

# contact



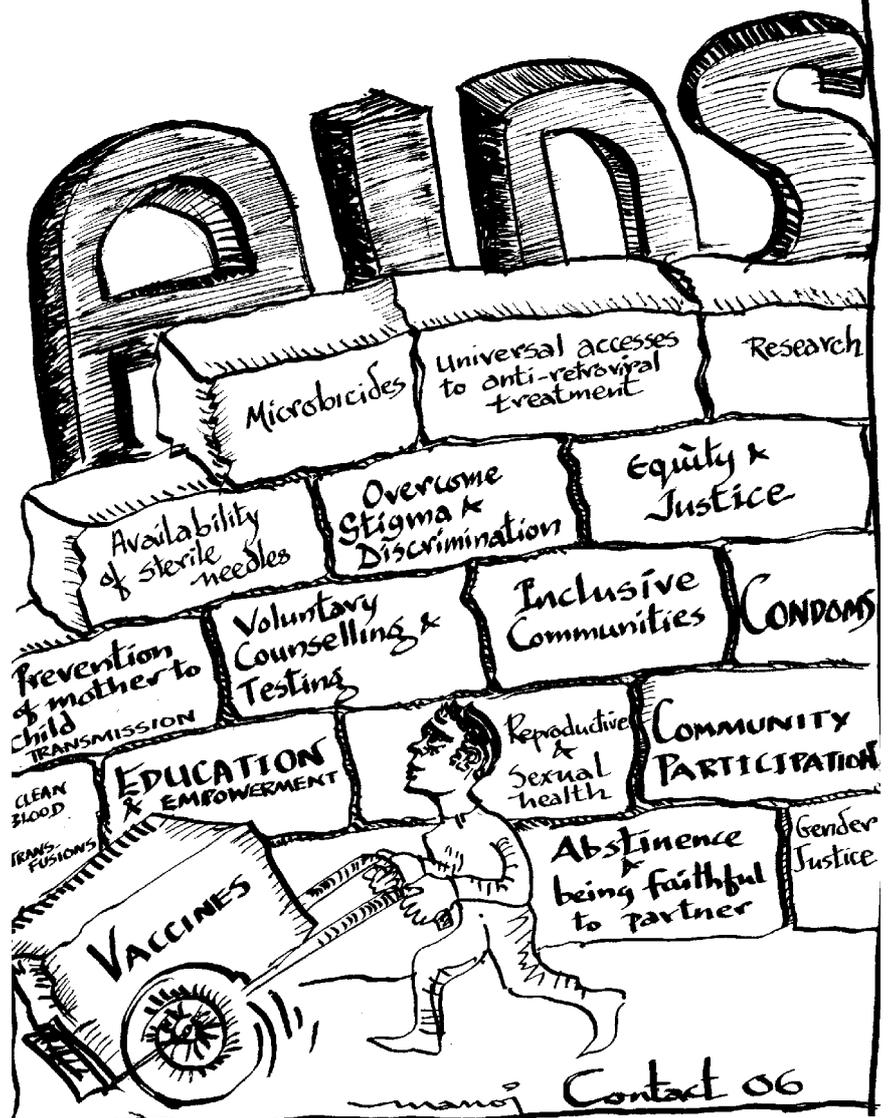
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- 2 **The importance of prevention to faith communities**  
*Manoj Kurian*
- 4 **Churches in the lead on HIV prevention reinvigoration**  
*Purnima Mane*
- 6 **ABC, AB or SAVE**  
*Manoj Kurian*
- 9 **Positive prevention**  
*Kevin Osborne*
- 12 **Out from the margins: putting populations key to the AIDS pandemic at the heart of the fight against AIDS**  
*Joseph O'Reilly*
- 15 **Post-exposure prophylaxis**  
*Princess Nothemba Simelela*
- 18 **Prevention of mother-to-child HIV transmission**  
*Peter Ngure*
- 22 **An epidemic of stigma and discrimination**  
*Joseph O'Reilly*
- 26 **A HIV vaccine: why we need one, current efforts and challenges**  
*Kate Taylor, Andrew Doupe*
- 29 **Microbicides and their role in HIV prevention**  
*Rebekah Webb*
- 32 **Male circumcision: a potentially important new addition to HIV prevention**  
*Daniel T. Halperin*
- 38 **Things to come: nano-technology and HIV prevention**  
*Gregor Wolbring*
- 39 **Biblical reflections: Challenging Christians to take up HIV prevention in a holistic manner**  
*Isabel Apawo Phiri*

## HIV PREVENTION CURRENT ISSUES AND NEW TECHNOLOGIES



# THE IMPORTANCE OF PREVENTION TO FAITH COMMUNITIES

*The World Council of Churches<sup>1</sup> has been very clear on its commitment to dealing with HIV and always promoted a holistic approach, giving HIV prevention a key role.*

**A**s early as 1986 the Executive committee of the World Council of Churches (WCC) stated:

*to confess that churches as institutions have been slow to speak and to act, - that many Christians have been quick to judge and condemn many of the people who have fallen prey to the disease; and that through their silence, many churches share responsibility for the*

*fear that has swept our world more quickly than the virus itself "and called on the churches to respond appropriately to the need for pastoral care, education for prevention and social ministry"<sup>2</sup>.*

In September 1996, a landmark, comprehensive statement, the Impact of HIV/AIDS and the Churches' Response, was adopted by the WCC Central Committee on the basis of the WCC Consultative Group on AIDS study process.<sup>3</sup> The statement clearly states that:

*Churches can do much to promote, both in their own lives and in the wider society, a climate of sensitive, factual and open exploration of the ethical issues posed*

*by the pandemic. ... in accordance with their emphasis upon personal and communal responsibility the churches' can promote conditions – personal, cultural, and socio-economic – which support persons in making responsible choices. This requires a degree of personal freedom which is not always available: for example, women, even within marriage, may not have the power to say "no" or to insist on the practice of such effective preventive measures such as abstinence, mutual fidelity and condom use.*

The statement went on to assert:

*People living with HIV generally encounter fear, rejection and discrimination. Because such reactions contradict the values of the gospel, the churches are called to formulate and advocate a clear policy of non-discrimination against persons living with HIV/AIDS.*

Much positive change has occurred since then.

In the year 2000, along with ecumenical partners and member churches, WCC launched the Ecumenical Advocacy Alliance, which has been active in campaigning for comprehensive HIV prevention of HIV. The global poster campaign to counter stigma and discrimination and the follow up work on 'communities of faith creating change in attitudes that cause HIV and AIDS-related stigma and discrimination' has been notable<sup>4</sup>. The launching of the Ecumenical HIV/AIDS Initiative in Africa<sup>5</sup>, in 2002, with its critical

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component of bringing about an inspired and rigorous theological understanding of HIV, and the appropriate training of clergy and the laity has been important in promoting HIV prevention. More recently, the WCC campaign in association with African Network of Religious Leaders Living with or personally affected by HIV and AIDS (ANERELA+) and Global Network of People Living with HIV/AIDS (GNP+) to promote greater participation of people living with HIV in the life of the church<sup>6</sup>, has contributed to the churches inclusive response.

All these initiatives and much more are required to overcome this epidemic. Faith communities still have a long way to go to putting preventive strategies on par with the care and support they provide to HIV affected communities.

It is in this context, we appreciate tremendously the leadership of the Joint United Nations Programme on HIV/AIDS (UNAIDS) for the clarity and focus they have brought to comprehensive prevention strategies<sup>7</sup>.

We are thankful for the support UNAIDS has provided for realizing this publication. We see this as part of the

United Nations' commitment to the wider engagement of the civil society in the AIDS response. We also see it as a clear invitation, challenging all of us to a higher level of comprehensive action, enhancing HIV prevention and care.

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**References:**

- 1 The World Council of Churches is a fellowship of churches, now 347, in more than 120 countries in all continents from virtually all Christian traditions. The Roman Catholic Church is not a member church but works cooperatively with the WCC. The highest governing body is the assembly, which meets approximately every seven years. The WCC was formally inaugurated in 1948 in Amsterdam, Netherlands. Its staff is headed by the General Secretary Samuel Kobia from the Methodist church in Kenya.
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Jedrzej Chelminski EAA

# CHURCHES IN THE LEAD ON HIV PREVENTION REINVIORATION

*Saving lives is the paramount goal of all HIV programmes. Successful HIV prevention programmes utilize all approaches known to be effective, not implementing one or a few select actions in isolation. These include promoting sexual abstinence, fidelity among married couple and the use of condoms for those who are not in a position to abstain or be faithful. It also includes ensuring that injecting drug users have access to clean needles and syringes as well as programmes supporting them to stop drug use. The strategies also include assurance that HIV-positive pregnant women receive treatment to prevent HIV transmission to the child. These strategies (See insert) were endorsed by the UNAIDS board last year and provide the framework for re-energizing HIV prevention globally<sup>1</sup>.*

**F**ighting stigma and discrimination against vulnerable groups and people living with HIV, and ensuring their inclusive participation in all aspects of the response is key to turning around the epidemic. UNAIDS welcomes the World Council of Churches (WCC) statement that “*stigma and discrimination of people living with HIV is a sin and against the will of God*”. If this statement is put into practice, churches would be helping immensely in efforts to eradicate the unjust exclusion of people living with HIV from day-to-day life.

Churches can be and in many cases already are forceful actors in the field

of HIV prevention. While UNAIDS is already collaborating with faith-based organizations worldwide and has extensive collaboration with the WCC and individual churches, it seeks to broaden this partnership in the coming years. While recognizing that on some issues we differ, we have a common understanding of the need to both promote abstinence and faithfulness and help people to identify situations of risk and take steps to protect themselves from HIV when these occur.

Churches must become the trusted source for accurate information to members about human sexuality. Such knowledge is required to understand HIV and how to prevent HIV transmission. We are inspired by the many churches who work with marginalized populations such as drug users and sex workers, and young people as valuable partners in addressing issues of risk and vulnerability, providing education, and often have a sound knowledge of how to work with these groups.

Churches have been in the forefront of care for people living with HIV. In many countries, churches provide much of the available health care and are important collaborators when it comes to ensuring that HIV prevention is

**The Principles of Effective Prevention**

- All HIV prevention efforts/ programmes must have as their fundamental basis the promotion, protection and respect of **human rights including gender equality**.
- HIV prevention programmes must be **differentiated and locally-adapted** to the relevant epidemiological, economic, social and cultural contexts in which they are implemented.
- HIV prevention actions must be **evidence-informed**, based on what is known and proven to be effective and investment to expand the evidence base should be strengthened.
- HIV prevention programmes must be **comprehensive** in scope, using the full range of policy and programmatic interventions known to be effective.
- HIV prevention is for life; **therefore, both delivery of existing interventions as well as research and development of new technologies require a long-term and sustained effort**, recognizing that results will only be seen over the longer-term and need to be maintained.
- HIV prevention programming must be at a **coverage, scale and intensity** that is enough to make a critical difference.
- **Community participation** of those for whom HIV prevention programmes are planned is critical for their impact.

integrated into the health and care services they provide.

As the international community focuses on scaling up towards universal access to HIV prevention, and AIDS treatment, care and support, churches and their health care institutions must be key partners in the development and achievement of country-level targets, action plans and the roll out of implementation activities. Furthermore, as and when, new prevention technologies such as microbicides and vaccines become available, they will need to play a major role in promoting their acceptance. Many churches have characteristically worked in relative isolation, often in remote rural communities. Today the international community looks to work in collaboration and partnership with communities of faith and recognizes the importance of their contribution.

As HIV is mainly a sexually transmitted virus and as sexuality is a difficult topic to discuss, UNAIDS is encouraged by the innovative ways some churches handle these issues. One church, realizing that infidelity often was due to sexual boredom in marriage, arranges meetings in which married couples can discuss this problem, and how to repair and enhance sexual relations within the married couple. Many Christian-based organizations have made efforts to be

involved in HIV prevention, for example, World Relief, which has produced very comprehensive information material on human sexuality<sup>2</sup>.

HIV will change the world, and we are already seeing this happening in the hardest hit countries. Many churches have begun internal work on transformation in order to be able to respond to this changed world. UNAIDS welcomes this process of reflection and transformation among churches to be more relevant to changing times.

