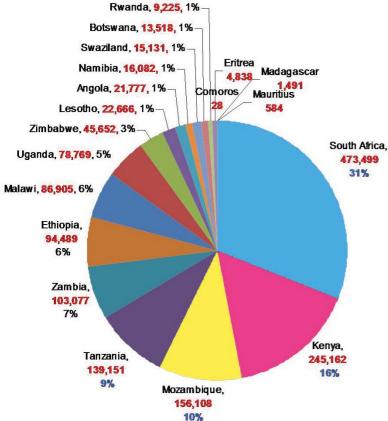
- Botswana
- Lesotho
- Namibia
- South Africa
- Swaziland
- Zambia
- Zimbabwe

Figure 2.1. HIV prevalence in adults in sub-Saharan Africa, 2007¹



Sub-Saharan Africa also bore two-thirds of the global burden of new HIV infections (1.9 million out of 2.7 million in 2007). 1.5 million of these new infections were in East and Southern Africa, and 90% of these were in just eight countries: South Africa, Kenya, Mozambique, Tanzania, Zambia, Ethiopia, Malawi and Uganda (Figure 2.2).

Figure 2.2. Estimated new infections in East and Southern Africa, 2007⁵



Even within sub-regions and countries there is enormous variation in HIV prevalence, influenced by a variety of factors such as sex, living in rural versus urban settings, ethnicity, and marital status.¹ Prevalence is also usually higher for mobile individuals.

HIV prevalence also differs substantially with individual risk behaviours, with people with multiple concurrent partners or in age-disparate sexual relationships, those engaging in transactional sex, MSM and IDU being at particularly high risk.

2.2 HIV among young people in sub-Saharan Africa – where do we need to focus our efforts?

An estimated 3.4 million youth (15-24y) in sub-Saharan Africa were living with HIV in 2007. The proportion of people living with HIV who are youth varies from country to country. The overall prevalence of HIV in 15-24 year olds in the Region was 1.1% in males, and 3.2% in females. Three quarters of youth living with HIV are females.

Epidemiological data is critical to ensuring that efforts and resources to reduce HIV among young people are targeted appropriately.

2.2.1 Reducing Transmission

Efforts to reduce HIV transmission need to focus on individuals who are HIV positive in order to reduce the number of people they infect (transmit the virus to). Prevalence data are essential for identifying which populations are key to HIV transmission and are therefore fuelling the epidemic.

Age-disaggregated prevalence data from national population-based surveys in Uganda and South Africa show that efforts to reduce transmission in these countries should be targeted at men aged 25 years and above, and women aged 20 years and above (figure 2.3).

Understanding the modes of transmission (as well as which age, sex and other groups to target) is important for informing HIV prevention programmes. As Figure 2.4 shows, the relative importance for transmission of different partnerships varies between countries. Recent work for the Know Your Epidemic initiative suggests that in Kenya and

Box 2: Definitions

Acquisition: An uninfected individual becoming HIV-infected

Transmission: When the virus is passed from an HIV-infected individual to an uninfected individual

Incidence (risk): The proportion of a population who become newly infected within a specified period of time (e.g. 1 year)

Prevalence: The proportion of a population who are infected at a given point in time

Figure 2.3a. HIV prevalence by age & sex, Uganda, 2004-5⁶

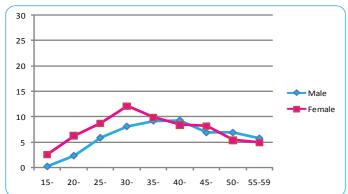
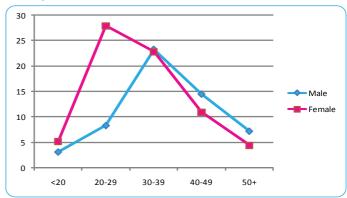


Figure 2.3b. HIV prevalence by age & sex, South Africa, 2005⁷



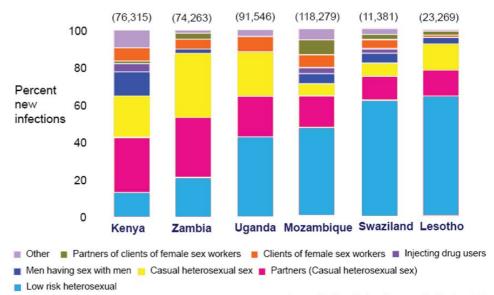
Zambia, at least half of the new transmissions occurred within casual heterosexual sex. However in Swaziland and Lesotho the majority of new transmissions were thought to occur through "low-risk" heterosexual sex with regular partners. This indicates that HIV programmes need to know the particular contexts where the infections are occurring and target prevention interventions to those relationships where most infections are occurring. They should not follow "onesize-fits-all" approaches

which have often been based on historical patterns of transmission that may no longer be correct (concurrency and male circumcision are currently major issues), or on misconceptions (e.g. that sex between males is very rare throughout sub-Saharan Africa).

2.2.2 Reducing acquisition of HIV in young people

The HIV prevalence in any age-sex group of the population reflects the balance between past new infections and subsequent mortality. While prevalence data is useful for targeting interventions towards the source from which new HIV infections must come, they do not show where the new infections are actually occurring. Because HIV prevalence is cumulative, it is slow to change. And, as more people access HAART and survival increases, prevalence will increase unless new infections (HIV acquisition) are reduced. So, HIV incidence data, though less widely

Figure 2.4. HIV incidence by modes of transmission



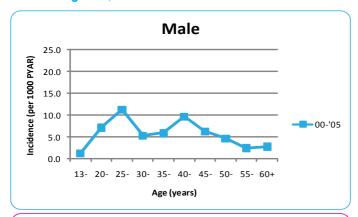
Sources: Draft results from Know your Epidemic project

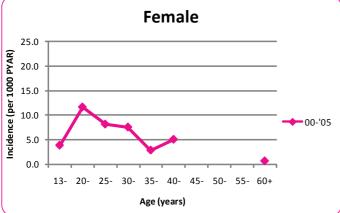
available, are more useful for monitoring progress and for identifying emerging trends.

Incidence data are also essential for understanding where new HIV infections are occurring. Unfortunately incidence data are much more difficult to measure, as they usually require follow-up of large numbers of individuals over time. Increasingly, attempts have been made to estimate HIV incidence within single large-scale cross-sectional surveys using a "detuned" HIV test.⁸ The validity of these estimates remain controversial,⁹ but if validated they will provide crucial age and sex-specific estimates of HIV incidence to supplement the data from the very small number of longitudinal cohort studies on selected, usually rural populations in Africa.

Figure 2.5 shows the incidence of HIV by age and sex in a rural population of south-western Uganda. The HIV incidence rate peaked in males in the 25-29 year age group, and was high (>5%) throughout the

Figure 2.5. HIV incidence by age and sex in rural southwestern Uganda, 2000-2005¹⁰





range from 20-24y to 45-49y. The incidence rate in females peaked in the 20-24 year age group, and was high from 20-24y to 30-34y. Interventions to reduce HIV acquisition need to target young people in the age group before HIV incidence starts to rise, and interventions must be sustained throughout the age range where HIV incidence remains high. In the case of this region of Uganda, this would mean focusing on 15-19 year-old males and 13-19 year-old females, with sustained interventions among 20-49 year-old males and 20-39 year-old females.

It is also important to realise that the distribution of the epidemic is not static, and to make sure that HIV prevention programmes are responsive to changes in incidence rates among different groups of young people.

2.2.3 Which subgroups of young people are most at risk of HIV acquisition?

Even within the group of young people (10-24 years), there is still considerable variation between subgroups within and between countries. Some subgroups are more at risk of HIV acquisition than others.

• Young women: Throughout sub-Saharan Africa,

HIV incidence starts earlier and is far higher among young women than young men. This reflects the fact that the male partners of young women are often older than the women; there are low perceptions of risk linked to partnership and relationship types; power structures are highly influenced by gender norms, with young women in many instances having less power to decide with whom they have sex, the type of sex they have and whether sex is protected; and young women are possibly biologically more susceptible to HIV acquisition than older women. HIV is often then passed from young women to young men.

- Older young people: The age range of young people encompasses the transition from childhood, where risk of HIV acquisition is very low (apart from perinatally), to adulthood, when the majority are sexually active and are likely to have the highest rates of sexual partner change, and, where relevant, of exposure to injecting drug use (this is a very small proportion of infections, but has some potential to increase). HIV incidence is therefore much higher in the older half of the age range of young people (ie. in the 17-24 year-olds) than in the younger half (10-16 year-olds). Since HIV prevalence is cumulative and HIV mortality rates are relatively low, HIV prevalence usually increases year-onyear throughout the age range.
- **Poverty:** The relationship between poverty and HIV is not the same in all countries in sub-Saharan Africa, and may well be changing with time. In some countries, such as Kenya, Malawi and Tanzania, HIV prevalence has been found to be higher among wealthier groups, perhaps because of their greater mobility. In other countries, such as Lesotho, poverty has been associated with higher HIV prevalence (see Figure 2.6). In South Africa, geographical variations in HIV prevalence have been found to be associated with inequalities in wealth, with people in informal employment in urban areas having much higher HIV prevalence than those in formal employment in urban areas. There has been suggestion of a temporal shift as well. Earlier in the epidemic wealthier and better educated groups had higher prevalence of HIV. Over time this has shifted to the poorer, less-educated having higher HIV prevalence.

- Educational Attainment: There is also some variation in how educational attainment impacts HIV prevalence, although less so than with wealth. In some countries, people with more education have higher HIV prevalence, while in other countries we see the opposite (Figure 2.7). In some countries, trend data suggest that prevalence is stable in less educated, less wealthy people, and dropping in more educated, more wealthy people.^{1, 10-12} Caution must be used when drawing conclusions from data on these factors, as their relationship with HIV may be confounded by other factors such as higher mobility in more educated individuals, or people with more education likely to live in more urban areas, both of which are associated with higher HIV prevalence.
- women whose sexual partners are several years older than themselves are at higher risk of acquiring HIV (Figure 2.7). As women get older risk is still there, but is less related to age differentials. Age disparity between sexual partners is very common in sub-Saharan Africa, and may be linked to economic or other societal pressures that young women face. Males of similar age do not have access to the resources to be able to give gifts, so may not be perceived as suitable partners. It has also been suggested that in some instances young women see themselves as empowered and taking advantage of the older men.¹³
- Multiple and concurrent partners: Multiple and long term concurrent relationships in linked and overlapping sexual networks with limited condom use are associated with increased risk of HIV acquisition and transmission. Multiple partner trends among females 15-19 years vary by country, with an increase in Uganda, while five other countries surveyed showed a steady or decreasing trend.
- Urban vs rural: Within a country, risk of HIV acquisition can vary substantially between urban and rural areas, with young people living in major cities at least five times more likely to acquire HIV before they reach the age of 25 years than young people living in remote rural areas in some countries. But as most countries still have largely rural populations, a high

Figure 2.6. HIV prevalence among 20-24 year old women by wealth¹¹

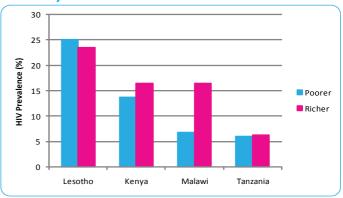


Figure 2.7. HIV prevalence among 20-24 year old women by education level¹¹

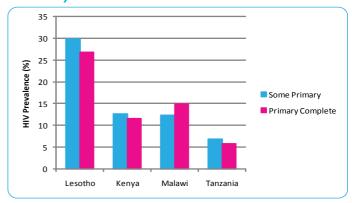
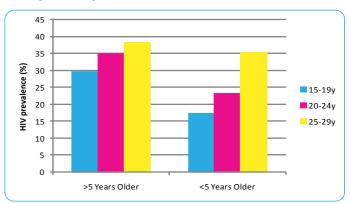


Figure 2.7. Age disparate sex and HIV prevalence (%) among 15-29 year-old females in South Africa¹⁴



proportion of all new infections are found in rural settings. Rural areas often have very different vulnerability contexts and channels for delivering programmes (such as access to communication channels and more traditional gender norms and opportunity structures which contribute to lower school enrolment, higher rates of early marriage, high levels of food insecurity, etc.).

