



ALLIANCE FOR MICROBICIDE DEVELOPMENT

29 August 2008, Volume 9, Number 34

The Alliance for Microbicide Development News Digest is an unedited compilation of:

- Media coverage of microbicides;
- Abstracts of published articles on microbicides and relevant science;
- Material on other reproductive health and HIV prevention technologies; and
- Matters of politics and policy with importance for microbicide research, development, and advocacy.

Its purpose is to:

- Raise awareness around the broadest possible range of opinions and information about microbicides disseminated in scientific journals and the media; and
- Provide an objective basis for decision-making and evidence-informed advocacy.

Articles included in the Digest do not necessarily reflect the views of the Alliance. No press releases are included, however when information from a press release is picked up by the media, that coverage is included. To suggest material for inclusion, please contact digest@microbicide.org.

The Digest is produced in a web-based format. Readers can view complete issues of the Digest or search by keyword for individual articles at http://www.microbicide.org/cs/weekly_news_digest. If you would like to be removed from the Digest distribution list, please send an email to digest@microbicide.org. We welcome comments, questions, and ideas about other microbicide-relevant topics we might cover, services we might provide, and better ways of providing them!

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- Empower Women and Girls to Stay HIV-Negative
- International Conference: "Challenges for the Future: Research on HIV/AIDS, Malaria and Tuberculosis"

1. PUBLISHED RESEARCH: MICROBICIDE-SPECIFIC

"Anti-human immunodeficiency virus type 1 activities of antimicrobial peptides derived from human and bovine cathelicidins"

Author(s): Wang G, Watson K M, Buckheit R W

Reference: Antimicrob Agents Chemother. 01 September 2008;52(9):3438-40.

<http://aac.asm.org/cgi/content/abstract/52/9/3438?etoc>

Published Abstract: From among 15 human cathelicidin LL-37-derived peptides, FK-13 was identified as the smallest peptide active against human immunodeficiency virus (HIV) and GI-20 had the highest therapeutic index, which was twice that of LL-37. BMAP-18, which is derived from bovine cathelicidin BMAP-27, possessed a therapeutic index similar to that of GI-20. Peptide sequence order, helical structures, and aromatic residues are important in HIV inhibition.

"Inhibition of herpes simplex virus types 1 and 2 in vitro infection by sulfated derivatives of escherichia coli K5 polysaccharide"

Author(s): Pinna D, Oreste P, Coradin T, et al

Reference: Antimicrob Agents Chemother. 01 September 2008;52(9):3078-84.

<http://aac.asm.org/cgi/content/abstract/52/9/3078?etoc>

Published Abstract: Herpes simplex virus type 1 (HSV-1) and HSV-2 are neurotropic viruses and common human pathogens causing major public health problems such as genital herpes, a sexually transmitted disease also correlated with increased transmission and replication of human immunodeficiency virus type 1 (HIV-1). Therefore, compounds capable of blocking HIV-1, HSV-1, and HSV-2 transmission represent candidate **microbicides** with a potential added value over that of molecules acting selectively against either infection. We report here that sulfated derivatives of the Escherichia coli K5 polysaccharide, structurally highly similar to heparin and previously shown to inhibit HIV-1 entry and replication in vitro, also exert suppressive activities against both HSV-1 and HSV-2 infections. In particular, the N,O-sulfated [K5-N,OS(H)] and O-sulfated epimerized [Epi-K5-OS(H)] forms inhibited the infection of Vero cells by HSV-1 and -2, with 50% inhibitory concentrations (IC₅₀) between 3 ± 0.05 and 48 ± 27 nM, and were not toxic to the cells at concentrations as high as 5 μ M. These compounds impaired the early steps of HSV-1 and HSV-2 virion attachment and entry into host cells and reduced the cell-to-cell spread of HSV-2. Since K5-N,OS(H) and Epi-K5-OS(H) also inhibit HIV-1 infection, they may represent valid candidates for development as topical **microbicides** preventing sexual transmission of HIV-1, HSV-1, and HSV-2.

"Identification of differentially expressed proteins in the cervical mucosa of HIV-1-resistant sex workers"

Author(s): Burgener A, Boutilier J, Wachih C, et al

Reference: J Proteome Res. 16 August 2008;Epub ahead of print.