**Purnima Mane**, Director, Department of Policy, Evidence and Partnerships, UNAIDS.

**Essential Programmatic Actions for HIV Prevention**

1. Prevent the sexual transmission of HIV.
2. Prevent mother-to-child transmission of HIV.
3. Prevent the transmission of HIV through injecting drug use, including harm reduction measures.
4. Ensure the safety of the blood supply.
5. Prevent HIV transmission in healthcare settings.
6. Promote greater access to voluntary HIV counselling and testing while promoting principles of confidentiality and consent.
7. Integrate HIV prevention into AIDS treatment services.
8. Focus on HIV prevention among young people.
9. Provide HIV-related information and education to enable individuals to protect themselves from infection.
10. Confront and mitigate HIV-related stigma and discrimination.
11. Prepare for access and use of vaccines and microbicides

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- 1 UNAIDS (June 2005). *Intensifying HIV prevention: UNAIDS policy position paper*. Geneva, Switzerland. Endorsed by the 16th meeting of the UNAIDS Programme Coordinating Board. [http://data.unaids.org/publications/irc-pub06/jc1165-intensif\\_hiv\\_newstyle\\_en.pdf](http://data.unaids.org/publications/irc-pub06/jc1165-intensif_hiv_newstyle_en.pdf)
- 2 World Relief (2002). *Choose Life: A Guide for Peer Educators and Youth Leaders*  
Choose Life is especially geared for peer educators, youth leaders and others working with groups of youth. The guide provides facilitators with games, discussion questions and notes on behaviour change – the objective is enable them to effectively address HIV from a values-based perspective. A serial story runs through the curriculum, following the lives of youth and their families through issues such as self-image, partner pressure, temptation, sexual abuse, and unwed pregnancy. The curriculum is especially geared for the 15 to 19-year-old age group but is also applicable for other ages.  
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**Essential Policy Actions for HIV Prevention**

1. Ensure that **human rights** are promoted, protected and respected and that measures are taken to eliminate discrimination and combat stigma.
2. Build and maintain **leadership** from all sections of society, including governments, affected communities, non governmental organizations, faith - based organizations, the education sector, media, the private sector and trade unions.
3. Involve **people living with HIV, in the design, implementation and evaluation of prevention strategies**, addressing the distinct prevention needs.
4. Address **cultural norms and beliefs**, recognizing both the key role they may play in supporting prevention efforts and the potential they have to fuel HIV transmission.
5. Promote gender equality and address **gender norms and relations** to reduce the vulnerability of women and girls, involving men and boys in this effort.
6. Promote widespread **knowledge and awareness** of how HIV is transmitted and how infection can be averted.
7. Promote the links between HIV prevention and **sexual and reproductive health**.
8. Support the mobilization of **community- based responses** throughout the continuum of prevention, care and treatment.
9. Promote programmes targeted at HIV prevention needs of **key affected groups and populations**.
10. Mobilizing and strengthening **financial, and human and institutional capacity** across all sectors, particularly in health and education.
11. Review and reform **legal frameworks** to remove barriers to effective, evidence based HIV prevention, combat stigma and discrimination and protect the rights of people living with HIV or vulnerable or at risk to HIV.
12. Ensure that sufficient investments are made in the research and development of, and advocacy for, **new prevention technologies**.

# ABC, AB OR SAVE

*The **ABC** strategy, which stands for **Abstinence, Be faithful and Condoms** has been a key strategy in comprehensive HIV prevention programmes. To its credit, the catchy and simple acronym has popularized HIV prevention measures. It has brought to the forefront the role of sex in HIV transmission and put forward the promotion of condoms as a key component of HIV prevention. It has also, in no uncertain terms, underlined the important role of behavioural modification such as delaying sexual debut and reducing the number of sexual partners in curbing HIV transmission in communities.*

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**B**ut some of the messages used for HIV prevention have had the unfortunate consequence of adding to the stigma surrounding HIV. In some respects, **ABC** is one such message. **ABC** has proven less than ideal to address the complexities of human life, as it does not take into account the critically important issue of gender. It has failed to address masculinity, and its often harmful and violent expression. It avoids the reality of women being deprived of their right to negotiate sexual relationships. Some women's empowerment programmes for HIV prevention have also added to the existing burden on women as safe sex negotiation strategies have become their exclusive responsibility.

While abstinence may be appropriate at some stages of life and faithfulness is for many people the preferred choice, they both unfortunately do not guarantee protection against infection in the community setting. There is no question of the validity and the importance of abstinence and faithfulness.

But highlighting these at the cost of comprehensive and holistic prevention strategies will not help us address the root causes of HIV.

According to some interpretations of **ABC**, the use of a condom automatically puts a person in the category of one who cannot be faithful or does not want to abstain. This fuels stigma and precludes safer sexual practices. Though the **ABC** approach itself has its limitation, it is sometime further truncated by some faith communities who, having problems accepting the role of condoms in prevention, conveniently drop the 'C'. A limited **ABC** strategy becomes a further compromised **AB!**

Many regions have a serious problem of HIV transmission through injecting drug use. The **ABC** completely precludes dealing with this route of transmission and other significant routes of infection such as – mother-to-child transmission and unsafe blood transfusions. The strategy is also incapable of addressing the social issues such as poverty and the role of harmful traditions and practises in HIV transmission. The **ABC** approach is also didactic and less open to dialogue and participation of people living with HIV. Many proponents get carried away and seem to be quite sure about what "we" are able to do for "them". Perspectives also become skewed when faith communities talk to one another, excluding other civil society players, resulting in "I scratch your back and you mine... I will ask you what you



A comparison of the positive and negative aspects of the **ABC** strategy

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Focus</b>	<ul style="list-style-type: none"> <li>■ Catchy and simple acronym, which has popularized HIV prevention and been communicated effectively.</li> </ul>	<ul style="list-style-type: none"> <li>■ The focus is not comprehensive as this strategy dwells only on sexual transmission. It does not address other important modes of transmission (e.g. injecting drug use, mother-to-child transmission, unsafe blood transfusions).</li> <li>■ <b>ABC</b> works only in English and loses its edge when translated into other languages.</li> </ul>
<b>Behaviour</b>	<ul style="list-style-type: none"> <li>■ Brings forth the importance of behavioural modification such as delay in sexual debut and reduction in the number of sexual partners (in the form of <b>A&amp;B</b>)</li> <li>■ Brought condom use to the frontlines of HIV prevention (in the form of <b>C</b>)</li> </ul>	<ul style="list-style-type: none"> <li>■ It is simplistic and does not encourage dealing with the complex issues involved in comprehensive HIV prevention strategies.</li> <li>■ Tends to give a downward grading of value to <b>AB&amp;C</b> implicating users of condoms as those who have failed <b>A&amp;B</b>.</li> <li>■ Liable to truncation and manipulation such as 'C' being dropped.</li> </ul>
<b>Gender</b>	<ul style="list-style-type: none"> <li>■ Needs the faithfulness and cooperation of both partners. Condom use very clearly depends on the willingness of men to use them.</li> </ul>	<ul style="list-style-type: none"> <li>■ Weak on gender perspective as much of the decision-making that impacts the effectiveness of <b>ABC</b> rests with men.</li> <li>■ Does not empower women as it does not leave much choice if the male partner has multiple partners and/or refuses to use condoms.</li> </ul>

want to respond to and you will answer what I want to hear!"

As the **AB** approach now has many proponents and sources of funding, it is for faith communities to ask themselves difficult and incisive questions, and search for more comprehensive alternatives.

**The way forward**

The African Network of Religious Leaders Living with or personally affected by HIV and AIDS (ANERELA+)

has developed a new model for a comprehensive HIV response, called **SAVE**, which is an effective replacement for the **ABC** strategy. The model consists of:

- Safer practices
- Available medications
- Voluntary counselling and testing (VCT)
- Empowerment

HIV prevention can never be effective without AIDS treatment, care and support components. The **SAVE** model combines HIV prevention and AIDS treatment, care and support components, as well as providing messages to counter stigma.

The adoption of **SAVE** does not imply the abandonment of abstinence. The 'S', for 'safer practices' includes abstinence as well as a wide range of evidence-based HIV prevention interventions such as safe blood for blood transfusion; barrier methods for penetrative sexual intercourse; sterile needles and syringes for injecting; safer methods for scarification and adoption of universal medical precautions. While abstinence remains a reliable method of avoiding exposure to sexually transmitted infections, it must not be taught in isolation. It is vital that information is always available on a wide range of evidence-based HIV prevention interventions.

'A' refers to available medications. Antiretroviral therapy is by no means the only medical intervention needed by people living with HIV. Long before it may be necessary, or desirable, for a person to commence antiretroviral therapy, some HIV-related opportunistic infections will need to be treated. Treatment of these infections results in improved quality of life, better health and longer term survival. Furthermore, every person needs good

nutrition and clean water, and this is doubly true for people living with HIV.

'V' refers to voluntary counselling and testing. Individuals who know their HIV status are in a better position to protect themselves from infection; and if they are HIV-positive, from infecting others. People who know that they are HIV-positive can be provided with information and support to enable them to live positively. Those who know that they are HIV-negative may have an incentive to adhere to 'S'. People, who are ignorant of their HIV status or who are not cared for, are more vulnerable and can be potential sources of new HIV infections.

'E' refers to empowerment through education. It is not possible to make informed decisions about any aspect of HIV or sexual or other behaviours without access to all the relevant facts. Inaccurate information and ignorance are two of the greatest factors driving HIV-related stigma and discrimination. Correct, non-judgmental information needs to be disseminated to all, inside and outside churches. This will assist people to live positively – whatever their HIV status – and to break down barriers which HIV has created between people and within communities. Education also includes information on good nutrition, stress management and the need for physical exercise.

HIV is a virus. The development and implementation of HIV preventive strategies should be based on public health measures and human rights principles. The behavioural patterns that make people susceptible to HIV may have moral implications. Strengthening the value systems in communities without simplistic moralization is vital to enhancing prevention strategies. However, working against scientifically proven preventive measures is both unethical and detrimental to life.

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# POSITIVE PREVENTION

*Some people are amazed that my wife and I are parents, while others think we were irresponsible. They don't know all of the research and testing we did, and precautions we took to limit the risk to my wife, who is still negative. When I told my parents we were pregnant, my mother was in tears and my father had to take a walk to absorb it all. It was more than we dreamed could happen. The impossible had come true.*

*Christo Greying, a HIV positive priest from South Africa, who now has two HIV-negative daughters<sup>1</sup>.*

## Why is positive prevention needed now?

Since HIV made its debut on the international stage over 25 years ago, much has been learnt about prevention. Knowledge about HIV transmission and the role of key interventions to prevent HIV transmission from mother-to-child and harm reduction initiatives for injecting drug users have dramatically altered the prevention landscape. However, in the face of increased treatment and the key to sustained behaviour change(s) remaining largely elusive, HIV prevention fatigue is a reality which has not been adequately addressed. The weariness of both the "post-AIDS" generation for whom past hard won battles have little meaning as they explore their sexuality and for those who have reaped the rewards of antiretroviral therapy are realities that our prevention efforts need to address more boldly.

'Traditional' prevention efforts have largely targeted those who are HIV-negative, and obviously this is crucial, yet it ignores the needs, and important role, of those who are HIV positive. The assumption that knowledge of HIV status alone will ensure sustained safer sex practice has been called into question by the increasing number of new infections in key populations where HIV had appeared to have stabilized. The HIV prevention agenda needs to keep pace with these new and dynamic demands of the epidemic – and this includes responding to the reality of

treatment access, the increasing number of serodiscordant relationships and the importance of addressing the specific prevention needs of people living with HIV. Encouraging and supporting people living with HIV to live 'positively' includes a strong recognition that issues of love, life and intimacy are part of their reality.

HIV-positive people – the vast majority of whom are unaware of their status – are the nexus for future infections and to exclude them from dedicated prevention efforts is not conducive to successful global prevention. By building on the lessons that have been learnt about strengthening the links between HIV prevention, and AIDS treatment, care and support into a seamless continuum and about the imperative of a human rights-based approach towards HIV, the addition of 'positive prevention' initiatives will create cohesiveness to ensure that the sum of the parts is greater than each individual component.

## What is positive prevention?

Positive prevention can be defined<sup>2</sup> as a set of actions that help people living with HIV to:

- protect their sexual health;
- avoid other sexually transmitted infections;
- delay HIV and AIDS disease progression; and
- avoid transmitting HIV to others.

Positive prevention is based on the realities and perspectives of people living with HIV and it acknowledges that every individual has a right to a productive, satisfying and enjoyable sexual (and reproductive) life. This necessitates the development of explicit information that can inform the choices that people living with HIV (and their sexual and recreational partners) make. Ownership of positive prevention approaches depend and rely upon individual action.

**What are the living principles of a positive prevention strategy and how should these be put into practice?**

The following four guiding principles determine both the validity and content of a positive prevention approach:

- *Promotion of human rights:* This should ensure the right to privacy, confidentiality, informed consent and voluntary disclosure. Protection of the rights of people living with HIV needs to be guaranteed. Stigma and discrimination – including self stigma – drive people underground and make prevention even more difficult. A supportive and enabling legal environment is a fundamental cornerstone as it recognizes that prevention strategies based on coercion and criminalization are not the answer.
- *Involvement of people living with HIV:* People living with HIV must be involved in the decisions relating to their life. In accordance with the Greater Involvement of People Living with HIV (GIPA)<sup>3</sup> Principle, the active engagement of people living with HIV in determining their own unique prevention reality is key to success in ensuring relevance, efficacy and applicability.
- *Embracing shared ownership and responsibility:* Of particular importance is that positive prevention places the responsibility for reducing HIV transmission on everybody and removes the undue burden on

people who are aware of their status. Safer and responsible sexual behaviour is the responsibility of all partners – irrespective of status. Promoting a culture of shared responsibility could also improve communication and equality within relationships.

- *Recognition of diversity:* People living with HIV are heterogeneous and represent a cross section of all sectors of society. Issues of race, ethnicity, gender, orientation, age, language, and risk profile will all have an effect on how positive prevention initiatives need to be tailored.

**What positive prevention is and what it is not**

While there is consensus on what the purpose of positive prevention is, there is still a lack of coherence on the actual term. Some have referred to it as ‘prevention for positives,’ ‘prevention interventions for people living with HIV’ and ‘prevention for by and with people living with HIV.’ The term ‘positive prevention’ is at times also confused with the development of upbeat and supportive mainstream and primary prevention messages aimed at predominantly HIV-negative people. Irrespective of the term used, the four building blocks of a positive prevention approach aim to proactively address the sexual and health needs of people living with HIV.