Other high risk/vulnerable groups: Young people
are often disproportionately represented in
sub-groups of the population who are either
vulnerable or at high risk of acquiring HIV, such
as individuals involved in sex work with limited

condom use, individuals who share injecting drug equipment, prisoners who engage in unprotected anal sex; and adolescent orphans who are at risk of forced or unsafe sex due limited capacity or lack of family supervision. There is also extensive ecological and observational data indicating that uncircumcised men are at higher risk of HIV acquisition.

2.3 Progress is being made

Encouragingly, progress is being made in terms of reductions in HIV incidence and prevalence among young people in some areas of sub-Saharan Africa. For example:

- In rural south-western Uganda, incidence of HIV among young men aged 20-24 years was lower in 2000-2005 than in the previous 5 years, and in young women aged 13-24 years HIV incidence had already fallen substantially between 1990-94 and 1995-99 and had stayed at the lower rate during 2000-05.15
- Data from South Africa show that prevalence among young people was lower in 2008 compared to 2005 and 2002, with statistically significant declines among 15-24 year-old men since 2002 (from 6.2 to 3.0%) and among women since 2005 (from 16.9 to 13.6%).^{14, 16, 17} A number of other countries showed decreases in incidence of HIV in 2008 among young women attending ANC clinics.¹
- Condom use by young people is increasing in some countries, such as South Africa^{14, 16,}
 Positive changes in terms of knowledge and reported behaviours have been shown in 2008 in other countries as well.¹

2.4 Conclusions

- Preventing HIV among young people is vitally important, as the future course of the epidemic will depend in part on reducing HIV acquisition among young people (especially 15-24y in women and 25-34y among men).
- Interventions to prevent new infections among young people must be designed both to reduce their risk of acquiring HIV (HIV acquisition), but also to reduce the risk of others transmitting the virus to them (HIV transmission), which may require different approaches and target groups. HIV incidence is key to knowing where HIV acquisition is occurring, while HIV prevalence is key to knowing where the virus is coming from.
- Interventions in young people will need to be
 of high quality, coverage, and sustained as
 there are new generations continuously entering
 adolescence and young adulthood.
- There is a need to better understand the links between HIV and key transitions in the lives of young people (e.g. school leaving).
- Older age groups also need to be targeted with interventions to prevent HIV acquisition, as risk does not suddenly disappear once people pass a certain arbitrary age threshold, and in some cases the HIV risk is even higher among young adults (e.g. 25-34 year-old men) than in young people.
- Preventing HIV incidence among young people is likely to also require interventions to prevent HIV transmission from older (ie. >25y) adults ("positive prevention").
- There are important differences in the epidemiology of HIV among young people in sub-Saharan Africa, between and within countries and sub-regions and by sub-group e.g. by sex, age, marital status, location, wealth, educational attainment, and specific risk behaviours. We need to move beyond simplistic analyses and remain current in our assumptions of what is going on: the epidemic is constantly changing.

HIV prevention efforts need to be built on a detailed understanding of disaggregated data around the who, where and what of new HIV infections. This should be combined with a more in-depth analysis about the context and local epidemic, both current and predicted into the future. It is important to ensure that the packages of interventions are evidence informed and tailored to specific contexts, and implemented with a measure of efficacy. They need to be multifaceted and focused on reducing risk related to specific relationship types and sexual behaviours through first increasing young people's self efficacy and capacity to assess individual risk and put risk avoidance and risk reduction skills in practice. No singe intervention will be able to reduced HIV acquisition and transmission, so more efforts are need to ensure comprehensive and linked combinations of interventions which increase awareness of risk, challenge and change attitudes around behaviours among individuals and within communalities, increase individuals and communities self-efficacy around being able to put risk reduction behaviours into practice and ensure their increased access to relevant and adolescent-sensitive HIV prevention and care services.



Photograph courtesy of David Ross

3. What do we know about the effectiveness of what has been done to date?

The workshop explored what we know about the effectiveness of current HIV prevention interventions among young people. Sue Napierala Mavedzenge presented findings from an update of the Steady..., Ready..., Go! systematic review of behavioural interventions in young people. This review was limited to studies taking place in sub-Saharan Africa, and identified twenty-one recent evaluations of interventions in schools, health facilities and or geographically defined communities. This review provides recommendations on which types of interventions have sufficient evidence for large-scale implementation, and which types require further evidence before widespread implementation can be recommended. This was followed by a presentation by David Ross summarizing the results of three recently-reported randomised controlled trials of HIV prevention interventions for young people in one or more of these three settings that were conducted in sub-Saharan Africa and that measured HIV and other biological outcomes, in addition to other HIV mediating factors.

Box 3.1 The UNGASS Goals

In 2001, UN member states committed themselves to a number of goals relating to HIV prevention in young people:

- By 2010, ensure that at least 95% of young people... have access to the ... information... they need... to reduce their vulnerability to HIV
- By 2010, ensure that at least 95% of young people... have access to the ... skills... they need... to reduce their vulnerability to HIV
- By 2010, ensure that at least 95% of young people... have access to the ... services... they need... to reduce their vulnerability to HIV
- By 2003, develop and/or strengthen strategies, policies and programmes which... reduce the vulnerability of children and young people
- By 2005... HIV prevalence among young people (15-24years)
 reduced by 25% in the most affected countries... by 2010...
 reduce prevalence by 25% globally

3.1 Background and methodology of the Steady..., Ready..., Go! review

In 2005-2006, WHO and LSHTM led a major systematic review for the Inter Agency Task Team on Young People (IATT/YP) of interventions to prevent HIV among young people in developing countries. Interventions were looked at by setting, including schools, health services, geographically-defined communities, mass media, and interventions for young people most at risk. The review focused on the implications of the results for policies and programming, and provided clear recommendations based on the available evidence.

One key feature of this novel approach was the recognition that not all interventions should require the same strength of evidence to recommend their implementation. The reviewers used criteria based on feasibility, cost, potential for adverse outcomes, acceptability, potential size of effect, and other health or social benefits to judge how much evidence would be needed to recommend a specific type of intervention. The reviewers then judged the available evidence of effectiveness in relation to the UNGASS goals on access to information, services and skills, and reduction in vulnerability and HIV prevalence (see Box 3.1) against these predefined thresholds. An outline of the methodology can be found in Box 3.2.

Box 3.2. The Steady..., Ready..., Go! Methodology

- Interventions are categorised by the 'setting' in which they are implemented, and then by the type of intervention within that setting;
- 2. The strength of evidence needed for widespread implementation (evidence threshold) is defined, based on an explicit assessment of key factors;
- Studies are selected based on inclusion/exclusion criteria, quality of the intervention, implementation process, and quality of the outcome evaluation and are then critically reviewed:
- 4. The strength of evidence on the effectiveness of each type of intervention is summarized, and then compared against the evidence threshold;
- Evidence-based recommendations are derived from this comparison for each type of intervention within a given setting and allocated to Go!, Ready, Steady or Do not go.

In practice, given a dearth of studies that had evaluated the impact of interventions on HIV infection, recommendations needed to be made based on the impacts on knowledge, skills, reported attitudes and self-efficacy, reported sexual behaviours and/or use of health services, despite the well-recognized limitations of some of these indicators. Each of the types of intervention within each setting were then classified as Go!, Ready, Steady or Do not go. Box 3.3 provides more details on what these terms imply.

There have been a substantial number of evaluations of new HIV prevention interventions among young people which have reported results since 2005. Using a similar methodology, Sue Napierala Mavedzenge, Aoife Doyle and David Ross have updated the evidence of effectiveness of interventions in three settings - schools, health services and geographically-defined communities - to take account of the new evidence available. The following sections outline the recommendations for each setting based on combined data from the two systematic reviews.

Box 3.3. Steady, Ready, Go terminology

Go!	Take these interventions to scale NOW!
	Sufficient evidence to recommend widespread
	implementation on large scale now, with careful
	monitoring (coverage & quality & cost)
Ready	Implement widely but continue to
	evaluate
	Evidence suggests interventions are effective, but
	large-scale implementation must be accompanied
	by further evaluation to clarify impact and
	mechanisms of action
Steady	More research and development still
	needed
	Evidence is promising, but further intervention
	development, pilot testing and evaluation
	urgently needed before they can move into the
	"Ready" or the "Do not go" categories
Do not go	Not the way to go

3.2 Interventions in schools

Schools are the most common setting for targeted HIV prevention interventions in young people. They have great potential for HIV prevention education in that students are expected to attend regularly, and the great majority of young people begin attending prior to becoming sexually active. However interventions are likely to be less effective where (a) content is not relevant to the sexual risks facing young people, and (b) large proportion of young people do not attend school.

In this 2009 review, interventions were categorised in the following ways:

- Curriculum-based versus non-curriculum-based:
 Curriculum-based interventions are typically more intensive, and based on theory and previous research, often with pilot testing. Non-curriculum-based interventions are often less structured, and can involve a wide variety of activities such as dramas, competitions, and health fairs.
- Adult-led versus peer-led: Teachers (or other adults) will likely have more knowledge, skills and experience to lead a sexual health intervention. These types of interventions are typically logistically manageable, more often curriculumbased, and replicable. Peer-led interventions may facilitate more comfortable discussion, but are often less intensive and less structured.

This review also distinguished whether interventions contained a set of 17 characteristics identified by Kirby and colleagues as components of interventions previously found to be successful at reducing reported risky sexual behaviour. A list of these characteristics can be found in Annex D.

The review found that curriculum-based, adult-led interventions with the 'Kirby characteristics' showed strong evidence of effectiveness in terms of improving knowledge (of sexual and reproductive health information, HIV risks and prevention options) and reported sexual risk behaviours, and were given a 'Go!' recommendation: they should be taken to scale now, as the threshold of evidence for their effectiveness was met. Interventions led by older youth (≥18y and not from the same class) which are curriculum-based with the 'Kirby characteristics' were recommended as 'Ready', meaning they can be implemented widely, but only with careful monitoring

and evaluation of their impact. All other in-school interventions need further research and development before they can be recommended for widespread implementation.

3.3 Improving health services

HIV prevention strategies targeting young people, such as HIV testing and counselling, condoms, treatment, care and support services, or male circumcision, can be successfully implemented in health services. To accomplish this, health facilities must adopt a 'youth-friendly' environment, which includes:

- Accessibility: putting services in reach and making them potentially useable by all young people who need them;
- Acceptability: making services such that young people will be willing to use them, by ensuring privacy and treating young people with respect;
- Effectiveness: providing appropriate, high-quality prevention, care and treatment services.