<http://highwire.stanford.edu/cgi/medline/pmid;18707157>

Published Abstract: Novel tools are necessary to understand mechanisms of altered susceptibility to HIV-1 infection in women of the Pumwani Sex Worker cohort, Kenya. In this cohort, more than 140 of the 2000 participants have been characterized to be relatively resistant to HIV-1 infection. Given that sexual transmission of HIV-1 occurs through mucosal surfaces such as that in the cervicovaginal environment, our hypothesis is that innate immune factors in the genital tract may play a role in HIV-1 infection resistance. Understanding this mechanism may help develop **microbicides** and/or vaccines against HIV-1. A quantitative proteomics technique (2D-DIGE: two-dimensional difference in-gel electrophoresis) was used to examine cervical mucosa of HIV-1 resistant women (n = 10) for biomarkers of HIV-1 resistance. Over 15 proteins were found to be differentially expressed between HIV-1-resistant women and control groups (n = 29), some which show a greater than 8-fold change. HIV-1-resistant women overexpressed several antiproteases, including those from the serpin B family, and also cystatin A, a known anti-HIV-1 factor. Immunoblotting for a selection of the identified proteins confirmed the DIGE volume differences. Validation of these results on a larger sample of individuals will provide further evidence these biomarkers are associated with HIV-1 resistance and could help aid in the development of effective **microbicides** against HIV-1.

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2. PUBLISHED RESEARCH: RELEVANT BASIC AND TRANSLATIONAL SCIENCE

"Chronic administration of tenofovir to rhesus macaques from infancy through adulthood and pregnancy: Summary of pharmacokinetics and biological and virological effects"

Author(s): Van Rompay K K, Durand-Gasselin L, Brignolo L L, et al

Reference: Antimicrob Agents Chemother. 01 September 2008;52(9):3144-60.

<http://aac.asm.org/cgi/content/abstract/52/9/3144?etoc>

Published Abstract: The reverse transcriptase (RT) inhibitor tenofovir (TFV) is highly effective in the simian immunodeficiency virus (SIV) macaque model of human immunodeficiency virus infection. The current report describes extended safety and efficacy data on 32 animals that received prolonged (1- to 13-year) daily subcutaneous TFV regimens. The likelihood of renal toxicity (proximal renal tubular dysfunction [PRTD]) correlated with plasma drug concentrations, which depended on the dosage regimen and age-related changes in drug clearance. Below a threshold area under the concentration-time curve for TFV in plasma of 10 µg·h/ml, an exposure severalfold higher than that observed in humans treated orally with 300 mg TFV disoproxil fumarate (TDF), prolonged TFV administration was not associated with PRTD based on urinalysis, serum chemistry analyses, bone mineral density, and clinical observations. At low-dose maintenance regimens, plasma TFV concentrations and intracellular TFV diphosphate concentrations were similar to or slightly higher than those observed in TDF-treated humans. No new toxicities were identified. The available evidence does not suggest teratogenic effects of prolonged low-dose TFV treatment; by the age of 10 years, one macaque, on TFV treatment since birth, had produced three offspring that were healthy by all criteria up to the age of 5 years. Despite the presence of viral variants with a lysine-to-arginine substitution at codon 65 (K65R) of RT in all 28 SIV-infected animals, 6 animals suppressed viremia to undetectable levels for as long as 12 years of TFV monotherapy. In conclusion, these findings illustrate the safety and sustained benefits of prolonged TFV-containing regimens throughout development from infancy to adulthood, including pregnancy.

"Cytokine expression in the colonic mucosa of human immunodeficiency virus-infected individuals before and during 9 months of antiretroviral therapy"

Author(s): Schulbin H, Bode H, Stocker H, et al

Reference: Antimicrob Agents Chemother. 01 September 2008;52(9):3377-84.

<http://aac.asm.org/cgi/content/abstract/52/9/3377?etoc>

Published Abstract: High-level human immunodeficiency virus (HIV) replication and the rapid breakdown of the mucosal immune system are the hallmarks of HIV infection in the gut. Cytokine dysregulation may be related to both phenomena. Using real-time PCR we quantified the colonic mucosal mRNA expression of selected proinflammatory and regulatory (gamma interferon [IFN-gamma], tumor necrosis factor alpha [TNF-], and interleukin-2 [IL-2], IL-4, IL-6, and IL-10) and HIV-inhibitory (IL-16, CCL3, and CCL5) cytokines for 10 HIV-infected patients before and during 9 months of highly active antiretroviral therapy (HAART). HIV RNA and T-cell dynamics were measured in the colonic mucosa and the blood. Seven HIV-negative individuals served as controls. The mucosal mRNA expression of TNF-, IFN-gamma, IL-4, IL-6, and IL-10 was significantly higher in HIV-infected patients than in control patients and remained elevated during 9 months of HAART despite the decline in blood and mucosal HIV RNA levels and an increase in the level of CD4+ T lymphocytes. The mRNA levels of CCL3 and CCL5, both of which were elevated before treatment, returned to nearly normal during therapy. Despite reductions in levels of mucosal HIV RNA and the restoration of mucosal CD4+ T lymphocytes, antiretroviral therapy failed to restore the normal colonic immunologic environment.