It is imperative that information and support around issues such as safer sex, becoming pregnant and safer injecting use are available in all settings including medical centres, treatment delivery sites, family planning clinics, home-based care programmes and community centres. While clinical settings are one venue for interventions, positive prevention needs to reach out to networks, organizations and support groups of people living with HIV. Also specifically tailored positive prevention information and support needs to be provided at places where particular key vulnerable populations (sex workers, men who have sex with men and

injecting drug users) meet. For example, information on the impact of recreational drug use (including methamphetamines) on antiretroviral therapy needs to be part of the positive prevention package aimed at predominantly gay men. Or, in settings with high prevalence rates of herpes simplex virus, providing information on how this increases the risk of HIV transmission.

While positive prevention needs to address the specific nuances of what prevention means in the life of someone living with HIV, it has to be envisaged as part of a comprehensive and broad prevention strategy. In this way positive prevention does not become an excuse for shifting the responsibility for prevention onto people who are already marginalized and particularly vulnerable. Also it does not aim to have disclosure as an end point in and of itself – as disclosure does not guarantee safe behaviour(s). HIV programmes should deliver a comprehensive package of inclusive messages – irrespective of status- which could act as a modality for stigma reduction.

### What does the evidence say?

There is a dearth of evidence that addresses the complex issues encompassed in a positive prevention strategy. This is perhaps indicative of our collective failure to recognize earlier the importance of HIV prevention for people living with HIV.

However, successful HIV prevention campaigns aimed at people who are already HIV-positive can work if targeted effectively. Risk reduction strategies targeted at HIV-positive people have met with only partial success so far<sup>4</sup>. A meta-analysis of 15 studies found that 13 of them provided motivational components such as social support and behavioural skills training. These 'interventions' were shown to lead to a significant increase in the level of condom use for anal, oral or vaginal sex. But there was no evidence that either motivational or behavioural interventions had any effect on the number of

sexual partners that HIV positive individuals had.

Needle exchange programmes are part of a broader harm reduction approach and operate in a wide variety of legal settings. Many have argued that legal and political support is crucial to the success of needle exchange programmes. Police harassment and confidentiality are both significant challenges facing needle exchange programmes<sup>5</sup>. The data does not support the concern that this harm reduction intervention increases drug use or encourages initiation of these behaviours.

### So what?

In recognition of the new and changing world order brought about by HIV, positive prevention initiatives need to be initiated, scaled up and included into mainstream prevention strategies. For ultimately HIV – irrespective of serostatus – must be embraced, not feared. Positive prevention provides this opportunity. It helps link both prevention and care approaches and those living with and affected by HIV. For the foreseeable future we will never have an AIDS free world, but because of it we will have found a new way to live and to love ... and we will become wiser and richer because of it.

**Kevin Osborne**, HIV Advisor, International Planned Parenthood Federation.

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- 2 UNFPA, UNAIDS, WHO & IPPF (2005). Sexual and Reproductive Health and HIV/AIDS, A framework for priority linkages. <http://www.who.int/reproductive-health/stis/linking.html>
- 3 The GIPA principle was formalized at the 1994 Paris AIDS Summit when 42 countries agreed to "support a greater involvement of people living with HIV at all [...] levels [...] and to [...] stimulate the creation of supportive political, legal and social environments." This Declaration also expressed a "determination" to fully involve "people living with HIV in the formulation and implementation of public policies [and] ensure equal protection under the law."
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# OUT FROM THE MARGINS:

## Putting populations key to the AIDS pandemic at the heart of the fight against AIDS

*At the end of 2005 an estimated 38.6 million [33.4 million–46.0 million] people worldwide were living with HIV. In the same year an estimated 4.1 million [3.4 million–6.2 million] became newly infected with HIV and an estimated 2.8 million [2.4 million–3.3 million] lost their lives to AIDS.<sup>1</sup> Despite having just over 10% of the world's population, Sub-Saharan Africa is home to more than 60% of all people living with HIV – some 25.4 million – and AIDS is the leading cause of adult morbidity and mortality. Without a rapid increase in the HIV response most if not all of the people living with HIV in Sub-Saharan Africa will have died by 2020.*

### 3

Statistics mask a deeper truth about HIV which points to important issues about inequality, vulnerability and how best to fight the disease. The global AIDS epidemic is composed of many small, often overlapping epidemics that reflect different patterns of risk and vulnerability. The burden of HIV does not fall evenly across the world but concentrates its impact on regions and populations, exacerbating the impact of poverty, marginalization and human rights violations. As a result, within countries some groups are disproportionately affected by HIV.

The term 'key population' is used to refer to populations who are significant to the dynamics of the epidemic in a particular context. Depending on the country context and the rate of prevalence, key populations may include men who have sex with men, sex workers, injecting drug users and prisoners. In most countries, these populations tend to have a higher prevalence of HIV infection than that within the general population because they engage in behaviours that put them at greater risk of infection and they are among the most marginalized and discriminated against populations in society.

At the same time, the lack of resources devoted to HIV prevention, treatment and care for these populations are

disproportional to the number of people living with HIV from these groups or the impact of HIV on them. This is a serious mismanagement of resources and a human rights violation for individuals from these groups.

**Understanding risk and vulnerability** Understanding the difference between risk and vulnerability is vital for people involved in the HIV response.

**HIV risk** can be defined as the probability of an individual becoming infected by HIV either through his or her own actions, knowingly or not, or via another person's actions. For example, injecting drugs using contaminated needles or having unprotected sex with multiple partners increases a person's **risk** of HIV infection.

**Vulnerability** to HIV reflects an individual's or community's inability to control their risk of HIV infection. Poverty, gender inequality and harassment from state officials, including the police, are all factors that can increase people's **vulnerability** to HIV infection. Many populations are vulnerable to HIV. Women and girls, young people, people living in poverty, migrant labourers, people in conflict and post-conflict situations, refugees and internally displaced people all experience situations where they have

less control over their HIV risk than they should and programmes should prioritize their HIV prevention needs.

Both risk and vulnerability need to be addressed in planning comprehensive responses to the epidemic. However, for the most part HIV prevention efforts continue to prioritize risk reduction over vulnerability reduction. Examples include:

- programmes that provide information to drug users about safe injecting practices, but then governments jail drug users for possessing clean injecting equipment, which increases their vulnerability to HIV;
- organizations, which provide sexual health services to sex workers but provide no protection from violence or coercion to engage in unsafe sex, fail in their duty to provide a comprehensive range of interventions; and
- projects that seek to educate men who have sex with men about HIV transmission are undermined by the criminalization of homosexuality, and the consequent imprisonment and violence that gay and other men who have sex with men often experience at the hands of police.

### **A human rights approach to HIV**

All of these 'programming failures' are in fact violations of fundamental human rights. HIV prevention programmes continue to be stalled and undermined by these abuses, and assessments of the effectiveness of particular interventions continually fail to address the problem of the abjectly hostile policy environment for responding to AIDS in many countries.

As a result, human rights abuses of key populations fuel infection and violations of their rights follow infection, exacerbating the impact of the epidemic. Protecting the rights and interests of individuals at greater risk of HIV infection is therefore an important public health intervention which can both help stem the tide of new infections and mitigate the impact of the disease.

### **Men who have sex with men**

In a few societies sex between men is

widely accepted; in some it is tolerated; and in many it is the subject of strong disapproval, legal sanctions and social taboos. Official indifference or hostility means that there are few prevention and care programmes for men who have sex with men in developing countries. It also means that little research has been undertaken to discover HIV prevalence rates, how many men are at risk and how best to provide them with the information they need to protect themselves and their sexual partners.

Sex between men, particularly anal intercourse without a condom, is one way in which HIV and other sexually transmitted infections are transmitted. Although HIV prevalence rates among men who have sex with men are high in some countries; due to the relative invisibility of male to male sex, sex between men may be an unrecognized factor in national and regional epidemics.

Where HIV prevalence is low, focusing prevention efforts on people with high risk behaviours such as men who have sex with men not only protects those individuals but can contain the epidemic at a fraction of the cost associated with a generalized epidemic. Doing this effectively requires support for both risk and vulnerability reduction interventions.

Risk reduction activities might include distributing condoms and lubricant among men who have sex with men or providing them with specifically targeted education aimed at promoting safer sex. Supporting gay and other men who have sex with men to come together and to organize themselves for social networking, solidarity building and policy advocacy can play an important part in reducing their vulnerability.

### **Sex workers**

Sex workers are key to the dynamics of most HIV epidemics; the potential for a large number of sexual partners increases the likelihood of exposure to HIV for sex workers and/or the possibility of exposing others to HIV.

HIV prevention in the context of sex work rests on a range of factors including the

legal and policy environments in which sex work occurs; the legal, social and economic status of sex workers; and the capacity of sex workers to organize themselves and to identify and implement effective responses to the challenges they face, including HIV.

Although many countries criminalize sex work and thereby subject the act of buying or selling sex for money to criminal sanction; sex workers have the same human rights as everyone else, particularly rights to education, information, the highest attainable standard of health, and freedom from discrimination and violence, including sexual violence.

Since the beginning of the AIDS epidemic sex workers have organized around health and human rights issues, and as a result some sex worker organizations have played a crucial part in reducing HIV risk and vulnerability.

#### **Injecting drug users**

Injecting drug use is estimated to account for just less than one-third of new infections outside Sub-Saharan Africa. In spite of the importance of preventing HIV among injecting drug users, coverage of HIV prevention for this population is at best 5% across the globe<sup>2</sup>.

Beyond the physical risks associated with drug injection, drug users are vulnerable to HIV because of their social and legal status. Ironically, in many countries this means that HIV interventions are not legally available to drug users, or that drug users are unable or unwilling to access them for fear of recrimination or arrest.

#### **Prisoners**

Prisons are sites for drug use, unsafe injecting practices, tattooing with contaminated equipment, violence, rape and unprotected sex. Conditions in most prisons make them extremely high-risk environments for HIV transmission, leading them to be called 'incubators' of HIV, hepatitis C and tuberculosis. They are often overcrowded and offer poor nutrition with limited access to health care. Both male and female prisoners

often come from marginalized populations, such as injecting drug users or sex workers, who are already at increased risk of HIV infection.

HIV prevention and treatment efforts in prisons should be important components of national AIDS strategies not only because of the undoubted benefits in public health terms but also as a matter of fundamental human rights. Furthermore, most prisoners at some point return to the community. People retain the majority of their human rights when they enter prison, losing only those that are necessarily and explicitly limited because of incarceration. They retain such rights as freedom from cruel and inhuman punishment, and the right to the highest attainable standard of health care.

Over 20 years into the HIV response these populations remain key to the dynamics of the epidemic and continue to be disproportionately infected with HIV and affected by it. Unfortunately the political and institutional commitment required to address the economic, social, gender and other disparities which fuel AIDS epidemics and exacerbates its impact on people with these behaviours or in some settings remains unacceptably low.

Enhanced leadership, resources and prevention and even treatment programmes will prove inadequate unless the capacity of individuals and communities to decrease their vulnerability to infection is improved. What is needed is a radical reorientation of existing responses to HIV prevention and impact mitigation; a refocused approach to prevention that moves from rhetoric about vulnerability to making vulnerability reduction a priority.

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# POST-EXPOSURE PROPHYLAXIS

*In theory, a person exposed to HIV during sexual assault or other activity involving exposure to potentially infected blood and other body fluids can reduce the risk of infection by taking antiretroviral drugs soon after exposure, a treatment known as post-exposure prophylaxis.*

**A**ntiretroviral prophylaxis following occupational exposure has been a standard of care for health workers since the 1980's. Prophylaxis following sexual exposure and other exposures including injecting drug use has been extensively considered and debated. Practical guidelines and policy recommendations for non-occupational HIV prophylaxis must consider the limitations of current scientific knowledge and lack of definitive evidence concerning efficacy to support such recommendations.

Post-exposure prophylaxis should be considered following non-occupational exposures that include sexual assault, needle sharing, trauma involving human bites where there is exchange of blood, condom breakage or other exposures. Because there are no randomized, placebo-controlled clinical trials on which to definitively base recommendations, current recommendations are based on best practice evidence and the considered opinion of experts in this field. Several studies also support the feasibility of post-exposure prophylaxis<sup>1</sup>.

There are many factors to consider when deciding whether to implement post-exposure prophylaxis or not. A general and simple approach is that whenever possible, risk assessment and initiation of post-exposure prophylaxis should occur in settings where voluntary counselling and testing services as well as HIV clinical expertise are available or easily accessible by referral. Clients should be evaluated as soon as possible in order for therapy to be initiated within the recommended time-frames, which is

usually within 2 hours and no later than 72 hours after exposure.

When deciding whether to recommend the initiation of post-exposure prophylaxis, the clinician should assess the following factors.

## **The circumstances that led to HIV exposure**

Assessment should include the determination of whether the risk is an isolated event, episodic event, or habitual risk behaviour. Post-exposure prophylaxis is recommended in situations in which there is an isolated exposure (sexual, needle or trauma); however, it should not solely be dismissed on the basis of repeated high-risk behaviour(s). Persons who present with repeated high-risk behaviour(s) or for repeated courses of post-exposure prophylaxis should be the focus of intensified education and prevention interventions.

## **Degree of transmission risk based on type of exposure**

Determining the degree of risk of HIV transmission is an important factor in guiding both patient and clinician in making a decision concerning the provision of post-exposure prophylaxis. The health care provider should have a frank discussion with the patient regarding sexual activities, needle sharing and other activities that have potential for exposure to blood and body fluids<sup>2</sup>.