To evaluate the capacity of health services to impact HIV, studies included in this review examine not merely access to health services, but use of health services. This reflects both accessibility and acceptability of services.

Interventions in health services were classified according to the following typology:

- Training service providers: Interventions that only provided training to clinic staff in order for them to be able to respond to the needs of young people
- Training service providers plus implementing other interventions in the health facilities to make them more youth-friendly: Interventions that provided training to clinic staff and also implemented specific actions to further accommodate young people

Each of these types of interventions was then classified according to how young people were informed about the services:

- Activities conducted within the community
- Activities conducted with other sectors (eg. schools, mass media)

 Activities conducted within the community and with other sectors

This 2009 review found that interventions which train service providers and take actions to make the facility more youth-friendly, coupled with activities in the community and with involvement of other sectors to link or refer young people to health services had the strongest evidence of effectiveness for increasing utilisation of health services. These interventions were recommended as 'Ready' to be widely implemented, with continued monitoring and evaluation of their impact. All other types of intervention needed further research and development before widespread implementation can be recommended.

3.4 Interventions in geographically-defined communities

Community-level interventions have the potential to change established norms, values, and/or traditions that may impede HIV prevention and care. They may also increase access to information and services for young people. However, community interventions face challenges: the inherent difficulty in changing established norms, the diversity of communities, sustainability, and the difficulty of monitoring and evaluation.

The reviewers classified interventions according to the following typology:

- Interventions targeting young people, carried out in affiliation with existing groups and organisations working with young people to deliver the intervention
- Interventions targeting young people, creating a separate mechanism or infrastructure to deliver the intervention
- Interventions targeting the entire community, utilising traditional kinship networks to deliver the intervention, and using one-on-one discussions or small groups of people to disseminate the message
- Interventions targeting the entire community, using large-scale community activities to deliver the intervention

The review found that interventions targeting young people, using existing groups and organisations working with young people to deliver the intervention were 'Ready' for widespread implementation, with careful monitoring and evaluation of their impact. Interventions targeting the entire community, utilising traditional kinship networks to deliver the intervention, were also 'Ready'. There is not strong enough evidence that interventions targeting the entire community, using large-scale community activities to deliver the intervention improve knowledge, skills and reported behaviour, however there is strong evidence from one trial in South Africa that these interventions can reduce HSV2 incidence.

3.5 Mass media interventions

The review of mass media interventions was not updated. The review published in 2006 gave interventions using radio and other media (for example print media), with or without television a recommendation of 'Go!' for immediate widespread implementation.

3.6 Interventions targeting young people most at risk

The review of interventions targeting young people most at risk has also not been updated. In the review published in 2006, interventions using outreach and facility-based information and services were recommended as 'Ready' for widespread implementation, with careful monitoring and evaluation.

3.7 Evaluations assessing biological outcomes

Since 2005 there have been four interventions in sub-Saharan Africa that have reported the impact on HIV prevalence or incidence and on other biological outcomes, rather than relying on proxy measures such as reported behaviours. These trials provide strong evidence, as HIV is measured directly. There were three community randomized trials: the MEMA kwa Vijana trial in Mwanza Region, Tanzania; the Regai Dzive Shiri trial in rural Zimbabwe, and the Stepping Stones trial in rural South Africa. There was also one nationally representative cross-sectional survey in South Africa of the association between self-reported exposure to the loveLife programme and HIV prevalence. A fifth study measuring HIV, the IMAGE study in South Africa, was not initially included in this review, as analysis was not specifically conducted of the effect of the intervention among young people. An investigator from this study has agreed to conduct a sub-group analysis among 14-25 year-olds, which will then be included in the review. Further information on the IMAGE study can be found in Section 4.8.

Both the MEMA kwa Vijana and Regai Dzive Shiri trials were successful at increasing knowledge and skills among young people. MEMA kwa Vijana also changed some reported behaviours. However neither trial showed any impact on any of the biological outcomes they measured.

The Stepping Stones trial demonstrated a significant reduction in new cases of HSV2, however there was no significant impact on HIV prevalence, with a rate ratio of 0.95 (95%CI 0.67,1.35). This trial was evaluated among a self-selected group of volunteers who agreed to attend a series of 13 three-hour sessions, 3 three-hour peer group meetings, and a two-hour community meeting. These volunteers may not be representative of the general population. In addition this intervention used highly-skilled, highly-motivated facilitators.

Participation in a loveLife intervention was associated with decreased HIV prevalence in a national cross-sectional survey. Though this was the only evaluation to have found a statistically significant impact on HIV, the nature of the cross-sectional evaluation leaves potential for bias.

3.8 Conclusions

The international community is committed to increasing young people's access to the knowledge, skills and services they need to reduce their vulnerability to HIV. The Steady..., Ready..., Go! review provides clear recommendations to policy makers and programme implementers about which types of interventions have strong enough evidence of effectiveness in relation to these UNGASS goals to be widely implemented. Key strengths of the Steady..., Ready..., Go! methodology are that:

- it identifies types of interventions in each setting from the perspective of policy makers and programme managers;
- it uses a transparent mechanism for deciding on the strength of evidence needed to recommend widespread implementation of each of these types of intervention;
- it allows the use of evidence ranging from simple, uncontrolled before-after studies through to randomised controlled trials, where such evidence is appropriate based on the strength of evidence needed for policy decisions.

A summary of which interventions were classed as 'Go' or 'Ready' can be found in Table 3.1.

The discussion at the workshop highlighted that often very little information is published about both the intervention and the process evaluation, making it hard to learn from practice. Those involved in evaluating interventions should make sure details of the intervention itself are documented, as well as the results of the process evaluation.

Information on cost and cost-effectiveness is vital for informing decision making about interventions, however this has only rarely been evaluated. This will require better unpacking of interventions so that the content, methodology, exposure level, etc. are clearly identified in order to be able to cost and compare costs around good practice. Evaluation of intervention costs should be built into all evaluations of HIV prevention interventions. Recently UNESCO has issued a request for proposals investigating the costing and cost-effectiveness of school-based sexual education programmes.

Evidence from this review reinforces the widely held belief that knowledge is necessary but not sufficient to facilitate behaviour change, and that self-reported sexual behaviour is an unreliable proxy for HIV and other STIs. It is therefore recommended that, whenever possible, evaluations of HIV prevention interventions should include the measurement of impact on HIV or at least on other biological markers of sexual activity, provided that the quality of the interventions can be maintained, and that the intervention is sufficient to make it likely to have an impact on HIV incidence.

The discussion of the review concluded that:

- Multiple factors can mediate behaviour change in young people, and the social, cultural and epidemiological contexts in which interventions are implemented may modify their effectiveness considerably. As such, careful evaluation of local risk factors and context is necessary to inform the optimal intervention design.
- It has been recognized for some time that to achieve HIV prevention in young people it is necessary to address a range of factors affecting the individual and the environment in which s/ he lives. The challenge remains to ensure the implementation of simultaneous interventions in several settings, and thus have the capacity to promote change using different approaches on a number of levels.
- Interventions of specific types (Table 3.1), when implemented according to current good practice, have been shown to have sufficient evidence of effectiveness to be recommended for widespread implementation, based on their ability to improve knowledge, skills, use of services, and/or reported sexual risk behaviours.
- However, none of the behaviour change interventions in schools, health facilities and/ or geographically-defined communities that have been rigorously evaluated to date has been found to have an unequivocal impact on HIV among young people. This is perhaps not surprising given what we know about the determinants of HIV infection.
- Increased emphasis must be put on ensuring and maintaining the quality of interventions, which has proved to be a challenge in previous research.
- Most of the interventions that have been implemented and evaluated to date have

Table 3.1 Summary of current Ready and Go! recommendations

Recommendation	Setting	Type of intervention
Go! - take this type of intervention to scale NOW!	Schools	Curriculum-based, sexual health education programmes, led by adults, with or without the involvement of peer educators from within the same school (for knowledge and reported sexual risk behaviours goals)
Go! - take this type of intervention to scale NOW!	Mass media	Messages delivered through radio & other media (eg. print media), with or without TV (for knowledge & reported self-efficacy goals)
Ready - implement on a large-scale with evaluation for impact	Schools	Curriculum-based, sexual health education, led by older, well-trained youth with or without the involvement of peer educators from within the same school (for knowledge and reported sexual risk behaviours goals)
Ready - implement on a large-scale with evaluation for impact	Health services	Training service providers and actions in the clinic to make them more 'youth friendly', with activities in the community and involvement of other sectors (for utilisation of services goals)
Ready - implement on a large-scale with evaluation for impact	Geographically defined communities	Targeting youth and delivered using existing organisations, and interventions that target the community and are delivered through traditional networks or delivered through community-wide activities (for knowledge, skills and reported sexual risk behaviours goals)
Ready - implement on a large-scale with evaluation for impact	Young people most at risk	Interventions that provide information and services, through facilities and outreach (for reported sexual behaviours & utilisation goals)

primarily targeted changes in young people's sexual risk behaviours or use of health services through individual-level interventions within schools, health facilities, and/or geographically-defined communities. It may be possible to design more effective interventions of this type and in these settings. However, more effort should be made to link the programming along a continuum with interventions that aim to change wider population norms related to HIV risk among adults as well as young people, and which address structural (societal) issues, such as gender inequality, that are drivers of the HIV epidemic.



Photograph courtesy of Frances Cowan

4 What more do we need to do?

4.1 Why do we need to do more?

Bruce Dick introduced and facilitated this part of the workshop, which occupied a full day.

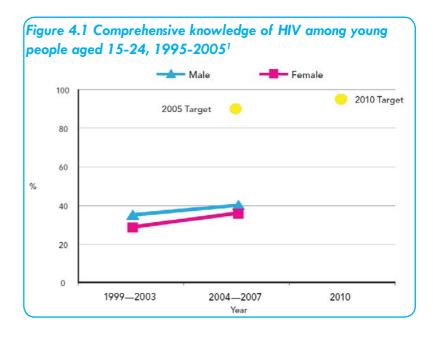
Epidemiological data indicate important differences in the epidemiology of HIV in sub-Saharan Africa, between and within sub-regions, especially among young people, e.g. by sex, age, marital status, location, wealth, educational attainment, etc. Furthermore, developmental changes do not take place at the same time in all individuals. An age-based definition and targeting of young people hides extensive heterogeneity in terms of a range of individual and environmental characteristics. As previously discussed, there was a consensus that HIV prevention efforts need to be built on a detailed understanding of disaggregated data about the context and local epidemic, both currently and for the predicted future.

Evidence from the updated Steady, Ready, Go! review confirms that a number of behavioural interventions in schools, health facilities, and geographically-defined communities are ready for widespread scale up now, based on evidence of effectiveness in meeting the UNGASS goals of improving knowledge, self-efficacy, reported behaviours or use of health services. In addition the first Steady, Ready, Go! review identified evidence of effectiveness of some types of mass media interventions, and of interventions targeting young people most at-risk. However we are still a long way from meeting the UNGASS goals (Figure

4.1). Furthermore, though these interventions may impact knowledge and reported self efficacy around risk reduction skills, and reported behaviours and attitudes, evidence from studies measuring biological outcomes indicate that, either due to quality, coverage, exposure or other confounders, these types of interventions have had little to no impact on reducing the incidence of HIV in the intervention group, at least in the short and medium term.