"HIV traffics through a specialized, surface-accessible intracellular compartment during trans-infection of T cells by mature dendritic cells"

Author(s): Yu H J, Reuter, M A, McDonald D

Reference: PLoS Pathog. 22 August 2008;4(8):e1000134.

<http://www.plospathogens.org/journals/pathogens/article/info%3Adoi%2F10.1371%2Fjournal.ppat.1000134>

Published Abstract: In vitro, dendritic cells (DCs) bind and transfer intact, infectious HIV to CD4 T cells without first becoming infected, a process known as trans-infection. trans-infection is accomplished by recruitment of HIV and its receptors to the site of DC–T cell contact and transfer of virions at a structure known as the infectious synapse. In this study, we used fluorescent microscopy to track individual HIV particles trafficking in DCs during virus uptake and trans-infection. Mature DCs rapidly concentrated HIV into an apparently intracellular compartment that lacked markers characteristic of early endosomes, lysosomes, or antigen-processing vesicles. Live cell microscopy demonstrated that the HIV-containing compartment was rapidly polarized toward the infectious synapse after contact with a T cell; however, the bulk of the concentrated virus remained in the DCs after T cell engagement. Individual virions were observed emerging from the compartment and fusing with the T cell membrane at the infectious synapse. The compartmentalized HIV, although engulfed by the cytoplasm, was fully accessible to HIV envelope-specific inhibitors and other membrane-impermeable probes that were delivered to the cell surface. These results demonstrate that HIV resides in an invaginated domain within DCs that is both contiguous with the plasma membrane and distinct from endocytic vesicles. We conclude that HIV virions are routed through this specialized compartment, which allows individual particles to be delivered to T cells during trans-infection.

EDITOR'S NOTE: *The full text of this article is available for public access at the above website.*

"Comparison of the diversity of the vaginal microbiota in HIV-infected and HIV-uninfected women with or without bacterial vaginosis"

Author(s): Spear G T, Sikaroodi M, Zariffard M R, et al

Reference: J Infect Dis. 21 August 2008;Epub ahead of print.

<http://www.ncbi.nlm.nih.gov/pubmed/18717638>

Published Abstract: Background. Whether human immunodeficiency virus (HIV) infection is associated with a change in the diversity of genital microbiota in women was investigated. Methods. Amplicon length heterogeneity polymerase chain reaction (LH-PCR) analysis and pyrosequencing of the 16S ribosomal RNA gene were used to analyze the diversity of the microbiota in HIV-positive (HIV(+)) and HIV-negative (HIV(-)) women with or without bacterial vaginosis (BV). Results. LH-PCR analysis revealed significantly more microbiota diversity in BV-positive (BV(+)) women than in BV-negative (BV(-)) women, but no significant difference was noted between HIV(+) women and HIV(-) women. Pyrosequencing revealed that *Lactobacillus* organisms constituted a median of 96% of the bacteria in BV(-) women. BV(+) women had a significantly higher number of taxa found at $\geq 1\%$ of the total genital microbiota (median, 11 taxa). Common taxa in BV(+) women were *Prevotella*, *Megasphaera*, *Gardnerella*, *Coriobacterineae*, *Lachnospira*, and *Sneathia*. There was a trend ([Formula: see text]) toward the presence of a higher number of taxa in HIV(+)BV(+) women than in HIV(-)BV(+) women. *Propionibacterineae*, *Citrobacter*, and *Anaerococcus* were the taxa found only in HIV(+) women ([Formula: see text]). Conclusions. The present study demonstrated that both LH-PCR analysis and pyrosequencing differentiated microbiota in BV(+) women from that in BV(-) women and that pyrosequencing indicated a trend toward increased diversity in BV(+)HIV(+) women, suggesting that HIV infection is associated with changes in the diversity of genital microbiota.

"Hormonal contraception and HIV disease progression"

Author(s): Stringer E, Antonsen E

Reference: Clin Infect Dis. 20 August 2008;Epub ahead of print.