Evaluation should also assess the presence of other factors known to further increase the risk of HIV transmission such as trauma at the site of exposure, and in cases of sexual exposure, the presence of genital ulcers and/or other sexually transmitted infections.

**(i). HIV Exposure through needle-stick injuries.**

Needle-stick injuries in a non-health care setting can prompt requests for post-exposure prophylaxis. Factors to consider in this instance include the potential source of the needle, type of needle, presence of blood and skin penetration. Vaccination to prevent tetanus may be indicated for needle stick injuries resulting in puncture wounds.

**(ii). HIV exposure through bites.**

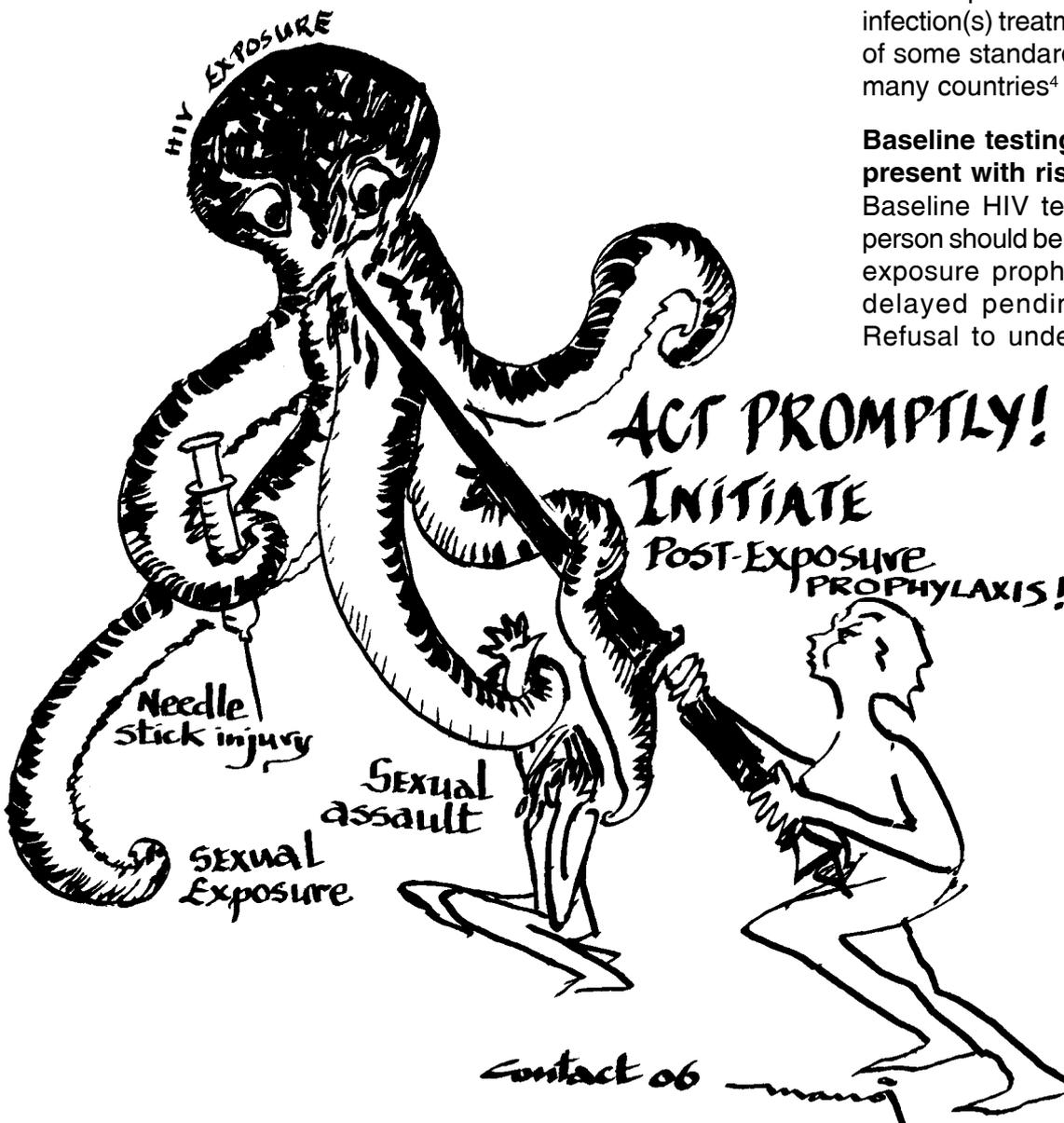
Although possible, HIV transmission following bites is thought to be extremely rare. While there have been many reported instances of bites, the few documented cases of possible HIV transmission following a human bite exposure were in adults exposed to blood-tinged saliva<sup>3</sup>.

**(iii). HIV exposure following sexual assault.**

Whenever possible, survivors of sexual assault should be treated in an emergency department where all appropriate medical resources are available. The recommendation for post-exposure prophylaxis should be communicated simply and clearly to the patient considering his/her emotional state and ability to comprehend the nature of the intervention. If the survivor is too distraught to engage in a discussion about whether to initiate therapy or not, a first dose of medication should be offered and arrangements made for a follow-up appointment within 3 days. Starter-packs of medication should be available on-site for rapid initiation of post-exposure prophylaxis following sexual assault. Emergency contraception and sexually transmitted infection(s) treatment have become part of some standard medical protocols in many countries<sup>4</sup>.

**Baseline testing for patients who present with risk exposures.**

Baseline HIV testing of the exposed person should be done. Initiation of post-exposure prophylaxis should not be delayed pending HIV test results. Refusal to undergo baseline testing



should not preclude the initiation of post-exposure prophylaxis. The risks and benefits of the intervention should be carefully explained and on-going counselling and support provided. Rapid HIV testing is the preferred method of testing in this situation because it can immediately identify previously infected persons and thus avoid unnecessary risks from inappropriate initiation of post-exposure prophylaxis. Counselling and referral for further care must be provided for clients who test HIV-positive at baseline.

**Recommendations for post-exposure prophylaxis**

Post-exposure prophylaxis should be initiated ideally within 2 hours and no later than 72 hours following exposure. Issues relating to potential benefits, unproven efficacy, potential side effects, the need for adherence to the treatment regime, signs and symptoms of primary HIV infection as well as the need for clinical and laboratory monitoring and follow-up must be discussed. The recommended protocol for post-exposure prophylaxis consists of zidovudine plus lamivudine together with a protease inhibitor, all taken orally:

Zidovudine 300 mg twice daily  
 Lamivudine 150 mg twice daily  
 Plus one of the following:  
 Tenofovir 300 mg daily  
 or Nelfinavir 750 mg three times daily  
 or Nelfinavir 1250 mg twice daily  
 or Lopinavir/ritonavir 3 capsules twice daily  
 or Saquinavir 1000 mg/ritonavir 100 mg twice daily  
 or Indinavir 800 mg daily

Alternatives to the first two drugs are:

- Instead of zidovudine use stavudine – 40 mg twice daily for bodyweight more than 60 kg, 30 mg daily if bodyweight lower than 60 kg
- Instead of lamivudine use didanosine - 400 mg daily if bodyweight more

than 60 kg, 250 mg daily if bodyweight lower than 60 kg.

Before starting, blood should be taken for full blood count (including differential and platelets) and liver function tests. These will serve as baselines for monitoring of side-effects. Prophylaxis should be taken for 4 weeks.

**Follow-up care and support**

Post-exposure care involves simultaneous attention to multiple issues: the emotional state of the exposed patient, adherence to the post-exposure prophylaxis regimen, monitoring for potential adverse effects and sequential HIV testing to exclude acquisition of infection.

**Resources**

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Centres for Disease Control and Prevention (1998). Management of possible sexual, injecting-drug-use, or other non-occupational exposure to HIV, including considerations related to antiretroviral therapy, *MMWR Morb Mortal Wkly Rep* 1998; 47(RR17):1-14. Available at: [www.cdc.gov/mmwr/pdf/rr471.pdf](http://www.cdc.gov/mmwr/pdf/rr471.pdf)

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# PREVENTION OF MOTHER-TO-CHILD HIV TRANSMISSION

**Introduction:** recent gains in child survival rates are threatened by the AIDS epidemic. Each year, approximately 600 000 infants, most of them in Sub-Saharan Africa, are born with or become HIV-positive as a result of mother-to-child HIV transmission. The rising number of HIV-positive children places an enormous burden on families and health care systems. Mother-to-child HIV transmission can be greatly reduced by expanding high quality antenatal and obstetric care, voluntary HIV counselling and testing, access to antiretroviral therapy, and the use of breast milk substitutes or exclusive breastfeeding.

## 5

### The Kenyan experience

In Kenya, AIDS was declared a national in 1999. Over 2.5 million people are living with HIV, an estimated 15% of the adult population. In addition to the estimated 220 000 HIV-positive children, there are almost 1 million AIDS orphans. The social and economic repercussions are devastating and are reversing hard-won gains in development and rolling back the child survival gains made since independence. Kenyan studies show that there is a nine-fold increase in the risk of death for HIV-positive children compared to HIV-negative children<sup>1</sup> and approximately 50% of HIV-positive children die before their second birthday. In the event that the mother dies, there is an eight-fold risk of death of an infant irrespective of HIV status.

Mother-to-child HIV transmission is responsible for most HIV infections in children. Babies can become infected during pregnancy, labour, delivery or through breast-feeding. Services for the prevention of mother-to-child transmission (PMTCT) were introduced on a pilot basis in 2000. Lessons learnt from this pilot were used to initiate the national programme in 2001 and today more than 759 facilities provide PMTCT services. The increased number of health facilities offering PMTCT services means that the number of pregnant women counselled, tested and offered treatment has progressively increased from just over 1000 in 2001 to over 265 000 in 2004, 22% of all pregnant women.

It is estimated that 60% of pregnant women visiting antenatal clinics now receive HIV counselling and testing. Nevirapine uptake at antenatal clinics is estimated at 38% and there has been good progress towards achieving the national target of providing PMTCT services in at least 80% of all facilities offering antenatal care by 2007<sup>2</sup>.

A Prevention of Mother to Child Transmission Technical Working Group was set up in early 2000 by National HIV/AIDS and STD Control Programme to guide the Government and the Ministry of Health on mainstreaming PMTCT services. The national PMTCT programme, launched in August 2002,

2005 National PMTCT service statistics and nevirapine uptake

Province	Sites	Mother counselling and testing	Mother nevirapine	Infant nevirapine
Central	139	50130	876	688
Coast	100	41938	1462	859
Eastern	124	2531	697	882
Nairobi	130	114158	5700	4178
N. E	17	3695	33	6
Nyanza	139	55707	5374	4697
R. Valley	220	69675	2685	1735
Western	57	35093	1030	706
Total	926	372927	17857	13751

is being implemented through government health facilities, especially the district hospitals and health centres. Other stakeholders, particularly faith-based organizations and the non-governmental organizations have played a key role in its implementation.

The PMTCT programme has adopted the WHO four-phase strategy for prenatal HIV prevention:

- prevention of HIV in women, especially young women;
- prevention of unintended pregnancies in HIV-positive women;
- prevention of mother-to-child HIV-transmission; and
- support for the mother and family.

The current national goal of PMTCT is to ensure that 80% of women in Kenya access PMTCT services. The National PMTCT targets are:

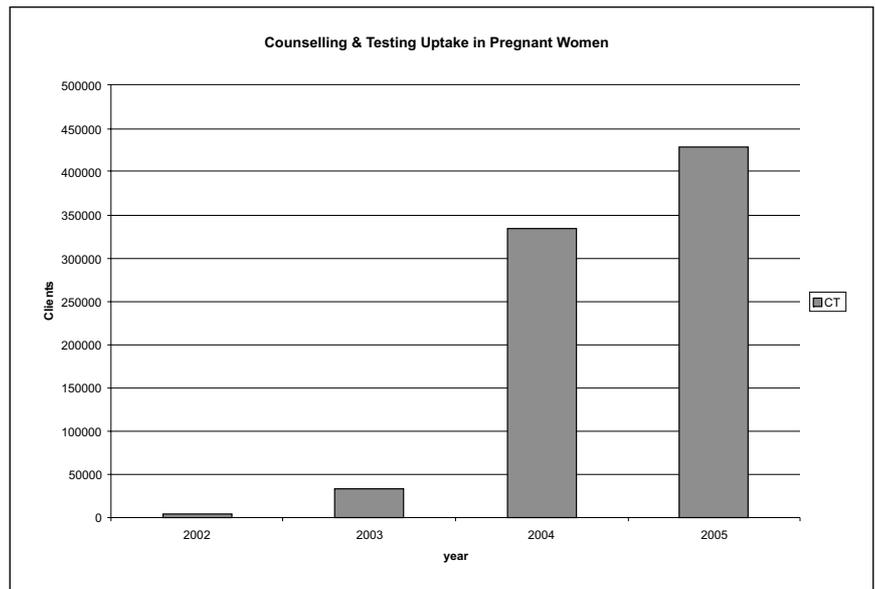
- 80% of women attending antenatal clinic have access to PMTCT services by 2005;
- 80% uptake of counselling and testing at each facility;
- 80% uptake of prophylactic antiretroviral therapy at each facility; and
- 50% of infant HIV infections averted by 2010.