The evidence base on the efficacy and effectiveness of a range of interventions that contribute to HIV prevention among young people is growing.² There is broad recognition of the on-going need to increase the coverage and quality of those interventions that have been shown to have a demonstrable impact on changing knowledge around risk behaviours and individual risk perception, self efficacy around risk avoidance skills and reducing HIV transmission behaviours.¹⁹ However, there is also an increasing realization that if we want to have a significant and sustained impact on HIV incidence we will need to do much more than simply "more of the same".²⁰⁻²²

Within the context of the workshop it was not possible to review the evidence for all the potential additional interventions that might be implemented to contribute to decreasing HIV among young people in sub-Saharan Africa. Lists of suggested priority interventions already exist, 22, 23 and the challenges of developing the evidence base for such interventions, involving a range of perspectives and disciplinary approaches, have been outlined in a number of publications. 23, 24 Furthermore, it is clear that because of the effect that context has on even the most frequently-mentioned structural determinants of HIV, such as poverty and gender inequities, the details of the "what more?" list are unlikely to be universally applicable. Rather, then, the workshop aimed to raise some of the issues that need to be taken into consideration when trying to answer the "what more?" question, using some specific examples to highlight key issues and challenges.



4.2 Understanding structural approaches

It is clear that HIV is not an isolated issue in the lives of young people, but rather it has common roots with other health and social problems affecting them. It is linked in terms of cause and effect to a range of other determinants and behaviours that undermine, or sometimes protect, young people's health and development. While we have seen that individual behaviour change interventions can have some success in reducing reported risk behaviour, addressing broader structural factors can substantially improve the impact on HIV prevention.¹⁴ Structural factors may include social, economic, community, legal or policy aspects of the environment, which are causally linked to HIV risk. Structural approaches work by altering these factors to shape or constrain health behaviours and their outcomes.

When addressing structural interventions or approaches, it is important to have a clear understanding of the difference between risk and vulnerability (Box 4.1). Some structural approaches contribute to decreasing risk, by helping to ensure that we move from efficacy to effectiveness, for example through engaging, mobilizing and empowering affected communities and ensuring that there is a supportive policy environment for risk-reduction interventions to be effectively implemented, making it possible to implement harm reduction interventions, for example. In many ways, such approaches are nothing more than good public health practice and have been promoted and implemented for many years in response to a range of health problems affecting different target groups. Others are directed explicitly to the factors that give rise to risk behaviours, which may act at an individual or a societal level. They aim to change social, economic, political or other factors that make young people vulnerable and therefore determine HIV risk in a specified context. Structural approaches may contribute to decreasing vulnerability through, for example, policies and programmes to decrease gender-based violence, to increase age of marriage; or to change the social values and norms that support age-disparate sex.^{24, 25}

Box 4.1: UNAIDS definitions of Risk and Vulnerability

Risk is defined as the probability that a person may acquire HIV infection. Certain behaviours create, enhance and perpetuate risk. Examples include unprotected sex with a partner whose HIV status is positive or unknown; multiple unprotected sexual partnerships; injecting drug use with contaminated needles and syringes.

Vulnerability results from a range of factors that reduce the ability of individuals and communities to avoid HIV infection. These may include: (i) personal factors such as the lack of knowledge and skills required to protect oneself and others; (ii) factors pertaining to the quality and coverage of services, such as inaccessibility of services due to distance, cost and other factors (iii) societal factors such as social and cultural norms, practices, beliefs and laws that stigmatize and disempower certain populations, and act as barriers to essential HIV prevention messages. These factors, alone or in combination, may create or exacerbate individual vulnerability and, as a result, collective vulnerability to HIV.

4.3 Existing frameworks for structural approaches and problems with these

Several conceptual frameworks for thinking about structural approaches have been proposed. Two such frameworks were introduced prior to the workshop and were discussed further during workshop proceedings. The first was proposed by Geeta Rao Gupta and colleagues¹⁴ (Figure 4.2) and the second by Judy Auerbach and colleagues¹⁵ (Figure 4.3).

These are just two examples of a number of frameworks that provide valuable insight into conceptualizing structural approaches. However the lack of a common template and the existence of multiple frameworks have the potential for confusion (for example in the Rao Gupta and Auerbach frameworks the X and Y axes are transposed and the distal-proximal axis is inverted!). Furthermore, there is a significant language barrier to discussion of structural approaches. The same word is used to describe both the mechanism of the intervention, as well as the level at which one intervenes. It may therefore be more appropriate to use the word 'structural' to describe the framework for intervention, but not use 'structural' to describe a component within the framework. Finally, more than other approaches to HIV prevention in young people, structural approaches require a number of different disciplines and sectors to think and work together. This has

been historically challenging, and the need for a coordinated response, dissemination of information, and sharing of good practices is essential for efficient and effective interventions.

No single framework for thinking about structural approaches was adopted at the workshop, though it

Figure 4.2 Framework to analyse how a structural factor might lead to increased risk (in this example, transactional sex)¹⁴

LEVEL	Distance from Risk	
	(in this example: transactional sex)	
	DistalProximal	
Superstructural	Gender Inequality	
Structural	Laws restricting women's	
	ownership of economic assets	
Environmental	Economic dependency	
	on men	
Individual	No money for	
	food etc	

was agreed that the term "structural factors" would be used broadly to describe the social, economic, community, legal or policy factors that influence an individual's, group's or community's ability to act around reducing risk or vulnerability to HIV. Similarly, "structural approach" would be used to define actions

> that aim to change structural factors that influence HIV risk or vulnerability. However, it was decided not to use the word "structural" to describe the more macro-level interventions that are implemented to decrease risk and vulnerability, but to call these "societal" interventions, thereby avoiding the confusion that arises when the same word is used for both intervention area and mechanism of action. It was agreed that the journal publication arising from this part of the workshop would attempt to develop a unifying framework for thinking about structural approaches.

Figure 4.3 Conceptual mapping of structural interventions based on scale of intervention and level of intervention¹⁵

Intervention focus

· Potential to affect larger groups or numbers · More limited to specific groups · Increasingly challenging to measure and control · Easier tome asure and control Society Community . Gro up Ind ividual **Proximal** Provisi on of preventi on technologies ·Shorter causal chains · Easier to control for other Traditional information, education and communication elements. (EC) activities (not social/structural) ·Decre ased potential for unfore see nout comes Legal reforms affecting particular groups Limited impact to spe disc issues Legal reforms ffeating the whole *Decreased notential for population sustained changeover time Programs to shape Causal immediate drivers of process specific group behavior Community mobilization activities (e.g. microcredit) National leadership ·Longer causal chairs for so dal change Multiple interacting Efforts to change gender norms in elements need to be followed communities or groups Individual/group ·Increased potential for empower ment unfore see noutcomes Color Key •Increase d potential for Popular movements for social change la ger-gale impact Strategies aiming to reshapedesired •Increase d potential for behavior patterns sustained change over time Strategies aiming to Distal enable existing

4.4 Why young people need explicit attention for structural approaches

Structural approaches may be particularly pertinent in the context of HIV prevention for young people. The second decade of life is a time of rapid physical, psychological and social development. It is the time when puberty occurs, when people are exposed to many first-time experiences, including sex for most, and sexual interest for all. They think about things in different ways and are influenced by new and different factors. How young people receive and act on information, and what skills they have to use the information that they access, often differ significantly during the second decade of life from both younger children and older adults, and can also vary considerably between individuals and within the same individual over a relatively short period. Thinking structurally helps us to determine factors that affect young people more than other people in the population, as they transition through this period of life. These factors need to be taken into consideration when developing interventions for preventing HIV among this group of the population.

4.5 Thinking structurally leads us to ask different questions and to understand different ways of thinking about HIV prevention

Structural approaches challenge us to move outside of our comfort zones and sectors, and to think differently about what can be done in terms of HIV prevention. There are five issues to consider when understanding and prioritizing different possible structural approaches. The first is **association**, which includes causal links and context. It is necessary to have an understanding of the causal chain linking distal structural factors and HIV risk behaviour. It is

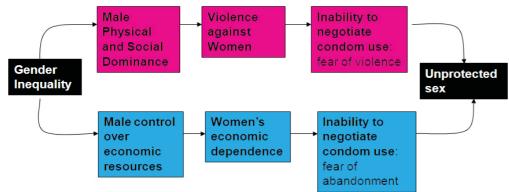
Box 4.2: Young people's perspective on critical interventions

Young people at the workshop identified the following eight issues as being critical to HIV prevention, from their perspective:

- Promotion of gender equity
- Promotion of meaningful youth participation
- Financial support to youth initiatives and capacity building of youth-led organizations.
- Skills-building and education
- Promotion of income-generating activities
- Outreach work for young people who are out-of-school
- Use of sports and cultural events as an entry point
- Youth social network development

also important to note that the same distal structural factor and specific HIV risk behaviour can be linked through different causal chains. An example of this is shown in Figure 4.4. Context has a major impact both on the expression of the determinants and on the relevance and feasibility of the interventions being proposed. For example, in terms of an intervention to increase the enrolment and retention of girls in school, although a strong association between increased educational attainment and lower HIV rates has been observed in some populations, this is not always the case.²⁶ While increasing primary school enrolment has widespread governmental commitment (for example, Education for All, and the Millennium Development Goals) and impressive progress has been made in terms of increasing enrolment in many countries, 27 there are ongoing questions about the capacity of the education system to influence determinants, since it is often weakest where it most needs to be strong.^{28, 29} Many other sectors are in a similar situation.





The second issue to consider is the **intervention**. Ideally the intervention should be designed and chosen based on a theoretical model, and biological, epidemiological and sociological plausibility for the structural approach being proposed. Thirdly, for any potential structural intervention it is necessary

to consider its likely or proven efficacy - can it work? The fourth consideration is effectiveness does it work in the real world, and can it achieve population-level, or community-level impact? Finally one must be able to **prioritize** between different structural approaches; resources are limited, particularly in sub-Saharan Africa, and the demand for the available resources is always great. Structural approaches to HIV prevention vary immensely as do their implementation, feasibility, costs and potential for other health and social risks and benefits, and prioritizing how much of the available resources should be spent on one intervention rather than another must be taken into consideration. None of the above questions will be easy and all will require additional research using methods from a range of disciplines and perspectives. It is not an either/or decision, but rather these questions are part of a continuum. In addition, focusing on structural approaches will have implications for the indicators that are used to monitor and evaluate national programmes to decrease HIV among young people, and the interventions are likely to have an impact on more than HIV, since many of the structural determinants underlie a number of health problems facing young people. Finally, an on-going challenge will be to identify and strengthen those structural determinants that are protective, that currently ensure that even among the most vulnerable groups of young people, the majority are HIV negative.

4.6 How thinking in a structural way can help us to decrease risk or decrease vulnerability and improve interventions we are already doing

Two examples of programmes that have used structural approaches to HIV prevention were presented, to aid in thinking about how such approaches might help to decrease risk or vulnerability, and at the same time improve the quality of some of the individual-level interventions that are already being implemented.

4.7 Addressing risk - loveLife

David Harrison gave a presentation on the importance of structural interventions to reduce risk tolerance and to increase young people's resilience, based on experiences within the loveLife programme. loveLife is the South African national youth HIV

prevention programme, which includes multi-media awareness and education campaigns, community outreach to provide information and referral, youth centres, and youth-friendly clinics. The programme is designed to address risk behaviours among young people. A national programme such as loveLife is exceedingly difficult to evaluate, 30 however in a cross-sectional population-based survey exposure to loveLife was associated with lower HIV prevalence.31

Young people often know the risk of acquiring HIV through sexual behaviours, they perceive the risk for themselves, yet they still engage in the risk behaviour. The problem is that some young people tolerate risk. By implication, we must address those structural factors that predispose to high risk-tolerance. Without enough attention to the causal chain between structural inequalities and high-risk behaviours, the options for intervention are limited.