<http://www.ncbi.nlm.nih.gov/pubmed/18715161>

Published Abstract: The majority of the 15.4 million human immunodeficiency virus (HIV)-infected women worldwide are of child-bearing age and need access to contraception. Hormonal methods of contraception are safe, acceptable, and effective in preventing unwanted pregnancies. Many published studies have examined the impact of hormonal contraception on HIV disease acquisition and transmissibility. Far fewer have investigated the relationship between hormonal contraception and HIV disease progression. This review examines available data on this relationship from clinical, animal, and immunological studies. Several clinical studies suggest an overall effect but are not definitive, and the mechanisms behind HIV disease progression are unclear. Animal and immunological data suggest that immunomodulation by hormonal contraceptive methods may affect the immune response to HIV infection. Additional work is needed in this area to elucidate the possible relationship between hormonal methods for birth control and progression to acquired immunodeficiency syndrome in HIV-infected women.

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3. PUBLISHED RESEARCH: RELEVANT BEHAVIORAL AND SOCIAL SCIENCE AND EPIDEMIOLOGY

"Gender differences in the risk of HIV infection among persons reporting abstinence, monogamy, and multiple sexual partners in northern Tanzania"

Author(s): Landman K Z, Ostermann J, Crump J A, et al

Reference: PLoS One. 27 August 2008;3(8):e3075.

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0003075>

Published Abstract: *Background* Monogamy, together with abstinence, partner reduction, and condom use, is widely advocated as a key behavioral strategy to prevent HIV infection in sub-Saharan Africa. We examined the association between the number of sexual partners and the risk of HIV seropositivity among men and women presenting for HIV voluntary counseling and testing (VCT) in northern Tanzania. *Methodology/ Principal Findings* Clients presenting for HIV VCT at a community-based AIDS service organization in Moshi, Tanzania were surveyed between November 2003 and December 2007. Data on sociodemographic characteristics, reasons for testing, sexual behaviors, and symptoms were collected. Men and women were categorized by number of lifetime sexual partners, and rates of seropositivity were reported by category. Factors associated with HIV seropositivity among monogamous males and females were identified by a multivariate logistic regression model. Of 6,549 clients, 3,607 (55%) were female, and the median age was 30 years (IQR 24–40). 939 (25%) females and 293 (10%) males ($p < 0.0001$) were HIV seropositive. Among 1,244 (34%) monogamous females and 423 (14%) monogamous males, the risk of HIV infection was 19% and 4%, respectively ($p < 0.0001$). The risk increased monotonically with additional partners up to 45% ($p < 0.001$) and 15% ($p < 0.001$) for women and men, respectively with 5 or more partners. In multivariate analysis, HIV seropositivity among monogamous women was most strongly associated with age ($p < 0.0001$), lower education ($p < 0.004$), and reporting a partner with other partners ($p = 0.015$). Only age was a significant risk factor for monogamous men ($p = 0.0004$). *Interpretation* Among women presenting for VCT, the number of partners is strongly associated with rates of seropositivity; however, even women reporting lifetime monogamy have a high risk for HIV infection. Partner reduction should be coupled with efforts to place tools in the hands of sexually active women to reduce their risk of contracting HIV.

EDITOR'S NOTE: *The full text of this article is available for public access at the above website.*

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4. EPIDEMIOLOGY

"'Hidden epidemic' of HIV amongst African migrants in the United States"

Date: 28 August 2008

Source: *AIDSmap.com News*

Author(s): Michael Carter

<http://www.aidsmap.com/en/news/357D460E-4816-483A-A739-80E59DDD46F8.asp>

There is a “hidden epidemic” of HIV amongst African migrants living in the United States, according to investigators writing in the September 12th edition of AIDS. The researchers found that African-born individuals in the US had a disproportionately high prevalence of HIV – although they comprised only 0.6% of the study population, almost 4% of HIV diagnoses were amongst African-born individuals. Furthermore, the investigators found that in one health area approximately 50% of HIV infections amongst black people were amongst individuals originating in Africa.

Because current US surveillance data do not routinely include information on individuals’ country of origin, it is probable that a significant number of HIV infections currently classified as being amongst African-Americans are likely to involve recent migrants from Africa.

Failure to acknowledge the scale of the HIV epidemic amongst African-born individuals, could, the investigators argue, mean that the HIV prevention and care needs of African-born US residents are being neglected. The investigators call on the US government and health authorities to target information about the availability of HIV testing and care to individuals from Africa, and for the gathering of accurate surveillance data about the country of origin of individuals diagnosed with HIV.

In 2005, almost two-thirds of the world’s HIV infections were located in sub-Saharan Africa. It is estimated that 25% or more of total HIV infections in western Europe are amongst migrants from southern Africa. Although the total number of African migrants in the US increased by 130% between 1990 and 2000, there is little information about the number of HIV infections amongst this community, and few HIV prevention or care services are targeted at individuals in this group.

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EDITOR'S NOTE: The full text of this article is available for public access at the above website. The Digest will include the original AIDS article when it is available.