In order to ensure capacity building and consistency in PMTCT services, a national PMTCT training curriculum was developed so that PMTCT service providers:

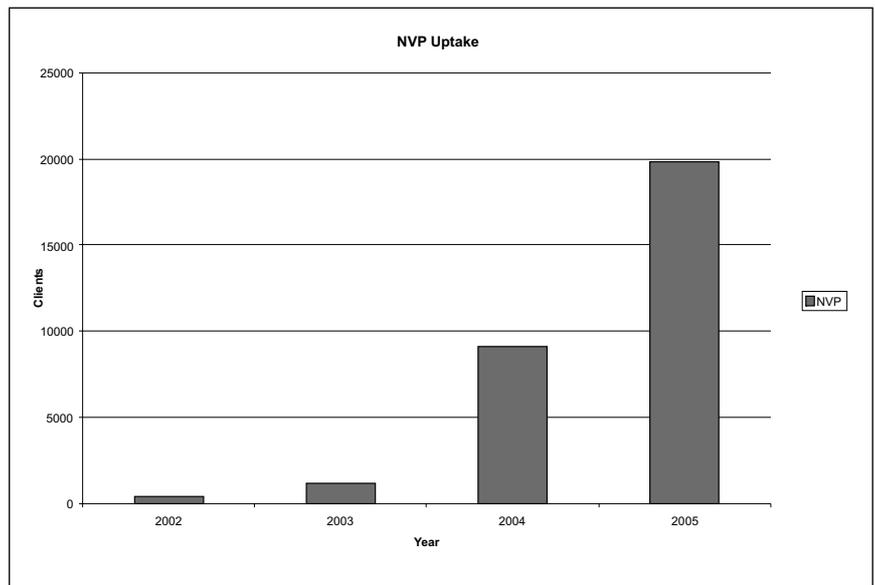
- acquire basic knowledge and skills in HIV and MTCT, counselling and HIV testing and reduce HIV-related stigma and discrimination; and
- can deliver PMTCT services; establish links for continued community care of people living with HIV; and understand programme monitoring and evaluation.

All PMTCT providers are required to undergo this certification training.

### National PMTCT Counselling and Testing Uptake



### National Nevirapine Uptake



Nevirapine is currently the best available option for resource-constrained nations. The dose of Nevirapine is 200 mg for mother at the onset of labour and 2 mg/kg for the baby within 72 hours of life/birth<sup>3</sup>.

### Christian Health Association of Kenya (CHAK)

Christian Health Association of Kenya (CHAK) is a national ecumenical network of Protestant Churches and their health facilities and programmes. Its is to serve and assist member health units in their implementation of the Holistic Health Ministry of Christ through advocacy, capacity building, technical



On-site mentoring & capacity building for PMCT at Nazareth Hospital: PMCT Trainers from CHAK Secretariat present an award to the best participant

support, networking, innovative health programmes and witnessing for a just and healthy nation. The motivation and guiding values of CHAK and its Member Health Units are drawn from the Biblical teaching on health and healing following the example of Christ and the teaching on love and sanctity of human life. Values are based on the Christian witness following the example of Christ and the Great Commission to reach out to all people to teach, preach and heal. Services are guided by professional

ethics and standards, and the principle of good stewardship and accountability to members and partners.

### CHAK's PMTCT Programme

The CHAK health institutions provide approximately 20% of health care services in Kenya. CHAK coordinates health care delivery in 435 health facilities of which 25 are hospitals. As a major health care provider and as a faith-based organization CHAK has enormous responsibilities as well as a unique strategic advantage in the AIDS response. The overall goal of CHAK's HIV/AIDS Programme is to reduce HIV transmission, improve the quality of life of both people living with HIV and those affected through providing PMTCT services and comprehensive AIDS care i.e. HIV prevention, and AIDS treatment, care and support packages.

CHAK's first PMTCT project at the Kijabe Hospital was initially supported by Elizabeth Glazer Paediatric AIDS Foundation in 2000. The project management was later transferred to CHAK Secretariat which allowed it to scale up to cover 12 hospitals. In 2004, a further 20 lower-level health facilities became involved, under the supervision of hospitals.

### Prevention of mother-to-child transmission services delivered through CHAK Member Health Units 2003-2005

Indicators	2003	2004	2005	Total
New ANC Clients	13 256	14 988	24 976	53 220
ANC Tested	6 278	9 533	13 347	29 058
ANC Positive	300	499	944	1 743
ANC Mothers NVP	162	271	494	927
ANC Infant NVP	126	178	264	568
Deliveries	12 573	11 372	17 896	41 841
Maternity Tested	467	1 612	2 689	4 768
Maternity Positive	73	85	311	469
Maternity Mother NVP doses			253	253
Total Deliveries	15 868	2 082	17 950	35 900
Maternity Women HIV Positive	245	70	315	630
Maternity Infant NVP doses	117	149	175	441

The Catholic Medical Mission Board “Born-to-Live” PMTCT project was initiated after CHAK hosted the first national faith-based PMTCT experience sharing workshop in March 2003. Based on a working partnership between the Kenya Episcopal Conference and CHAK, it was agreed that Catholic Medical Mission Board would roll out PMTCT services in 20 CHAK health units in response to increasing needs. CHAK has now introduced PMTCT services in 65 member health facilities and plans to cover 100 sites.

**Lessons learnt**

CHAK’s work has produced some insights into how to proceed, including:

1. PMTCT must be the norm in mother child health care. Health workers and clients should view PMTCT service as a routine part of the mother child health care experience.
2. Community mobilization is needed to influence public attitudes. Strengthening the ties between the mother child health clinic, outside sources of care and the community, including other public sector health services, non-governmental organizations, the private sector, lay workers, families, husbands, churches and community leaders.
3. Facilitate access to comprehensive care for mothers and families, which

can ensure continuity of care and creates hope thus reducing stigma.

4. Scaling up and sustainability require increased coverage to lower-level facilities, in-service training for untrained and retired midwives, a communication strategy to increase demand for services, partner mapping and community-based delivery of PMTCT.
5. Improved quality and sustainability of services requires an emphasis on comprehensive care and integration, support of supervision teams, and strengthening linkages with antiretroviral therapy programmes.
6. Reducing stigma by involving men, community mobilization and creating linkages to community-based services.

*We are all called upon to work together towards an HIV-Free Generation. Let us give hope to the children; the generation of tomorrow.*

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# AN EPIDEMIC OF STIGMA AND DISCRIMINATION

*The AIDS epidemic is one of the world's most significant challenges. AIDS has exposed the perilous state of many countries' health care systems as well as killing 8000 people daily, leaving thousands of children orphaned and reducing communities' productive capacity. The AIDS pandemic has seen an epidemic of HIV-related stigma, discrimination and denial follow in its wake.*

*Stigma and discrimination increase vulnerability and the impact of HIV among people living with and affected by it. They both seriously threaten the effectiveness of HIV prevention and treatment, which means tackling stigma and discrimination must be at the heart of the AIDS response.*

## 6

### **What is HIV-related stigma?**

Stigma is a powerful social label that radically changes the way people are viewed and view themselves. Stigma reinforces pre-existing negative assumptions, beliefs and prejudices. When a stigmatizing label is applied it is usually because society considers something undesirable, shameful or unworthy.

This is true of HIV, which has reinforced deeply held prejudices against groups already marginalized and stigmatized, including gay men and other men who have sex with men, injecting drug users and sex workers. HIV has also heightened the taboos associated with sex in general, and the association of HIV with Africa has reinforced racial prejudice.

HIV-related stigma occurs for a range of reasons, including:

- the fact that AIDS is a life-threatening disease;
- AIDS is associated with physical illnesses such as wasting;
- HIV is infectious, and there remains ignorance and a lack of understanding about HIV transmission;
- the association of HIV with behaviours which some consider deviant or morally reprehensible, including homosexuality, injecting drug use and sexual promiscuity;
- the view that people living with HIV are responsible for their infection; and

- HIV is associated with groups already stigmatized and discriminated against, including sexual minorities and racial groups.

### **What is HIV-related discrimination?**

HIV-related discrimination can be defined as any act, measure or omission that results in someone being treated less favourably because they have, or are believed to have, HIV. Discrimination, as distinct from stigma, occurs when someone is treated unfairly on the basis of their confirmed or suspected HIV status. HIV-related discrimination can have a wide reach, extending to people associated with people living with HIV, whether personally, or through family or professional association.

HIV-related discrimination can interact with pre-existing sources of stigma and discrimination. This means that HIV discrimination often impacts on people who are imputed to be HIV-positive because of who they are, or are perceived to be, such as gay men or other men who have sex with men or people who use or have had a history of using drugs.

### **Stigma and HIV-positive people**

Stigmatization of and discrimination against people living with HIV adversely affects their health and well-being, can touch all aspects of their lives, is often subtle and difficult to change, can result in violence and abuse, contributes to isolation and a lack of security, and can be painful and stressful. Research

shows that people who feel stigmatized by HIV are more likely to experience depression and less likely to access health services.

### **Stigma and prevention**

HIV-related stigma also undermines prevention efforts. The impact of stigma and discrimination contributes to a culture of silence and denial, in which it is more difficult to take the actions needed to respond to HIV. Stigma associated with communities most at risk of infection makes them more vulnerable to HIV infection.

Vulnerability operates at both the personal and societal levels. Various factors such as an individual's knowledge, awareness and life skills will make them more or less vulnerable to HIV. However, it is impossible to understand what makes someone personally vulnerable to HIV without addressing the contextual factors related to social vulnerability. These include the capacity to influence political and power structures which impact on people's lives, attitudes to sex and sexuality, and religious beliefs.

### **HIV related stigma and discrimination and gender inequality**

There is for instance a very clear correlation between HIV stigma associated with sex, gender inequality, the status of women, the violation of their human rights and the growing epidemic among women. Women are disproportionately infected with and affected by HIV. In Sub-Saharan Africa, 57 percent of those living with HIV are female and young women aged 15 to 24 are two and half times more likely to be infected than young men.

Human stories confront us with some terrible realities. The following example from a rape victim in the Democratic Republic of the Congo<sup>1</sup> clearly demonstrates the relationship between stigma, HIV, social exclusion and discrimination:

*My husband was angry; he said that because I had slept with the enemy, I would be punished and die of AIDS.*

*He said I was so dirty, that he did not want to stay with me.*

Addressing the impact of AIDS on women requires us to address the violations of women's rights which give rise to marginalization and increased vulnerability, which contribute to the risk of HIV infection. The interaction of gender inequality and HIV-related stigma and discrimination fuel the epidemic and exacerbates its impact on women, their families and communities.

### **Combating HIV-related stigma**

Stigma thrives on misinformation and denial. Even when people understand how HIV is transmitted, that HIV can be treated and that treatment is available, stigma and discrimination persist. Prejudices regarding sex, gender and sexuality are difficult to change and despite the high HIV prevalence in some communities; blame and denial are common and continue to contribute to the stigmatization of people living with HIV. The persistence of these beliefs can in part be explained by the influence of religious and moral beliefs and cultural norms. Some religions continue to teach that HIV is a punishment for a moral fault. Cultural and religious norms not just about sex but about social expectations generally and gender expectations in particular can also reinforce specific HIV-related stigmatizing attitudes.

In community workshops conducted for a regional anti-stigma programme in Southern Africa, participants cited many examples of stigma in religious institutions, including:

- refusal to sit next to someone who is (or suspected to be) living with HIV;
- not visiting someone who is ill;
- being excluded or expelled from church committees;
- preaching that AIDS is a punishment from God for 'the wages of sin'; and
- if pastors get sick, they lose the trust of their congregation<sup>2</sup>.

**Sex, politics, culture and religion**

HIV challenged us to confront some of our most deeply held assumptions about sex, gender, sexuality and drug use. The threat of infection and its consequences has resulted in the adoption of practical harm reduction measures i.e. to minimize the harm from activities that many people believe are wrong.

Religious beliefs and attitudes and traditional cultural norms have been a constant feature of debates and discussions surrounding how to respond to HIV. Religion has had both positive and negative influences in the AIDS response.

Faith based organizations are critical providers of home care in many countries and religious leaders have played important roles in challenging the exclusion of people living with HIV. However, some churches, mosques and temples and the teachers associated with them have reinforced stigma. These starkly different approaches to the fight against AIDS, one of which is vital to success and one which erodes the most modest gains can also come from the same religious traditions and even the same congregations.

Religion can be helpful. In Cambodia, the International HIV/AIDS Alliance supports local Buddhist organizations to undertake HIV work, which not only includes the provision of home-based care to people living with HIV but also makes use of Buddhist monks in normalizing HIV and challenging stigma<sup>3</sup>. Such work, and similar work undertaken by other faiths, needs to be replicated so that the positive contribution that religion can make to fighting stigma is realized.

**A world without stigma and discrimination is possible**

Despite increased funding, political commitment and progress in expanding access to HIV treatment and care, the AIDS epidemic continues to outpace the response. Increased leadership and commitment is needed, not just in funding or for increased access to

treatment, but in asserting the critical importance of overcoming HIV-related stigma and promoting human rights as a prerequisite in the AIDS response.

Without a fundamental commitment to stigma reduction and to human rights there is a risk of entrenching the very inequalities that are driving the epidemic and which increase the impact of HIV. Reducing HIV-related stigma requires:

- openness in facing up to the epidemic;
- active commitment to the greater involvement of people living with HIV in all aspects of the HIV response locally, nationally, regionally and internationally;
- persistent and public engagement on HIV in general and as a human rights issue in particular; and
- policies, programmes and laws that protect, promote and fulfil the rights of people in general, and the poor and vulnerable in particular.