The challenge is to understand the causal chain between structural inequalities and high-risk behaviour, i.e. why young people are more accepting of risk. We need to understand both the sociology and the psychology of risk tolerance – and frame this in simple ways that can be practically applied and form the basis for interventions. Social and behavioural economic theories imply that high risk-tolerance is shaped by the view that today has little potential and tomorrow is unlikely to be any different. That aimlessness is made worse by a sense of social exclusion. At this stage of the HIV pandemic, sexual behaviour is arguably less responsive to 'message' than to life circumstance. If that is the case, the dominant strategies for youthfocused HIV prevention should be those that build a sense of real and immediate possibility of a better future, while strengthening systems of support so that young people feel included. There will still be a need to provide young people with access to the knowledge, skills and services, but without structural interventions to help the most vulnerable young people achieve the motivation to want to avoid HIV and to live in a socially fulfilling way, these will not be enough. A focus then should be on developing 'want-to-change' strategies for young people - even as the 'what-to-change' communication is constantly refined by new evidence.

David Harrison stressed that the starting place is to better understand the trajectory of life of young people, as that will help explain the trajectory of HIV infection. As each age cohort grows up, they need to know about HIV and how to avoid it. But by their mid-teens, they should be anticipating the imminent transitions in their lives, and strategies may need to focus more on life navigation, building resilience and personal initiative. By late adolescence, young people should be linked into social networks that create systems of support through times of transition. These social networks should start in, but also extend beyond, school. Figure 4.5 shows the chain of mediators between structural inequality and high-risk behaviour in young people.

But developing self-efficacy and social networks is not enough when young people are not connected to opportunity. Sometimes, there is little opportunity, but more often the links to opportunity are missing.³² And too often, behaviour change programmes miss the opportunities.

David Harrison went on to recommend that a different construct for HIV prevention among young people also implies a new approach to monitoring and evaluation. While the goal of reducing the HIV incidence among young people remains, the mediators can no longer be measured only in terms of self-reported sexual behaviour and comprehension of prevention messages. Even social cognitive measures need to be broadened beyond questions of self-efficacy related to sexual relationships and specific behaviours such as condom use. They need to also gauge young people's sense of possibility, inclusion, and resilience – their response to life circumstances. Questions related to personal motivation for the long-term (such as having goals in life) have little predictive value³³ and should

perhaps be replaced by validated indicators of how young people respond to day-to-day pressures and expectations. Trends in the prevalence of HIV, condom use and other behaviours should be mapped in single-year age bands, and then related to each other and to the changing phases of young people's life, in order to better understand the trajectory of infection.

4.8 Addressing vulnerability - The IMAGE study

James Hargreaves presented a second example of an intervention that adopted a structural approach to HIV prevention and gender equity. There is no simple theoretical link between poverty and HIV risk. In addition, available empirical evidence does not support targeting 'poverty' if the ultimate goal is HIV prevention. However, thinking structurally, there is considerable consensus around a number of determinates on the causal pathway: young men and women want to have sex for a variety of reasons (demographic, cultural, biological, economic); gendered inequalities that give men more power over economic resources than women are very widespread; sex can be 'seen' and 'used' as a 'resource' especially by women.

These observations suggested that interventions that target the economic gap between men and women might give women a greater say over their own sexual lives, and if women were to choose safer sexual network configurations than men, then such interventions might also reduce levels of HIV transmission. The empirical data also suggest that interventions targeted at poverty alleviation/ educational opportunities might be expected to

Response to circumstance Response to 'message' Choice Inadequate Lack of real Low sense of: Structural knowledge and Purpose inequality and immediate - Belonging perception possibility in - Identity of risk Solidarity life Agency High risk tolerance High risk behavlour

Figure 4.5 The chain of mediators between structural inequality and high-risk behaviour ultimately impact on HIV rates, at least in the longer-term.

> The IMAGE study evaluated the provision of a package of interventions, combining microfinance, gender/ HIV training and community mobilization in rural South Africa. From 2001-2004, a cluster randomized trial examined direct

Source: Harrison, D. loveLife, South Africa

effects among female participants in the programme and indirect effects on HIV risk among 14-35 year olds living in the households of these female programme participants and in communities where the programme was offered.

The study found strong evidence of reduced levels of partner violence reported by direct intervention participants and of changes in gender empowerment. There was also some evidence that direct intervention participants who were <35 years old at baseline reported increased uptake of voluntary HIV counselling and testing and reported less unprotected sex, improvements in household economic wellbeing, and increased communication about sex and sexuality in their households. However, there was no evidence of an effect on HIV incidence or the self-reported rate of unprotected sex among indirectly exposed young people living in the households or communities of intervention participants.

Microfinance, as well as other economic incentive programmes for HIV prevention such as social welfare transfers and financial incentives, have the potential to impact on HIV transmission among young people. However, as with many other structural interventions there is a range of challenges, not least those related to targeting such interventions explicitly to young people, being clear about realistic outcomes and strengthening the evidence base for their effectiveness with this age group, dealing with possible ethical issues and monitoring and evaluating them once implemented.

4.9 Changing social values and norms

It had been hoped during this session to include a presentation of an innovative intervention currently being implemented in Tanzania that confronts head-on the social norm of age-disparate sex, thereby decreasing the vulnerability of adolescent girls and young women to HIV. The campaign uses a cartoon character named "Fataki" to create an influential negative cultural stereotype. "Fataki" is Swahili for explosion or fireworks. Fataki is a caricature of a typical male predator. He makes inappropriate advances to young women. He is half charming and half pathetic. The campaign uses hard-hitting humour to ridicule his behaviour, creating a villain who we love to hate.

This campaign is not designed to change a typical Fataki's behaviour directly; it is designed to make Fataki-like behaviour an object of derision and ridicule as opposed to overt and covert admiration and respect. The campaign emphasizes creating an "intervention attitude" in those people who can prevent their friends and loved ones from being captured by a Fataki, including family members, friends and community members. The intent of the campaign is to make it easier for people to raise and articulate their concerns about age-disparate sex. The campaign had three main objectives: 1) create a taboo against age-disparate sex; 2) provide a language of opposition; and 3) model and encourage appropriate behaviours for community members.

The intensity of the Fataki campaign through radio and banners created high exposure and visibility. A number of surveys have been tracking the campaign, the most recent of which showed that 76% of the respondents reported hearing or seeing a campaign message the previous month and 67% reported using the term Fataki to describe an older male sexual predator. The survey also found that 27% of respondents reported intervening to discourage cross-generational sex and 13% reported others intervening.

Unfortunately it was not possible for the presentation to be made, but an overview of the presentation was available in a background document and it provided an example of a societal-level structural approach in which the adults in the community were the focus of the intervention, rather than the young people themselves.

4.10 Conclusions

There has been progress, and some positive population-level results on reducing HIV incidence with interventions directed to individuals. We need to ensure that interventions that have been shown to be effective in improving young people's knowledge, skills and use of health services are taken to scale and that their quality is monitored and maintained. However, sexual behaviour and choice of sexual partner can increase risk, and these choices can be mediated by a range of contextual factors, some less distal and possible for an individual or community to affect and others quite distal and super structural. It is clear that to address this we also need to develop a second generation of interventions as part of the continuum to move beyond a focus on what individual young people can do to reduce their own risk to developing interventions directed to some of the structural determinants that increase HIV transmission. These structural approaches can both enhance the quality and impact of existing behavioural interventions that aim to decrease risk, and decrease the vulnerability of young people that increases the likelihood that they will adopt, or be forced to adopt behaviours that place them at risk. The workshop highlighted the need to:

- Think structurally about what we do and about the links between HIV prevention and young people's health and development more generally;
- Have underlying theoretical constructs for how we think structural approaches will impact on HIV incidence;
- Consider how much evidence would be needed before we would be confident to act:
- Develop new partnerships with different sorts of organisations than we usually work with, in order to design and implement structural interventions (eg. working with microfinance organisations or through social networking).

The challenge will then be to develop the interventions, to be clear about which specific activities would be implemented, by whom and through what settings; to be clear about what outcomes we might adopt for monitoring them; and, through implementing them, how we would contribute to the evidence in terms of impact and feasibility.

Additional conclusions from the presentations and discussions related to this session were:

- There is a need to be clear about the concepts of risk and vulnerability when thinking about structural approaches to HIV prevention;
- There is a lack of coordination across sectors and disciplines, and a lack of dissemination of information and sharing of good practices. This is of particular importance for structural interventions;
- Interventions are not either/or we need a mix, addressing individual capacity to assess and act around risk, and addressing factors which inhibit or enable risk reduction;
- Evaluation of structural interventions is a key challenge. This may require multidisciplinary teams to evaluate an intervention at different levels and from different perspectives;
- We need to continue to be innovative based on our knowledge of the epidemic, even if the evidence is imperfect.

5 Conclusions

The overall conclusions of the workshop included:

5.1 Epidemiology

- 5.1.1 Young people, especially young girls, are particularly vulnerable to HIV, and reducing their risk will be pivotal in determining the future course of the various epidemics in sub-Saharan Africa.
- 5.1.2 Interventions to prevent new infections among young people must be disaggregated and focused on narrower age bands around the behaviours, relationships and partnership types, and be designed both to reduce their risk of acquiring HIV (HIV acquisition), but also to reduce the risk of others transmitting the virus to them (HIV transmission). This may require different approaches and target groups. HIV incidence is key to knowing where HIV acquisition is occurring, while HIV prevalence is key to knowing where the virus is coming from (HIV transmission).
- 5.1.3 Interventions that start in young people will need to be sustained and supplemented as there are new generations continuously entering adolescence and young adulthood.
- 5.1.4 Older age groups also need to be targeted with interventions to prevent HIV acquisition, as risk does not suddenly disappear once people pass a certain arbitrary age threshold. In some cases the HIV risk is even higher among young adults (e.g. 25-24 year-old men) than in young people.
- 5.1.5 Preventing HIV incidence among young people is likely to also require interventions to prevent HIV transmission from older (ie. >25y) adults ("positive prevention").
- 5.1.6 There is a need to better understand the links between HIV and key transitions in the lives of young people (e.g. school leaving).
- 5.1.7 There are important differences in the epidemiology of HIV among young people in sub-Saharan Africa, between and within countries and sub-regions and by sub-group e.g. by sex, age, marital status, location, wealth, educational attainment, and specific risk behaviours. We need to move beyond simplistic analyses and remain current in our understanding of what is going on: the epidemic is constantly changing.

5.1.8 HIV prevention efforts need to be built on a detailed understanding of disaggregated data about the context and local epidemic, both current and predicted into the future. We need to ensure that packages of interventions are tailored to specific risk behaviours, relationship and partnership types and the contexts which affect these combinations. At the same time, interventions need improved quality and increased exposure levels and better integration and linkages. There should not be undue complexity which makes them confusing and difficult to implement.