Where human rights are at risk, people are at risk of HIV. And where people are living with or affected by HIV their human rights are in need of protection. Stigma is the prevailing context in which that risk of HIV infection occurs and in which people's rights are made vulnerable to abuse. By putting the rights of vulnerable groups and communities, together with the rights and interests of people living with HIV at the centre of the AIDS response we can help reduce stigma. This will both reduce vulnerability and mitigate the impact of AIDS.

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# A HIV VACCINE:

## Why we need one, current efforts and challenges

**Why we need a vaccine?** *The news about the AIDS epidemic is bleak and relentless. Since the start of the epidemic, an estimated 65 million people have been infected with HIV, of whom some 25 million have died. In 2005 alone almost 3 million people lost their lives to AIDS, children accounted for one in every six of these AIDS-related deaths. In the same year, there were over four million new HIV infections worldwide, almost three million of these in sub-Saharan Africa. Despite progress made in a small but growing number of countries, the AIDS epidemic continues to outstrip global efforts to contain it<sup>1</sup>.*

**H**IV prevention interventions are essential to make an impact on the pandemic. Where HIV prevalence is high—either in a geographic area (for example sub-Saharan Africa) or concentrated in particular populations (such as drug users in the Russian Federation)—maximum coverage is needed in order to slow the epidemic. It is also important to achieve optimal coverage of HIV prevention programmes in all settings in order to have an impact. It is estimated that the implementation of a comprehensive HIV prevention package could avert 29 million (or 63%) of the 45 million new infections expected to occur between 2002 and 2010<sup>2</sup>.

Furthermore, by the end of 2005, only 20% of those people who needed antiretroviral therapy were receiving them<sup>3</sup>. The costs of providing antiretroviral therapy is expected to rise, particularly with the international commitment to develop and implement a package for HIV prevention, treatment and care with the aim of coming as close as possible to the goal of universal access to treatment by 2010 for all those who need it<sup>4</sup>.

New and better long-term prevention tools are needed, particularly for women who lack the power to negotiate condom use. Microbicides, applied to prevent or reduce the risk of HIV infection during sexual intercourse, could be an important

additional HIV prevention method for women, increasing their control and ability to protect themselves. An effective preventive vaccine, however, offers the best long-term solution to the epidemic. Everyone, but in particular, women would be able to use it with or without their partner's knowledge. Vaccination of pre-adolescents before their first sexual experience would be an additional strategy to stop the AIDS epidemic.

### **A balanced response to AIDS is needed**

- adequate coverage of comprehensive prevention programmes<sup>5</sup> and scaling-up of AIDS treatment, care and support;
- greater investments in innovation, drugs, diagnostics and new prevention tools, including vaccine and microbicide research and development; and
- increased efforts to ensure the efficient and timely manufacturing, licensing and approval, and delivery of new prevention technologies.

Scientists believe that complete eradication of HIV through vaccines alone is unlikely. Furthermore, with the introduction of a vaccine, there is likely to be increased risk-taking behaviour(s)

by some people, erasing some of the HIV prevention gains due to vaccination. As a result, the introduction of any HIV vaccine must be reinforced by the sustained use of other HIV prevention interventions.

Nevertheless, vaccines could significantly reduce HIV transmission. Simulation modelling studies have investigated the potential impact of AIDS vaccines in a variety of developing countries<sup>6</sup>. While their results focus on individual countries and are based on specific assumptions, these studies generally find that:

- even vaccines that are only partially effective (30-50%) could significantly reduce the number of new infections; and
- effectively protecting a quarter of the adult population with a vaccine could reduce HIV prevalence – the number of HIV-positive people – by more than half over 20 years. Effectively protecting half of the adult population could reduce long-term HIV prevalence by 80%.

Therefore, there is considerable value in investing in AIDS vaccine research and development even as HIV prevention and AIDS treatment, care and support programmes continue to expand. Without new preventive technologies to complement and go beyond existing HIV prevention methods, AIDS treatment can be expected to absorb an ever-increasing proportion of aid, competing with other important poverty reduction programmes. One of the starkest realities is that in the long-term such levels of spending are not sustainable. Current HIV prevention approaches are clearly not enough. Interventions that depend upon sustained behaviour change have had limited success. There is a need to be thinking much more about long-term responses, while doing everything possible to mitigate the impact of the current AIDS epidemic in the short-term. Improved prevention would also help sustain access to antiretroviral therapy

for those who need it by reducing the total number of people living with HIV.

### **Current efforts**

The International AIDS Vaccine Initiative (IAVI) is fostering a new type of partnership between health researchers and institutions from developed and developing countries. Medical research has been taking place in developing countries for decades, but what is happening today is different. The current wave of vaccine and drug research is based on a deeper and more long-term relationship between national and external researchers with a greater focus on local capacity building and increased involvement of communities, national level stakeholders and political leaders. As a result, African and Asian researchers are now actively participating in defining the scientific hypothesis to be tested and in managing the trials themselves.

The new-style AIDS vaccine research partnerships are also starting to provide benefits beyond the immediate circle of scientists and trial volunteers, by improving health infrastructure and standards of care. One example is the United States Military HIV Research Program (WRAIR) in East Africa, which provides 'wrap-around' HIV prevention and treatment services to communities located near trials sites. This means setting up laboratory infrastructure, training clinicians and counsellors, and providing antiretroviral drugs and other supplies. Trial participants are HIV-negative so do not need antiretroviral therapy; however, the WRAIR programme now provides more than 10 000 people with antiretroviral therapy in Kenya, Tanzania and Uganda.

Creating a supportive environment for trials relies on involving community leaders and members. Community representatives are critical for designing and conducting trials – formally, as Community Advisory Board (CAB) members<sup>7</sup> – but also in the day-to-day interactions they have with volunteers. Medical and faith-based leaders are playing growing roles in educating others and encouraging support for the trials.

## Challenges ahead

Despite progress achieved through new vaccine research partnerships, a number of challenges remain. Securing adequate sources of funding for the long-term effort, as well as efficient and effective allocation of those resources, are on-going battles. The private sector has a central role in providing expertise, while building upon the strengths of public sector and academic institutions.

With one or two exceptions, AIDS vaccine research operates outside of national AIDS control programmes and budgeting cycles. Even though there has been considerable investment in training, there is still a shortage of human resources - scientists, clinicians, laboratory technicians, counsellors and community mobilizers - to undertake vaccine research in many countries, especially in Africa. The current efforts to scale up programmes should increase the capacity to run trials; and the growing number of trials should, conversely, increase the capacity to scale up HIV prevention and treatment programmes.

The ethical standards for trials need to be strengthened through an integrated country planning approach based on national and community partnerships, and through developing, and compliance with, clinical, ethical and regulatory standards. And finally, there is a need to plan to surmount potential barriers to AIDS vaccine access, for example through regulatory and licensing harmonization, health systems strengthening, and development of improved procurement and financing

schemes – in preparation for, rather than after, a vaccine is found.

No one should have any doubts that developing and supplying an AIDS vaccine will both be expensive and require long-term commitments by governments and the private sector with support from civil society, including faith-based organizations. However, the tens of millions of HIV infections averted and the costs saved on AIDS treatment, care and support will greatly outweigh such expenditure. While we may not know when we will have a vaccine, scientists are certain that one is possible.

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The International AIDS Vaccine Initiative (IAVI) is a global not-for-profit organization working to accelerate the development of a vaccine to prevent HIV infection and AIDS. Founded in 1996 and operational in 23 countries, IAVI and its network of partners research and develop vaccine candidates. IAVI also works to ensure that a future vaccine will be accessible to all who need it. The IAVI Report and Vax newsletters track the latest news in the vaccine field. These and a database of all AIDS vaccine trials and estimates of global expenditures on vaccine research and development can be found on IAVI's website [www.iavi.org](http://www.iavi.org).

# MICROBICIDES AND THEIR ROLE IN HIV PREVENTION

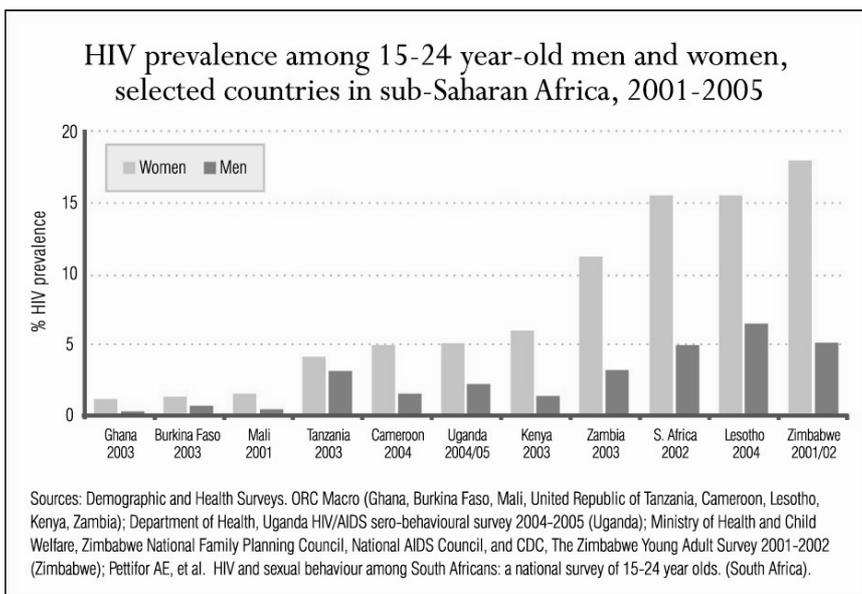
*Infectious diseases traditionally evoke two public health responses - prevention and treatment. Unfortunately, the virus that causes AIDS has proven to be much more difficult than anticipated to defeat, forcing scientists to be innovative. HIV vaccines have proven elusive, while treatment has required the combination of several drugs to be effective. Increasingly it is clear that a combination of approaches, both new and old, within a comprehensive response is needed. Microbicides – informed by what has been learned to date about HIV treatment and prevention – represent one of the most promising new ideas to have emerged out of the pandemic. In 2005, microbicides were hailed as one of ten new technologies poised to make an impact on reaching the health-related Millennium Development Goals <sup>1</sup>.*

## 8

### So what exactly are microbicides?

Microbicide is a term used to describe not one drug or product, but a range of substances - literally 'microbe killers' - that could substantially reduce the transmission of HIV and other sexually transmitted infections. Similar to the antibacterial products used in surgery, these products would be applied topically – in the vagina or rectum – to neutralize HIV along with other pathogens. Various potentially effective mechanisms of action are being pursued, from killing viruses and

bacteria, or setting up a chemical barrier, to enhancing the body's natural defence mechanisms. A second generation of microbicides are based on antiretroviral drugs that disrupt HIV attachment and replication at the site of transmission. Microbicides could come in many forms, including gels, creams, suppositories, films, or in the form of a sponge or vaginal ring. In the future, it might even be possible to formulate a topical vaccine in combination with a microbicide - thus re-boosting the vaccine every time the microbicide is applied.



Microbicides do not yet exist, but currently five candidates are in clinical trials to determine their effectiveness in reducing HIV transmission. With sufficient resources and political will, a microbicide could be ready for distribution in a handful of developing countries by the end of 2010.

The urgent need for microbicides is exacerbated by the feminization of AIDS. Today, women are the fastest-growing sub-group of people living with HIV, and most become infected through heterosexual contact. Women, particularly younger women, are more vulnerable to HIV infection than men for economic, social and biological reasons. In South Africa for example,

Source: AIDS Epidemic Update, UNAIDS, December 2005

one in four women is infected with HIV before the age of 22.

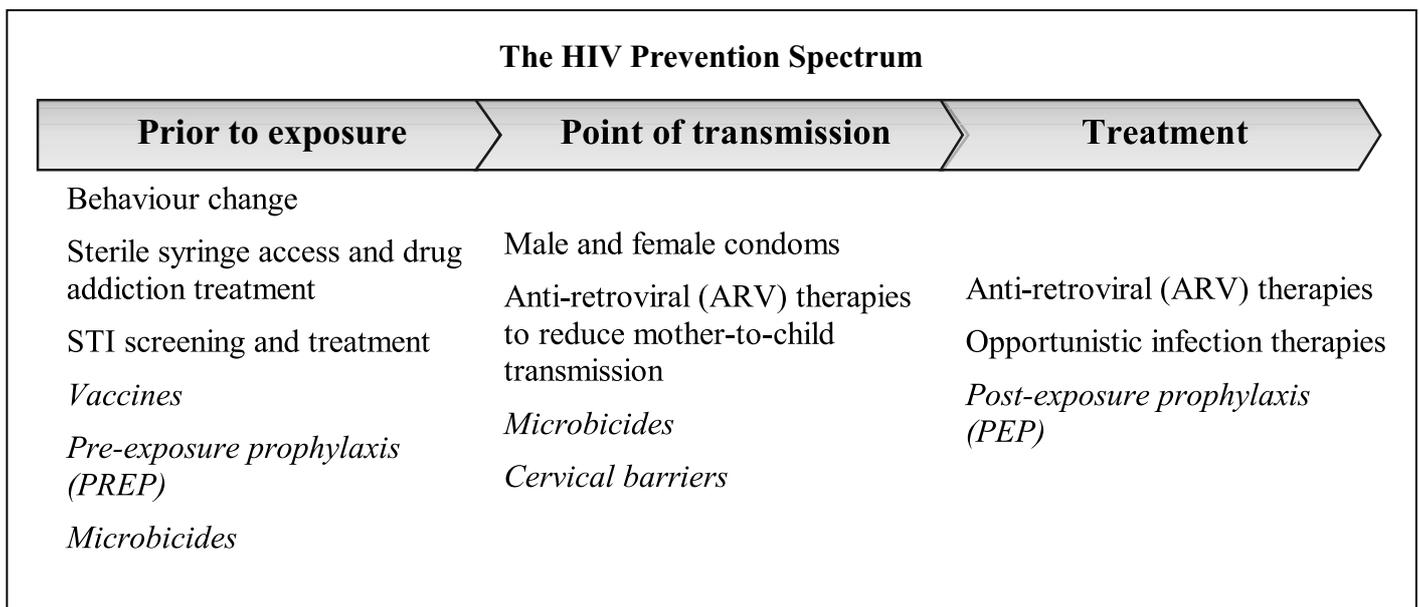
Current prevention options fail to take into account women's social, economic and domestic circumstances. The dominant prevention message is ABC – 'Abstain, Be Faithful and Condomize'. For many women, these messages are inadequate and unrealistic. They assume that marriage will offer protection from HIV and that men will be willing to use condoms. Cruelly, the opposite is often the case. Globally, the majority of women contract HIV and sexually transmitted infections from a husband or steady boyfriend rather than a casual partner. Recommending condom use also requires women to choose between foregoing childbearing and exposing themselves to a potentially fatal disease.