5.2 What we know about the effectiveness of what has been done to date

5.2.1 An updated systematic review of behavioural interventions targeting young people has identified the types of interventions among young people in schools, health services and geographically-defined communities that have strong enough evidence supporting their effectiveness – at least to achieve improvements in knowledge, reported sexual behaviour and/or increased use of health services – to be recommended to be immediately taken to scale. Combining these with the recommendations from a similar earlier review² results in:

Interventions that are Go! (i.e. take this type of intervention to scale NOW!)

- Interventions in schools that are curriculum-based, sexual health education programmes, led by adults, with or without the involvement of peer educators from within the same school (for knowledge and reported sexual risk behaviours goals)
- Mass media interventions that deliver the message through radio & other media (e.g. print media), with or without TV (for knowledge & reported selfefficacy goals)

Interventions that are Ready (i.e. implement on a large-scale but evaluate for impact)

- Interventions in schools that are curriculum-based, sexual health education programmes, led by older, well-trained youth with or without the involvement of peer educators from within the same school (for knowledge and reported sexual risk behaviours goals)
- Interventions in health services that train service providers and include actions in the clinic to make

- them more 'youth friendly', with activities in the community and involvement of other sectors (for utilisation of services goals)
- Interventions in geographically-defined communities that target youth and are delivered using existing organisations, and interventions that target the community and are delivered through traditional networks or delivered through community-wide activities (for knowledge, skills and reported sexual risk behaviours goals)
- Interventions targeting young people most at risk that provide information and services, through facilities and outreach (for reported sexual behaviours & utilisation goals)
- 5.2.2 However, evidence from this review reinforces the widely held belief that knowledge alone is not enough to facilitate behaviour change, and despite improved reported sexual behaviour there was little impact on biological measures of sexual health in studies that did measured these.

5.3 What more do we need to do?

- 5.3.1 Progress has been made. In a number of sub-Saharan African countries there have been reductions in HIV incidence among young people over the past few years sometimes earlier. We need to ensure that effective interventions such as male circumcision, condom promotion and provision are taken to scale and that their quality is maintained. Also, we need to ensure that interventions that have been shown to improve young people's knowledge, skills and use of health services (the Go! and Ready interventions listed above) are taken to scale.
- 5.3.2 However, it is clear that we also need to develop better combination interventions that move beyond what individual young people can do to reduce their own risk, to those that deal with some of the structural determinants that increase their risk of, and vulnerability to, HIV.
- 5.3.3 The workshop highlighted the need to:
- Think structurally about what we do and about the links between HIV prevention and young people's health and development more generally,
- Consider how much evidence we need before we act
- Have underlying theoretical constructs for how we think structural approaches will impact on HIV incidence
- Develop new partnerships with different sorts of organisations than we usually work with, in order to implement structural interventions (e.g. working with microfinance organisations, with mass media, or with organisations who work with the parents of young people)

6 Recommendations

6.1 Recommendations to policy makers

Policy Recommendation 1.

Strengthen partnerships and collaboration - An increased emphasis on structural approaches will make it even more important that different sectors and stakeholders work together! This may take place through existing mechanisms in countries that support coordination and accountability in relation to national HIV responses, or it may be necessary to create new collaboration mechanisms and/or involve new partners. Governments need to lead and facilitate this process, though specific mechanisms may differ from country to country.

Policy Recommendation 2.

Implement existing evidence-based policies - We have good evidence for a number of interventions that are effective in terms of achieving global and national targets related to HIV among young people. We need to ensure that there are policies which support the implementation of these evidence-based interventions to scale, and that such policies are implemented! We must disseminate the policies widely, provide guidance for their implementation, hold people accountable for implementing them, and better understand and solve the barriers to their implementation.

Policy Recommendation 3.

Provide political leadership for responding to sensitive issues - There are a number of interventions that are politically sensitive in most countries, but have good evidence of effectiveness and need urgent action if we are to decrease HIV among young people. This will require strong leadership from governments. The two most notable examples of this are relationship and sex education in schools (and for young people out of school), and the promotion and use of condoms by sexually active young people.

Policy Recommendation 4.

Develop new and updated polices - There is a need to review existing policies and ensure that they reflect the current evidence on effectiveness and epidemic profile in the country, including adequate attention to data that are disaggregated by key characteristics such as age, sex, marital status, location, wealth and educational attainment. These policies need to inform the prioritization of programmes and the allocation

of resources, in order to take effective interventions to scale for those groups of young people that need them most. It will be important to create the space for young people to be involved in the development of policies and in monitoring their implementation.

Policy Recommendation 5.

Tackle new issues - Progress has been made in many countries in relation to HIV prevention among young people, and existing effective interventions need to continue to be taken to scale with quality, in terms of content, intensity and methods of delivery. However, there is a need to do more: to tackle the structural determinants of HIV that have often not been effectively addressed (e.g. differentials in economic power between young men and young women, interventions to address protective factors such as parents), to tackle new or neglected issues (e.g. alcohol and substance use) and to respond to the changing characteristics of young people (e.g. with an increasing proportion who are urban, educated, and with access to new technologies such as the internet and mobile phones). Policy makers need to be driving the research agenda and ensuring that there is "space" and resources for innovative interventions to prevent HIV among young people (e.g. using new technologies) and respond effectively to the needs of a growing number of young people living with HIV.

6.2 Recommendations to programme implementers

Programme Recommendation 1.

Know what the existing evidence-based policies are and implement them - It will be important to hold implementers accountable for operationalising evidence-informed policies, and hold policy makers to account for facilitating and providing the political leadership for their operationalisation.

Programme Recommendation 2.

Implement and sustain the following types of intervention to scale, following good practice and with careful monitoring and evaluating for impact:

- Sexual health education programmes in schools that are curriculum-based, led by adults or older, well-trained youth, with or without the involvement of peer educators from within the same school, and that contain essential components of interventions previously found to be successful at reducing reported risky sexual behaviour (clear health and behaviour goals; address multiple sexual and psychosocial risk and protective factors; cultural, developmental age, and sexual experience-appropriate messages, etc);
- Mass media interventions that deliver the message through radio & other media (e.g. print media), with or without TV, focusing on a mix of audiences, providing age relevant sexual health and HIV prevention information, and designed to challenge and affect social norms which enable or inhibit risk reduction behaviours:
- Interventions in health services that train service providers and include actions in the clinic to make them more "youth friendly", with activities in the community and the involvement of other sectors;
- Interventions in geographically-defined communities that target young people and are delivered through existing organisations, and interventions that target the whole community and are delivered through traditional networks or through community-wide activities;
- Interventions targeting young people most at risk that provide relevant information, skills and capacity development for putting harm reduction and risk reduction behaviours into practice and accessing available services, and the provision of adolescent-sensitive harm reduction HIV

prevention services, through facilities and outreach based programmes.

Programme implementers must also identify and solve some clear bottlenecks within programmes in these settings, such as:

- Promotion and provision of condoms for adolescents who are likely to be sexually active (starting at the average age of sexual debut);
- Carrying out and making good use of monitoring, evaluation and operations research within programmes;
- Better differentiated and prioritized interventions, giving adequate attention to characteristics such as age, sex, marital status, urban-rural and educational attainment;
- Stronger coordination that supports interventions which fit into a national plan that has been generated in consultation with civil society, and that is endorsed and steered by government.

Programme Recommendation 3.

Create space for innovation and new approaches, such as:

- Capitalize on the young people involved in programmes by developing a pipeline of leadership for social innovation and providing mechanisms to ensure they keep their focus on influencing those young people (and adults) at high risk of HIV, who will often not be people like themselves;
- Focus on approaches for reaching young people who are not at school, not attending clinics, not in clubs, etc. as these will likely be the young people at highest risk and most in need of effective HIV prevention interventions;
- Focus on periods of transition (e.g. leaving school, entering marriage, starting employment) in order to reduce risk tolerance and increase young peoples' resilience;
- Explore and evaluate the use of new technologies (e.g. mobile phones, internet), particularly for urban youth and young adults;
- Strengthen the links between interventions for young people, for example through a branded or franchised programme, that is endorsed by and accountable to government as well as to the intended beneficiaries.

Programme Recommendation 4.

Programme implementers also need to *think structurally* when developing programmes specifically targeted to decreasing the acquisition of HIV by young people (i.e. where the new infections are happening). Programme implementers will need to form alliances and partnerships with researchers and other groups who have not previously been directly involved in HIV prevention programmes, such as community development or microcredit organizations. This will enable them to develop, test and evaluate structural approaches, to:

- Strengthen risk-reduction interventions through supportive policies and the mobilization and empowerment of target populations
- Decrease the structural determinants that increase young peoples' vulnerability to HIV infection.

Examples might include (but definitely not be limited to) interventions that aim to:

- Keep girls in school;
- Develop economic opportunities (e.g. employment, financing for education, volunteer work placements, etc.), disseminate information about them and create links between young people and the opportunities developed;
- Change social values and norms that have a negative impact on HIV transmission and acquisition, focusing on adults, especially adult men (where the virus is coming from).

Programme Recommendation 6.

Insist on *AIDS impact assessments* for all major new development or economic initiatives such as mines, factories, bridges, and roads.

6.3 Recommendations to researchers

Research Recommendation 1.

Develop a better understanding of the changing dynamics and socio-cultural contexts of local epidemics. This will be achieved though high-quality analysis of epidemiological data triangulated with data collected using other research methodologies.

Research Recommendation 2.

Identify potential social, psychosocial, cultural and economic determinants of HIV risk, develop better-validated tools to measure these and investigate their importance to epidemic trends. This will help target interventions more effectively, and the measurement tools could be used as complementary measures of intervention effect.

Research Recommendation 3.

More operations research is required on quality, content, intensity and a range of issues affecting the scale-up and effective delivery of programmes, including the capacity of existing systems, such as schools and health facilities, as well as costing studies.

Research Recommendation 4.

Evaluate innovative approaches to support existing HIV prevention programmes for young people using the most appropriate mix of evaluation methods. Three key priorities include:

- Interventions focusing on structural change (including "large-scale" and the "upstream" aspects of this);
- New technologies (across the spectrum from microbicides to new information and communication technologies);
- Adaptations of existing interventions specifically for young people (e.g. male circumcision and HIV testing and counselling).

Research Recommendation 5.

Present results in a clear, user-friendly format and language for programme implementers and policy makers. For example:

- In terms of an investment portfolio or policy brief;
- Making use of people and organizations who are experts at communicating research results.

6.4 Recommendations to donors

Donor Recommendation 1.

Support government priorities - Provide technical and financial resources to support those evidence-based interventions that governments have defined as being priorities, and ensure that adequate consideration is given to the long-term time frame of the interventions that need to be delivered.

Donor Recommendation 2.

Support young people - Support platforms for the voices of young people to make substantial inputs into national policies, including support for youth activists (e.g. an ActUp for prevention), and help to strengthen the capacity and coordination among youth organizations.

Donor Recommendation 3.

Ensure intervention rigour - In funding programmes, ensure rigour in the design and implementation of the interventions, including clear modelling of the causal chain of effect, risk analysis, and identification of critical success factors and thresholds of scale.

Donor Recommendation 4.

"Join up" intervention and research funding – including operations research.

Donor Recommendation 5.

Commit! - Recognise that programmes and research can take a long time to be effective.

Donor Recommendation 6.

Fund TEST practice as well as BEST practice — While focusing resources on existing evidence-based interventions must remain a priority, allocate some funds for innovative new approaches that are linked to careful evaluation which is integrated from the intervention design stage.

Donor Recommendation 7.

Retain flexibility - Retain the flexibility and ability to redirect resources based on emerging evidence and ideas.