HIV prevention, like contraception and other forms of self-protection, works best when people have a range of options to choose from. Just as good treatment requires combination therapy, effective prevention requires a combination of strategies that target the virus at different stages of its life-cycle. In recent years, efforts have focused on expanding the range of HIV prevention tool.

Microbicides could offer women - for the first time - a method they can initiate that does not require the active co-operation of a male partner. Although many

women in acceptability surveys indicate that they do not plan to hide their microbicide use from their partners, they nevertheless would like a product that is unobtrusive and doesn't have to be discussed each time they have sex. Critically, many women also want a product that will allow them to conceive without risk of becoming HIV infected. Non-contraceptive microbicides could be a way for women – including those already living with HIV - to ensure that they have healthy pregnancies and bear healthy children. A European Union-funded social marketing survey revealed a strong interest in using microbicides among women – and men – in developing countries including South Africa, Uganda and Zimbabwe.

Modelling studies have indicated that even with a 60% effective microbicide, over 2.5 million HIV cases could be averted over 3 years among women, men and children. So why are they not available now? The answer is not just about science. New drug development is usually funded by large pharmaceutical companies. These multi-national corporations, however, have demonstrated very little interest in microbicides to date because they see too much uncertainty and too little potential profit. Universities and small, independent biopharmaceutical firms have, therefore, taken the lead. These researchers have to rely on governmental and philanthropic grants



to fund their research and development efforts. Thus, the responsibility for funding the work required to make microbicides a reality falls on the public sector.

Most candidate microbicides are being developed within public-private partnerships, such as the United Kingdom Microbicides Development Programme and the International Partnership for Microbicides. Roughly US\$140 million was invested in 2004 in microbicide research and development, more than double the amount invested globally in 2000. Yet, experts estimate that this annual investment must double again and that US\$280 million is needed annually to ensure that a safe and effective microbicide becomes publicly available as rapidly as possible.

Not surprisingly, microbicides have attracted both excitement and scepticism. Some fear that people will

However, in light of the devastating impact of AIDS on families and communities, many more see microbicides as offering hope for their daughters and a lifeline to those who, unable to control their risk factors, currently have absolutely no way to protect themselves from HIV. Microbicides will not be – and must not be regarded as – a magic bullet. No one technology or strategy will ‘solve’ the AIDS pandemic. Enthusiasm about these new methods must not be allowed to deflect attention to the underlying social, economic and cultural realities that condition people’s risk. We also must work to give vulnerable groups and women especially, the economic and social power to negotiate with their partners the terms and conditions under which sex takes place.

The Global Campaign for Microbicides works towards three critical goals:

1. to raise awareness and mobilise political will for increased funding for microbicide research;
2. to create a supportive policy environment for their timely development, introduction and use; and
3. to ensure that as science proceeds, the public interest is protected and the rights and interests of trial participants, users, and communities are fully represented and respected.

We invite faith-based organisations supporting our goals to endorse the Campaign and help us to advocate for these new prevention options – because it is only through sustained global campaigning that the funding and political will be found to put these urgently needed prevention tools into the hands of the women who need them most without delay.

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#### **Resources and web links:**

For a basic introduction of the microbicides field and a series of fact sheets on a range of microbicide topics, consult the Global Campaign for Microbicides website:  
[www.global-campaign.org](http://www.global-campaign.org)

Global Campaign for Microbicides (2004). *In Women’s Hands*.

Short film about microbicide development in DVD or video format.

Global Coalition on Women and AIDS and UNAIDS (2006). Increase Women’s Control over HIV Prevention – Fight AIDS  
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International Partnership for Microbicides (2005). Microbicides – an Essential HIV Prevention Strategy for Achieving the MDGs  
[www.ipm-microbicides.org](http://www.ipm-microbicides.org)

Alliance for Microbicide Development [www.microbicides.org](http://www.microbicides.org)

Microbicide Development Programme [www.mdp.mrc.ac.uk](http://www.mdp.mrc.ac.uk)

abandon condoms, fidelity and abstinence in preference to microbicides. While the introduction of microbicides is likely to be followed by increased risk-taking behaviour(s) by some people, their introduction must be reinforced by the sustained use of other HIV prevention interventions.

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- 2 I would like to thank Lori Heise and Anna Forbes of the Global Campaign for Microbicides for their input into the writing of this article.

# MALE CIRCUMCISION:

## A potentially important new addition to HIV prevention<sup>1</sup>

*Behaviour change or 'ABC'<sup>2</sup>, including promoting of social norms to address the practice of multiple (concurrent) sexual partnerships<sup>3</sup>, remains the most important strategy for preventing sexual transmission of HIV. However, especially in the most severely affected regions of southern and east Africa, additional prevention measures are urgently needed<sup>4</sup>. While actual deployment of other potentially valuable technologies, such as an HIV vaccine and microbicides, remains many years away, male circumcision, which is probably the oldest and certainly the most common surgical procedure known, has become increasingly discussed in relation to HIV, along with emerging evidence of other health benefits such as protection against penile, cervical and prostate cancers<sup>5</sup>.*

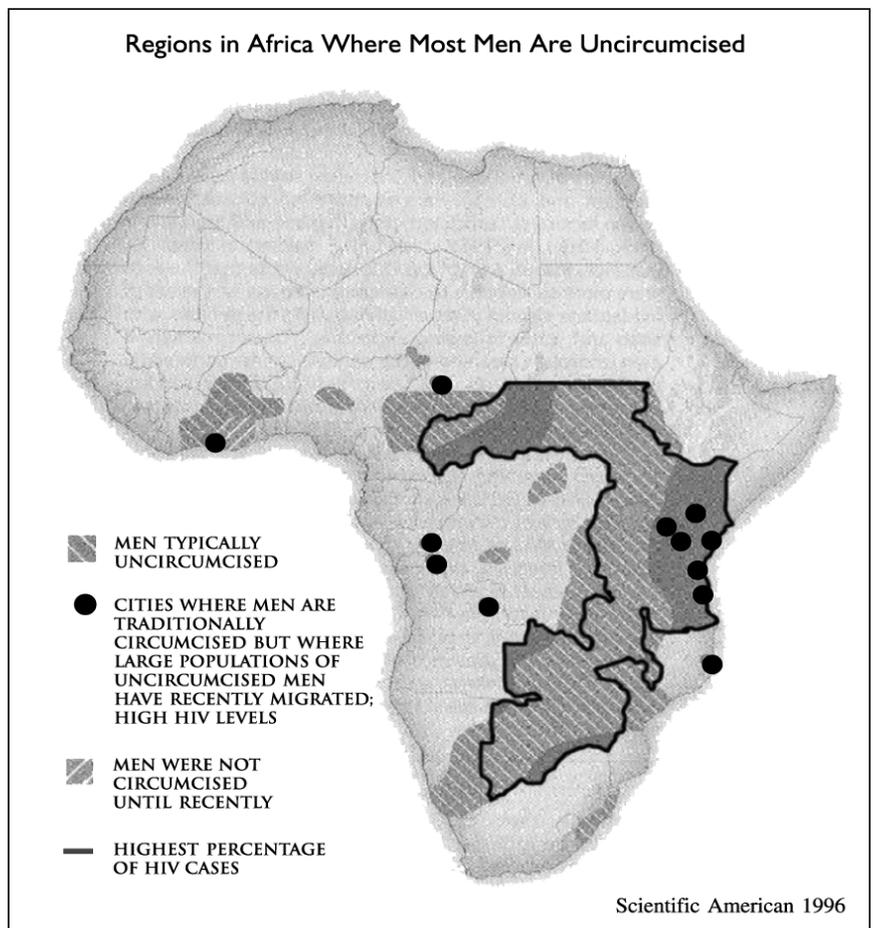
**M**any studies have been published over the past decades in leading peer reviewed journals documenting the various HIV and other health benefits of male circumcision, yet in some quarters it remains a highly controversial topic. In the past, churches and other religious institutions contributed to the demise of traditional initiation rites in Africa, which typically included male circumcision. Faith-based organizations could now play a more positive and important role in addressing the AIDS pandemic, for example by helping to make safe and affordable male circumcision services (e.g. at mission hospitals) more widely available.

### Clinical trial of male circumcision finds a strong protective effect

Much of the recent surge of interest in this topic stems from publication of the first randomized controlled trial of circumcision among adult men, in Orange Farm, South Africa, which found a 60-75% reduced risk of HIV among those who were circumcised<sup>6</sup>, consistent with findings from many other epidemiological studies over the past two decades<sup>7</sup>. As news of this study has begun to spread, both internationally and in the southern and east Africa region in particular, male circumcision has increasingly caught the attention of HIV and other health professionals, as well as public opinion<sup>8</sup>. A recent modelling study by WHO, UNAIDS and several

European and United States universities estimates that, based on the Orange Farm findings, circumcision could avert about 2 million new HIV infections and 300 000 million deaths over the next 10 years in Sub-Saharan Africa, with a further 3.7 million new HIV infections and 2.7 million deaths averted in the 10 years thereafter<sup>9</sup>.

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As with any surgical procedure or cultural or behavioural practice, there are potential risks as well as benefits related to male circumcision, and policy makers are now increasingly turning to international bodies such as WHO and UNAIDS for technical and programmatic guidance<sup>10</sup>. It is widely anticipated that if the two remaining randomized trials in Kenya and Uganda (results expected in 2007) confirm the Orange Farm finding, male circumcision will be officially endorsed as a useful adjunctive approach within broader HIV prevention efforts.

**The global epidemiology of male circumcision**

Circumcision is performed in many parts of the world for a variety of religious, cultural, social, medical and other reasons. Currently, about 20%-25% of all males are circumcised, and the majority of African societies continue to practice male circumcision. The main parts of the African continent where circumcision is generally no longer practiced are precisely in those countries which make up the "AIDS belt" of much of southern and parts of east Africa, where HIV prevalence is vastly higher

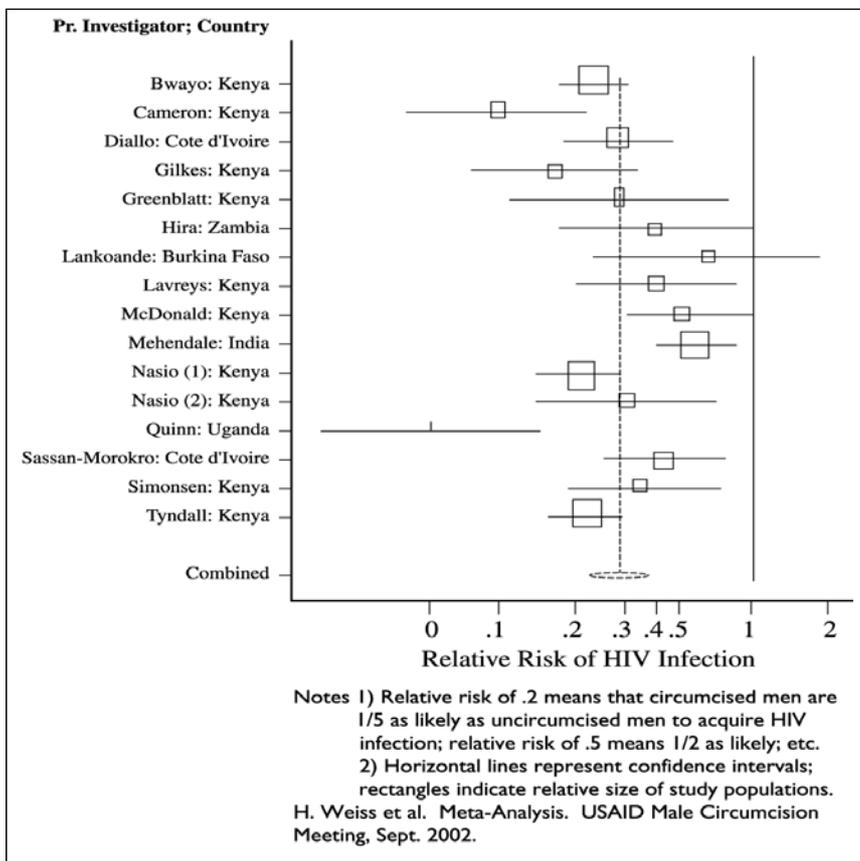
than anywhere else (see map)<sup>11</sup>. Similarly, HIV prevalence in the predominantly non-circumcising countries of south and southeast Asia is much higher than in neighbouring countries where circumcision is practiced and which otherwise have similar sexual and behavioural practices<sup>12</sup>.