7. Action plan

The goal of this workshop was to provide clear guidance and support for the development of evidence-informed programmes for HIV prevention among young people in sub-Saharan Africa. It is important that the recommendations agreed at the workshop (see section 6) are communicated effectively to policy makers, programme implementers, researchers and donors, to ensure that decisions made on HIV prevention among young people in sub-Saharan Africa are based on the best available evidence, and the available resources are used effectively. Annex E provides an overview of the communication activities and opportunities that are planned for the next 18 months. Below is a short summary of immediate action points following the meeting.

Action	Lead	Deadline
Framework based on how young people think about HIV	Young people who attended the	25th September 2009
prevention developed and then incorporated into the	meeting,	
workshop report		
Workshop report finalised and disseminated	Organising committee	22nd October 2009, then
		ongoing
Concise summary of workshop conclusions & recommen-	Organising committee	22nd October 2009, then
dations produced and disseminated widely		ongoing
Report / summary / policy briefs / papers from meetings	All participants	Started by 22nd
shared with key organisations & networks		October 2009, then ongoing
Journal articles based on background documents submit-		
ted as a potential series in J Adolescent Health:		
Epidemiology of HIV among young people in sub-	David Ross & Rick Olson	15th January 2010
Saharan Africa		
Steady, Ready, Go! systematic review update	Sue Napierala Mavedzenge	15th January 2010
What more needs to be done?	Bruce Dick	15th February 2010
HIV Prevention among young people in sub-Saharan	David Ross	15th February 2010
Africa: The way forward		
Policy briefs on key issues discussed at meeting final-	Annabelle South	Briefs produced by 15th
ized and disseminated widely		December 2009 and then
		dissemination ongoing

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Annex A - Participants

List of participants

	1	
	International HIV/AIDS Alliance, Madagascar	
	Family Health International (FHI), Tanzania	
Barriere-Constantin	UNAIDS Country Coordinator, Tanzania	
Changalucha	National Institute for Medical Research (NIMR), Tanzania	
Chetty	UNESCO Program Specialist, France	
Chuwa	UNICEF, Tanzania	
Conly	USAID Headquarters, USA	
Cowan	University College London/University of Zimbabwe, Zimbabwe	
Cruz	PEPFAR, Mozambique	
Dick	WHO Headquarters, Switzerland	
Gcilitshana	Student Partnership Worldwide, South Africa	
Hargreaves	London School of Hygiene & Tropical Medicine, UK	
Harrison	Independent (former CEO loveLife), South Africa	
Hayes	London School of Hygiene & Tropical Medicine, UK	
James-Traore	PEPFAR, USA	
Katengeza	Ministry of Health, Malawi	
Kiranga	USAID, Kenya	
Lansard	UNESCO Program Specialist, Namibia	
Makokha	Family Health International (FHI), Tanzania	
Mapella	Ministry of Health & Social Welfare, Tanzania	
Masiyiwa	UNAIDS youth representative, Switzerland	
Mpakani	UNFPA youth representative, Zambia	
Mrisho	TACAIDS, Tanzania	
Mutali	UNICEF, Tanzania	
Namanya	East African Community (EAC), Kenya	
Napierala Mavedzenge	London School of Hygiene & Tropical Medicine, UK	
Ng'wanasabi	Johns Hopkins University CCP, Tanzania	
Nutakor	Ghana Health Service, Ghana	
Olson	UNICEF, Eastern and Southern Regional Office, South Africa	
Otieno	UNFPA headquarters, USA	
Plummer	London School of Hygiene & Tropical Medicine, UK	
Raahauge	UNAIDS, Tanzania	
Ross	London School of Hygiene & Tropical Medicine, UK	
Setswe	Human Science Research Council, South Africa	
South	London School of Hygiene & Tropical Medicine, UK	
Warren	UNICEF, Malawi	
Zebroff	Department for International Development (DFID), Tanzania	
	Changalucha Chetty Chuwa Conly Cowan Cruz Dick Gcilitshana Hargreaves Harrison Hayes James-Traore Katengeza Kiranga Lansard Makokha Mapella Masiyiwa Mpakani Mrisho Mutali Namanya Napierala Mavedzenge Ng'wanasabi Nutakor Olson Otieno Plummer Raahauge Ross Setswe South Warren	

List of people invited but unable to attend

David	Ajagun	Ministry of Health, Nigeria	
Ауо	Ajayi	PATH, USA	
Gavyole	Awene	WHO, Tanzania	
Katherine	Bond	Rockefeller Foundation, USA	
Judith	Bruce	Population Council, USA	
Don	Bundy	World Bank, USA	
Fiona	Duby	Department for International Development (DFID), UK	
Annabel	Erulkar	Population Council, Ethiopia	
Adesegun	Fatusi	Obafemi Awolowo University, Nigeria	
Jane	Ferguson	WHO, Switzerland	
Alan	Flisher	University of Cape Town, South Africa	
Catherine	Hankins	UNAIDS, Switzerland	
Antonica	Hembe	Southern African Development Community (SADC), Botswana	
Helen	Jackson	UNAIDS, South Africa	
Rachel	Jewkes	South African Medical Research Council, South Africa	
Saidi	Kapiga	Mwanza Intervention Trials Unit (MITU), National Institute for Medical Research (NIMR), Tanzania	
Susan	Kasedde	UNAIDS, South Africa	
Doug	Kirby	ETR Associates, USA	
Irenei	Kirei	Youth Action Volunteers, Tanzania	
Elizabeth	Lule	AIDS Campaign Team for Africa (ACTafrica), World Bank, USA	
Alponse	Mulumba	Southern African Development Community (SADC), Botswana	
Julitta	Onabanjo	UNFPA, Tanzania	
Melissa	Poulsen	Centers for Disease Control and Prevention (CDC), USA	
Susan	Rich	Bill and Melinda Gates Foundation, USA	
Olive	Shashana	Human Sciences Research Council, South Africa	
Leickness	Chisamu Simbayi	Human Sciences Research Council and Stellenbosch University, South Africa	
Stanley	Sonoiya	East African Community, Kenya	
Jean-Baptiste	Tapko	WHO, Tanzania	
Diane	Widdus	UNICEF, USA	
Danny	White	MRC Social & Public Health Sciences Unit, Glasgow, UK	
Debrework	Zewdie	World Bank, USA	

Annex B - Workshop agenda

HIV prevention among young people in sub-Saharan Africa: The way forward

September 14-17, 2009 White Sands Hotel, Dar es Salaam, Tanzania Organised by:

London School of Hygiene & Tropical Medicine Mwanza Research Centre, National Institute for Medical Research, Tanzania Supported by:

World Health Organization, Child & Adolescent Health Department, Geneva UNICEF, East and Southern Africa Regional Office, Nairobi Hosted by:

Mwanza Research Centre, National Institute for Medical Research, Tanzania Logistic support from:

Family Health International, Tanzania

Day 1: Monday 14th September

Arrival by 12.30hrs for lunch

14.00-15.00 1. Building the foundations for the workshop

- Welcome and introductions
- Overview of the workshop
- Participant expectations
- Review of the agenda and mechanisms of working

15.00-15.30 Refreshments

15.30-17.00 2. What are the key challenges in terms of the choices that decision-makers need to make related to interventions to prevent HIV among young people in sub-Saharan Africa?

 Group Work, with feedback and discussion in plenary

Day 2: Tuesday 15th September

 08.30-08.45 Brief Review of Day 1 & Plan for Day 2 (John Changalucha)

What we know about the current situation of HIV among young people and interventions through schools, health facilities, geographically-defined communities for reaching the UNGASS goals (Chair: Mary Otieno, Geoff Setswe)

08.45-09.45 3. The epidemiology of HIV among young people in sub-Saharan Africa (John Changalucha)

- A brief presentation on the background document on this topic
- Comments by Rick Olson
- Discussion in plenary
 - What do we know about the who, when, where and why of HIV infection in young people in sub-Saharan Africa?
 - Are there important gaps in the data that are being collected? Analysed?
 - Do the data need to be further disaggregated?

09.45-10.30 4. Frameworks for categorizing interventions to prevent HIV among young people in sub-Saharan Africa (David Ross)

 A brief presentation on the background document on this topic followed by buzz groups and discussion in plenary

10.30-11.00 Refreshments

Day 2: Tuesday 15th September (ctd.)

11.00-12.30 5. The effectiveness of interventions for HIV prevention delivered through schools, health services, & geographically-defined communities (Sue Napierala Mavedzenge)

 A summary presentation of the background paper on this topic followed by discussion in plenary, including identifying evidence from any unpublished evaluations

12.30-13.30 Lunch

13.30-14.30 6. Unpacking the three cluster randomized trials with biological outcomes (David Ross)

 A brief presentation followed by discussion in plenary

14.30-15.00 7. What are the implications of the epidemiology and the results of the evaluations for action in these three settings in terms of research, policy, and programming?

Group Work (Facilitator: Bruce Dick)

15.00-15.30 Refreshments

15.30-17.30 7. What are the implications of the epidemiology and the results of the evaluations for action in these three settings in terms of research, policy, and programming? (cont...d)

Group Work followed by report back and discussion in plenary (Facilitator: Bruce Dick)

•

Day 3: Wednesday 16th September What More should we be doing? (Chair: Shanti Conly)

08:30–09:00 Review and Feedback from Day 2 (Mary Otieno, Geoff Setswe)

Overview of Day 3 (Bruce Dick)

09:00–09:30 8. Pulling-together the strands: Epidemiology and Evidence on Effectiveness of Interventions to Prevent HIV among Young People in sub-Saharan Africa (David Ross)

09:30—10:00 9. Young People, Risk, Vulnerability, Structural Interventions: Getting on the Same Page (Bruce Dick)

10:00–10:30 10. Decreasing Girls Vulnerability: Lessons Learnt from Southern Africa (Rick Olson)

10:30–11:00 Refreshments and Group Photo

11:00–12:30 11. What more do we need to do? Group Work and Plenary Feedback:

- Are we in agreement ... any questions?
- What is missing from HIV prevention programmes for young people in sub-Saharan Africa
- What would help countries decide what to do
- Who needs to be influenced and what would influence them?

12:30-14:00 Lunch

14:00-14:45 12. Money and IMAGE (James Hargreaves)

14:45-15:45 13. Decreasing Risk Tolerance (David Harrison)

15:45-16:00 Refreshments

16:00-17:30 14. What more do we need to do? Group Work and Plenary feedback:

 Moving ahead with new interventions - recommendations for researchers, policy makers and programmers

Day 4: Thursday 17th September What is the way forward? (Chair: Richard Hayes)

08.30-08.45 Brief Review of Day 3 & Plan for Day 4 (Rick Olson)

08.45-10.00 15. Conclusions & Recommendations

- Discussion in working groups to try to reach consensus on evidence-informed recommendations (to policy makers, programme managers, and researchers) related to the roles of:
 - interventions targeted to individual young people in schools, health facilities, and geographically-bounded communities
 - interventions in other settings targeted to individual young people
 - interventions targeted at the societal level and/or primarily to adults (25y+)

10.00-10.30 Refreshments

10.30-11.30 15. Conclusions & Recommendations (cont..d)

Report back by groups and discussion in plenary

11.30-12.30 16. Action Plan and Follow-up (Annabelle South)

- How to make the outcomes of this workshop really useful?
- How to build on the workshop to strengthen linkages between researchers and policy makers/ programmers
- The organisers will propose a draft action plan, including a communications strategy for taking forward the conclusions and recommendations from this workshop, and mechanisms for building on the network established/strengthened at the workshop, followed by discussion in plenary and reaching of consensus

12.30 Close

12.30-13.30 Lunch

Annex C – Potential frameworks for categorising interventions to prevent HIV among young people

Prepared by: David Ross

A By mechanism

- C1. Biomedical
- C2. Behavioural
- C3. Structural

B By sector

- B1. Education
- B2. Health
- B3. Social Welfare
- B4. Community Development
- B5. Information and Communication
- B6. Sports
- B7. Agriculture & Fisheries
- B8. Energy & Natural Resources
- B9. Tourism

etc

C By setting

- C1. Schools
- C2. Health Facilities
- C3. Mass media
- C4. Geographically-bounded communities
- C5. Groups at high risk (e.g. CSWs, IV Drug Users, MSM)
- C6. Policy & legislation

D By the composition and number of the group targeted

Interventions may be targeted to young people as:

- D1. Individuals (e.g. one-on-one health education or counselling (including sexual risk reduction counselling or condom counselling), HIV testing & counselling (HTC), male circumcision, etc);
- D2. In couples (e.g. couples HTC, couples counselling about risk or condom use, etc);
- D3. As an age, or age and sex, group within the general population (e.g. targeted mass media, through schools or youth clubs, youth-friendly sexual & reproductive health services);
- D4. As specific sub-groups at high risk (e.g. young commercial sex workers, young IV drug users;
- D5. As part of interventions with a wider age range (e.g. all adults or total population or a sub-group of the population at high risk such as commercial sex workers)

E By whether young people are targeted directly or indirectly

Such as:

- E1. Young people targeted directly (e.g. sexual health education in schools, male circumcision, etc)
- E2. Young people targeted indirectly, with the interventions being targeted at gatekeepers and influencers of young people (e.g. parents, religious leaders, celebrities, politicians, teachers, peers (including older peers)

Annex D: Characteristics of Effective In-School Curriculum-Based Programmes, proposed by Kirby & colleagues

The Process of Developing the				
Cu	rriculum			
1.	Involved multiple people with differ-			

- Involved multiple people with different backgrounds in theory, research and sex/HIV education to develop the curriculum
- 2. Assessed relevant needs and assets of target group
- 3. Used a logic model approach to develop the curriculum that specified the health goals, the behaviors affecting those health goals, the risk and protective factors affecting those behaviors, and the activities addressing those risk and protective factors
- 4. Designed activities consistent with community values and available resources (e.g., staff time, staff skills, facility space, and supplies)
- 5. Pilot-tested the program

The Contents of the Curriculum Itself

Curriculum Goals and Objectives

- Focused on clear health goals the prevention of STD/HIV and/or pregnancy
- Focused narrowly on specific behaviors leading to these health goals
 (e.g., abstaining from sex or using condoms or other contraceptives),
 gave clear messages about these behaviors, and addressed situations that might lead to them and how to avoid them
- 3. Addressed multiple sexual psychosocial risk and protective factors affecting sexual behaviors (e.g., knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy)

Activities and Teaching Methodologies

- 4. Created a safe social environment for youth to participate
- Included multiple activities to change each of the targeted risk and protective factors
- Employed instructionally sound teaching methods that actively involved the
 participants, that helped participants
 personalize the information, and that
 were designed to change each group
 of risk and protective factors
- 7. Employed activities, instructional methods and behavioral messages that were appropriate to the youths' culture, developmental age, and sexual experience
- 3. Covered topics in a logical sequence

The Implementation of the Curriculum

- 1. Secured at least minimal support from appropriate authorities such as ministries of health, school districts or community organizations
- Selected educators with desired characteristics (whenever possible), trained them and provided monitoring, supervision and support
- If needed, implemented activities to recruit and retain youth and overcome barriers to their involvement, e.g., publicized the program, offered food, or obtained consent
- 4. Implemented virtually all activities with reasonable fidelity

Kirby D, Laris BA, and Rolleri L. The Impact of Sex and HIV Education Programs in Schools and Communities on Sexual Behaviors among Young Adults. Washington DC: Family Health International, 2006

Annex E - Communicating the way forward

Introduction

The purpose of this document is to outline a strategic plan for communicating the recommendations from this meeting to key stakeholders. This is a working document designed to be a starting point for discussions on how best to communicate with the target audiences. Comments on this strategy are also very welcome, and can be emailed to

Annabelle.south@lshtm.ac.uk

Aim

The aim of communications activities from this workshop is the uptake of recommendations derived from the workshop by governments, other implementing agencies, development partners, research institutions and funding organisations.

Audiences

Sub-Saharan African Governments

- Ministries responsible for:
 - Health
 - Education
 - Out of school youth
- National agencies responsible for ASRH and HIV prevention
- National AIDS Commissions/ Councils & Control Programmes

Research Organisations

 Researchers and research organisations working on ASRH and HIV prevention in sub-Saharan Africa

International Agencies

- African Union
- East African Community
- Southern African Development Community
- UNAIDS
- UNESCO
- UNFPA
- UNICEF
- World Health Organisation (WHO)
- World Bank

Donors

- Multilateral donors, eg:
 - Global Fund to fight AIDS, Tuberculosis and Malaria
- Bilateral donors, ea:
 - USAID & PEPFAR
 - Department For International Development (DFID)
 - Irish Aid
- Foundations, eg:
 - Bill & Melinda Gates Foundation
 - Clinton Foundation

Civil Society

- People Living with HIV(PLHIV) groups
- International Non-Governmental Organisations (INGOs), eg:
 - International HIV/AIDS Alliance
 - Oxfam
- National and local Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs)
- Faith Based Organisations (FBOs)
- Reproductive health groups
- Youth organisations

Objectives for each audience group

Table 1: Specific objectives for each audience group

Audience	Objective		
National governments in sub-Saharan Africa	 Implementation of HIV prevention programmes for young people that are based on evidence of effectiveness, and recommendations from the workshop Careful monitoring of the effectiveness, efficiency and equity of any programmes implemented 		
International Agencies	International organisations promote HIV prevention programmes that are based on evidence of effectiveness, and support recommendations from the workshop		
Donors	 Donors fund HIV prevention programmes for young people that are based on evidence of effectiveness, and recommendations from the workshop Donors fund research to strengthen or refine these recommendations Donors fund research into areas identified as priorities in the research agenda from the workshop 		
Civil society	 Civil society organisations involved in HIV prevention in young people make use of the recommendations in their work Advocate to national governments for HIV prevention programmes for youn people that are based on evidence of effectiveness, elimination of ineffective or harmful programmes, and improved monitoring and oversight of programmes 		
Research organisations	Researchers design and carry out research projects into the areas identified in the research agenda from this workshop, and ensure that their findings are communicated effectively to key stakeholders		

Tools, activities and opportunities for communicating recommendations from the workshop

Table 2 provides an initial outline of the suggested activities and opportunities to communicate the recommendations from the workshop to the audiences identified above. We are sure that there will be many other potential opportunities that are not yet listed and we welcome your suggestions either before, during or after the workshop. There will be an opportunity to add other specific suggestions during the workshop, and on the last day of the workshop there will be a session in which the group will discuss and then prioritise all the outputs and specific opportunities.

Tools for use during these activities and opportunities include:

 Policy brief based on recommendations from the meeting (printed and electronic copies), to be distributed at conferences and meetings, and electronically via knowledge intermediaries such as listservs, Development Gateway, AIDS Portal, Research 4 Development, ELDIS, UN Interagency Task Teams on Young People, on HIV and on Education, UNESCO clearing house for the education sector, Youth InfoNet, HIV this week

- Research agenda (printed and electronic copies)
- MEMA kwa Vijana website
- Special journal issue with papers from the meeting
- Meeting report

Resources for communication

We hope that individuals and organisations represented at the meeting will continue to work with us to ensure the recommendations from this workshop influence the programmes and policies of key stakeholders. Some of the organisations represented at this meeting will have strong links with particular target audiences, which will be vital if we are to effectively communicate the recommendations with national governments, international agencies, civil society, donors and research organisations. It was suggested that the UNAIDS UCC network could communicate the recommendations in each country.

The MEMA kwa Vijana team have funding for producing the meeting report, policy brief, research agenda and special journal issue. However, the MEMA kwa Vijana funding ends at the end of December 2009. This means that activities from January 2010 onwards must be funded from other sources. It also means that project staff, including Sue Napierala

Mavedzenge, Annabelle South and Aoife Doyle, and the project administrators, will not be funded to work on activities from the meeting after this time. The other members of the conference organising committee (David Ross, Bruce Dick, Jane Ferguson and John Changalucha) will continue to work on communicating the recommendations from the workshop.

Table 2. Activities and opportunities for communicating recommendations from the meeting

	Sep — Dec 09	Jan — Mar 10	Apr — Jun 10	Jul — Sep 10
National	Policy brief written &	WHO-AFRO meeting with	SADC Ministries of	International AIDS
Governments in sub-	distributed	national HIV programme	Education Meeting	Conference, Vienna
Saharan Africa	SADC meeting with	managers	HIV Implementers	
	Ministries of Health re. HIV		Meeting?	
	(9th — 13th Nov)			
International	Meeting report written &	WHO-AFRO meeting with	HIV Implementers	International AIDS
Agencies	distributed	national HIV programme	Meeting?	Conference, Vienna
	Policy brief written &	managers		
	distributed			
	SADC meeting with			
	Ministries of Health re. HIV			
	(9th — 13th Nov)			
	SADC meeting with			
	Ministries of Education			
	(Nov)			
	IATT on Young People (26th			
	Oct)			
	IATT on Education, 2nd			
	December			
Donors	Meeting report written &		HIV Implementers	International AIDS
	distributed		Meeting?	Conference, Vienna
	Policy brief written &			
	distributed			
	Research agenda written &			
	distributed			
Civil society	Policy brief written &			International AIDS
	distributed			Conference, Vienna
Research	Meeting report written &	Journal articles pub-	Journal articles	International AIDS
organisations	distributed	lished	published	Conference, Vienna
-	Research agenda written &			
	distributed			
	SAHARA conference (30th			
	Nov — 3rd Dec)			
	IUSTI World Congress, 9th-			
	12th Nov			

Key: pink text: external meeting / event to target

blue text: tool developed / distributed





This is the full report of a technical workshop "HIV prevention among young people in sub-Saharan Africa: the way forward". The aim of the workshop was to provide guidance and support for evidence-informed interventions to prevent HIV among young people in Sub-Saharan Africa. It was held on 14th-17th September 2009 in Dar es Salaam, Tanzania. The workshop was organised by the London School of Hygiene & Tropical Medicine and the Mwanza Research Centre of the Tanzanian National Institute for Medical Research. The World Health Organisation's Department of Child and Adolescent Health; UNICEF East and Southern Africa Regional Office; and Family Health International Tanzania provided technical and logistic support to the workshop. Funding for the workshop was provided by UK Department for International Development; Irish Aid and UNICEF East and Southern Africa Regional Office.

Workshop Organising Committee: John Changalucha, Bruce Dick, Jane Ferguson, Sue Napierala Mavedzenge, Rick Olson, David A Ross, Annabelle South, Barbara Stacey

Electronic versions of this report and of the recommendations from the workshop are available at

www.memakwavijana.org

For more information about the workshop please contact:

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