To date over 40 epidemiological studies, most of them conducted in Africa, have found a significant relationship between the lack of male circumcision and higher risk of HIV acquisition<sup>13</sup> and the most rigorous (prospective and cohort) types of studies have found an even more dramatic protective effect<sup>14</sup>. However, some cross-sectional studies (including some recent Demographic and Health Surveys in Africa) have not found a significant correlation between circumcision and HIV, perhaps due to issues of residual confounding, self-report bias, confounding due to non-heterosexual forms of HIV transmission, etc.

A systematic review and meta-analysis of 38 studies by the London School of Hygiene and Tropical Medicine estimated that circumcision reduces HIV risk by approximately 50% overall, with about 70% reduction among higher risk populations (see figure)<sup>15</sup>. In addition to HIV, male circumcision reduces the risk of acquiring some other sexually transmitted infections, especially ulcerative types such as syphilis, chancroid and probably herpes<sup>16</sup>, and new data from Uganda suggests that circumcision may also reduce HIV transmission and some other sexually transmitted infections such as chlamydia<sup>17</sup> from infected men to their female partners<sup>18</sup>. This latter finding is currently being tested in another randomized controlled trial in Uganda.

**The biology of male circumcision and HIV infection**

Biological investigators have discovered that the tender mucous membrane surface of the inner foreskin contains a high density of immune system cells such as Langerhans, macrophages and CD4 cells. From an evolutionary perspective, the foreskin serves



a protective function, both physically to guard the sensitive glans (head) of the penis from injury, and because those immune system cells normally protect the body from infection. Yet because HIV enters the body precisely through the immune system, these same cells, which are more vulnerable to HIV infection due to the lack of keratinization (hardening) of the mucous membrane surface in the inner foreskin, now serve as highly efficient portals of entry or "magnets" for HIV<sup>19</sup>. Laboratory investigations have found that absorption of HIV in the inner foreskin is up to 9 times more efficient than in other genital mucosa, such as the cervical opening to the uterus<sup>20</sup>.

### **Cultural, ethical and other concerns**

In addition to the medical and epidemiological aspects of male circumcision, a number of cultural, behavioural, ethical and other issues and concerns have been raised. Some have alleged that circumcision is a form of "male genital mutilation"<sup>21</sup>, and south Africa has recently passed a child protection law that would ban circumcision for those under age 16, in the absence of religious or medical reasons<sup>22</sup>. Certainly, circumcision of neonates and young children raises the greatest ethical concerns, with critics asserting that the baby or young child is deprived of his ability to give informed consent for a permanent procedure<sup>23</sup>.

Others argue that, as in the case of childhood vaccinations, parents should be supplied with the most accurate information in order to decide what is in the best interests of the child. In addition to conferring potential future health benefits such as reducing the risk of HIV and other sexually transmitted infections, some cancers, and balanitis (painfully infected foreskin/glans), there are some more immediate benefits for the neonate, particularly the approximately 12-fold reduced risk of urinary tract infections during the first year of life<sup>24</sup>. In most of Africa, the main programmatic issues revolve more around circumcision for men and teens, who would be able to provide informed consent.

### **Safety issues**

As with all surgical procedures, circumcision carries it with some risks, particularly of pain, bleeding and infection. While the rate of complications in most clinical settings is generally fairly low, and the vast majority of such complications are minor and quickly resolved<sup>25</sup>, circumcision as practiced in some traditional settings can be quite risky<sup>26</sup>. Each year in South Africa, for example, dozens of boys and young men are seriously injured or die due to infections, exposure and other problems resulting from unsafe practices<sup>27</sup>. The main reason for the decline in popularity of circumcision in Britain in the 1940s was that a number of male infants died each year, nearly all of them from the use of general anaesthesia. Local anaesthesia, which is now recommended for infants, teen and adult circumcision, results in no deaths and few serious complications<sup>28</sup>.

### **Are African men (and women) interested in male circumcision?**

Of considerable importance is ascertaining the acceptability of adult male circumcision, especially in the high HIV prevalence regions of Africa. Over a dozen studies from nine African countries have been conducted; across these, the median proportion of uncircumcised men wanting to become circumcised, if the procedure was safe and affordable, was 65% (range 29-87%)<sup>29</sup>. In the studies which surveyed women (in areas where circumcision is not traditionally practiced), a majority also reported preferring a circumcised male partner. The most common reason across all studies given by both men and women for preferring circumcision is the belief that it results in improved penile hygiene.

Another very common reason reported is perceived protection against sexually transmitted infections. For example, in an unpublished study by Sane Tsela of 400 Swazi men in January 2006, 81% believed that circumcision reduces the risk of sexually transmitted infections, while only 18% said that it reduces the risk of HIV infection. Furthermore, 54%

of the non-circumcised men said they would want to be circumcised, and when asked, “if circumcision reduces the spread of HIV, would you like to do it?,” 87% said yes, suggesting, as in other studies, that if information that circumcision definitely reduces HIV risk is circulated, an even greater increase in demand for circumcision is likely.

In fact, men in some parts of Africa have recently been “voting with their feet,” with some public and private facilities in southern Africa reporting being inundated with men seeking clinical circumcision services<sup>30</sup>. Wait lists for elective circumcision at public hospitals in several countries, including Lesotho, Swaziland and Zambia, now run to 6 months or longer. One important concern, similar to the introduction of a future HIV vaccine, microbicide, etc. is that people who opt for circumcision may engage in “risk compensation” i.e. may increase their level of risk-taking behaviour (have more sexual partners, use condoms less, etc.) resulting from a false sense of security<sup>31</sup>. Clearly, it will be very important to ensure that scale-up of circumcision services is carried out within the overall rubric of comprehensive HIV prevention and male reproductive health efforts, and the message must be disseminated widely and continually that it certainly does not offer 100% protection.

#### **What about sexual pleasure?**

Another question often raised is whether male circumcision reduces sexual pleasure. The evidence to date is inconclusive, though much of it appears to suggest otherwise<sup>32</sup>. Although some believe that circumcised men experience less “sensation,” they appear to have fewer sexual problems overall, including lower rates of premature ejaculation<sup>33</sup>. Only a few methodologically sound studies of female preferences have been conducted. In all of them, including studies conducted in Botswana, Kenya and United States<sup>34</sup>, most women, including those who had an uncircumcised partner and were familiar with both types, reported preferring the

circumcised penis, mainly for reasons related to hygiene, as well as the belief that circumcised men “last longer” during intercourse.

As previously mentioned, some critics of male circumcision argue that it represents a form of “mutilation” that causes hidden trauma, which may in turn lead to a higher risk of post-traumatic stress disorder, rape, suicide, and even warfare, among other consequences<sup>35</sup>. There are, however, no scientific studies to support such views. Also, some people oppose circumcision on a more philosophical basis – “nature makes no mistakes” – whereas others disagree, arguing that the natural form is imperfect and that, as with other cultural or medical practices such as piercing or vaccinations, circumcision “improves” upon nature.

#### **Churches and male circumcision**

In some regions of Africa such as Botswana and parts of South Africa and Malawi, one of the main reasons for the disappearance in the 19<sup>th</sup> and early 20<sup>th</sup> centuries of traditional initiation rites of passage, which included male circumcision, was the influence of Christian missionaries, who deemed such practices to be pagan<sup>36</sup>. More recently some faith-based institutions such as Chogoria Hospital in Kenya have established programmes which combine traditional African coming-of-age practices with a safe clinical circumcision procedure and counseling on HIV prevention, reproductive health and gender issues<sup>37</sup>. Considering the extensive coverage of such mission hospitals and other Christian organizations in Africa and the broader developing world, these institutions could potentially help increase access to safe and culturally sensitive male circumcision and reproductive health services, which are increasingly being sought.

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# THINGS TO COME:

## Nano-technology and HIV prevention

10

*The term nano-technology was used first to describe a way to manufacture something from atomic molecules (such as food replication in many science fiction films where one says for example coffee and the machine builds and synthesizes the coffee molecule by molecule)<sup>1</sup>. However today, nanotechnology is used to mean 'nano-scale technology' and nano-scale sciences covering nano-technology research and development products, ideas and processes with a control size below 300nm. Many nano-taxonomies exist, which show the numerous fields, processes and products covered<sup>2</sup>.*

Nano-technology is also seen as a possible means of HIV prevention and potentially cure. To give four examples:

- 1) The Australian pharmaceutical company Starpharma<sup>3</sup> performs research on an nano-technology-based anti-microbial gel which prevents HIV infection of cells. The vaginal gel, SPL7013, uses nano-particle called dendrimers to encapsulate and disable HIV. "VivaGel had good results in Phase 1 human clinical trials: it appears to be non-toxic, non-irritating, and successful at preventing HIV and genital herpes"<sup>4</sup>. Studies also show that viruses are not evolving resistance to the microbicide. The product is now in expanded phase 1-2 trials, being tested around the world in various populations. It still has along way to go but the indications are positive.
- 2) The Journal of Nano-biotechnology has published a study that found that silver nano-particles kill HIV-1 and are likely to kill virtually any other virus<sup>6</sup>.
- 3) Professor Sinko, Chair of the Department of Pharmaceutics at Rutgers, State University of New Jersey, United States, and his team are working on developing nano-technology-based drug delivery systems to treat HIV-infected cells<sup>7</sup>.
- 4) Scientists at University of California Davis are hoping to use synthetically engineered nano-particles as a decoy to block HIV infecting human cells<sup>8</sup>.

The United States' National Institutes of Health's National Institute of Allergy and Infectious Diseases (NIAID) signed a \$20.3 million contract to fund VivaGel development for HIV prevention in October 2005. Two months ago, the NIAID signed another agreement to fund clinical trials of VivaGel aimed to study its application for genital herpes prevention. The United States Food and Drug Administration has granted VivaGel fast track status, which will be beneficial for phase 3 trials, cutting in half the time it takes for product registration and getting the product to market. The Food and Drug Administration's support of VivaGel has been something of a landmark as this is the first dendrimer to go through its system<sup>5</sup>.

As nano-technology-based HIV prevention is in the pipeline, it might be useful for faith-based organizations to become involved in the current nano-regulation and governance discourses.

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# BIBLICAL REFLECTIONS:

## Challenging Christians to take up HIV prevention in a holistic manner

*John Chapter 10:10 NRSV*  
*The thief only comes to steal and to kill and destroy. I came that they may have life and have it abundantly.*

Jesus brought a Gospel of life to his hearers. In the verse quoted above, the mission of Jesus was to invite people to a full life. The first question is: who is Jesus referring to as the recipient of the abundant life? This invitation is timeless and it is to all humanity. It is valid now as much as it was during the ministry of Jesus. It requires a response from all humanity to choose to live under the authority of God. The second question that comes to mind is: what is this full life that Jesus is talking about? The answer to this question is found in Jesus' mission statement, which he read in a Temple in Nazareth from the book of Isaiah (Luke 4:18-19 NRSV), stating:

*The Spirit of the Lord is upon me, because he has anointed me to bring good news to the poor. He has sent me to proclaim release to the captives and recovery of sight to the blind, to let the oppressed go free, to proclaim the year of the Lord's favour.*

Full life is good news to the poor, release to captives, recovery of sight to the blind and setting free the oppressed. It is about quality life that is defined by justice and wholeness as originally intended by God at creation. It is also about putting value to life. This means working together as a body of Christ to improve the quality of life of all humanity because

there is an acknowledgement that life is sacred. It is from God, lived for God and it goes back to God. Therefore quality life for all humanity is the will of God.

The second question to consider is: can one experience a full life here on earth when there are so many life denying forces operating at all levels? HIV is just one such negative force that denies humanity an abundant life for both the affected and those people living with HIV. It is "the thief that comes to steal and destroy". According to the two passages quoted above, full life is possible for people both here on earth. When the message of Jesus is placed in the context of HIV, the mission of the Church, which is the body of Christ, is to make quality life for all a possibility. This means looking at each HIV prevention method offered by science and see how best it can be applied to protect life. This approach is based on the assumption that we have now overcome our religious traditional original interpretation of AIDS as having been created by God to punish people for sexual sins. Frank Ham's sarcastic statement is a painful truth and spoke volumes when he said:

*How many Christians had earlier believed AIDS to be God's punishment for homosexuality- a belief that has backfired on them with contempt, as the 'punished' homosexuals in the west have access to life saving drugs not available to Africa's 'innocent' men and women, nor to their innocent children?'*

Because religious traditions are guided by ideals and not realities, religious

communities have had significant difficulties in dealing constructively with HIV prevention e.g. sex education, especially for the youth; the use of condom; gender roles; stigma and discrimination against people living with HIV; refusing to take therapies in favour of living by faith; diagnosing HIV by faith; declaring people healed but refusing them blood test; and depending only on prayer or charms for protection etc.

Fortunately there are many faith-based institutions that are now promoting a new theology of life on issues of equality between men and women, sexuality, facts about HIV, care, and accepting people living with HIV. It is in line with the theology of life that this publication is encouraging all Christians to adopt HIV prevention holistically, to protect the sanctity of life. In our discourse about what is the best method to

prevent HIV transmission, we should be guided by the mission statement of Jesus that he came that we may have life abundantly.

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NOTES:



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