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5. HIV/AIDS VACCINES

"An HIV vaccine - Challenges and prospects"

Date: 28 August 2008

Source: *N Engl J Med.* 28 August 2008;359(9):888-90. *Perspective.*

Author(s): Margaret I Johnston, Anthony S Fauci

<http://content.nejm.org/cgi/content/full/359/9/888?query=TOC>

Now well into the third decade of the pandemic of human immunodeficiency virus (HIV) and AIDS, we have seen dramatic successes in the treatment of HIV-infected persons in the United States and many other countries. Yet the pandemic still rages, with 2.7 million new infections in 2007. Indeed, for every infected person who began receiving antiretroviral therapy in 2007, 2.5 people were newly infected with HIV. Historically, vaccines have been among the most effective public health interventions, preventing the spread of viral infections. But an HIV vaccine has thus far been elusive and the quest disappointing and frustrating, prompting some to wonder whether an effective vaccine will ever be added to the HIV-prevention toolbox.

Although many viral infections cause severe illness and even death over a period of days to weeks, such infections typically induce immune responses involving both neutralizing antibodies that prevent further viral replication and cytotoxic T lymphocytes that recognize and eliminate infected cells that produce progeny virus. Such responses ultimately control and eliminate the virus effectively. Immunologic memory is established, and the person is left with protective immunity against subsequent infection with the same virus; this immunity is usually complete and long lasting.

Typically, vaccine development is based on this successful experiment of nature. An iterative approach of fundamental research coupled with empirical testing of immunogens leads to the identification of a product that, when given in an appropriate formulation and dose before exposure, induces immune responses that mimic the response to natural infection and protect recipients from the development of clinically apparent disease when they are exposed to the virus. Historically, the development of vaccines has relied heavily and successfully on empirical testing.

The situation is strikingly different with HIV infection. For the most part, the natural immune response against HIV is completely inadequate and, once primary infection is established, fails to eradicate the virus. With uncommon exceptions, HIV disease is relentlessly progressive, and virtually no one has a spontaneous recovery. Unlike other viruses for which we have successful human vaccines, HIV quickly integrates itself into the DNA of the host cell, where, in some cells, it remains latent and essentially invisible to the immune system. Because latency is established very early — within days to weeks after infection — the window of opportunity wherein HIV remains vulnerable to eradication through the immune response is very short.¹ Once latency is established, it has not yet been possible to eradicate the virus, even in patients receiving highly active antiretroviral therapy for extended periods.

The extraordinary mutability and resulting genetic diversity of HIV, which is substantially more complex than that of other human viruses, also present a formidable obstacle to immune control. By the time the body produces antibodies directed at the outer HIV envelope protein, which is the key target for neutralizing antibodies, the protein has mutated in such a way that the circulating antibodies cannot neutralize it. New antibodies are induced, but new mutations repeatedly enable the virus to evade the immune system. Furthermore, although broadly neutralizing antibodies could persist in the host and potentially neutralize the virus even as it mutates, these are rarely found in vivo and are apparently difficult to induce, since their epitopes tend to be conformationally masked and not readily accessible for immune recognition and response.²

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EDITOR'S NOTE: The full text of this article, including references, is available for public access at the above website.

"Preventive AIDS vaccine shows positive results"

Date: 18 August 2008

Source: *Nature India*. 18 August 2008. News.

<http://www.nature.com/nindia/2008/080818/full/nindia.2008.260.html>

The Indian Council of Medical Research, the National AIDS Control Organization and the International AIDS Vaccine Initiative have successfully completed a second Phase-I AIDS vaccine clinical trial in India. The trial of an MVA-based AIDS vaccine candidate (TBC-M4) conducted in Chennai has indicated that the vaccine candidate had acceptable levels of safety and was well tolerated.

The trial was done using two doses of the candidate vaccine. After three injections, 82 percent of the volunteers who received a low dose and 100 percent of those who received a high dose registered immune responses to the vaccine, according to an IAVI release. However the strength and diversity of these immune responses were modest. It may be possible to boost the immune response, if this vaccine is used in combination with other candidate AIDS vaccines, the release said.

"The MVA-based candidate was safe and showed promising initial immune responses. We do not know whether these observed responses will ultimately translate into an effective vaccine," said S K Bhattacharya, Additional Director General of the Indian Council of Medical Research.

The Phase I clinical trial was initiated in January 2006 at the Tuberculosis Research Center (TRC), an Indian Council of Medical Research (ICMR) institute in Chennai, and was completed in February 2008. Chennai-based YRG CARE collaborated with TRC to mobilize the community around the trial.

The objectives of the trial were to evaluate the safety of the vaccine candidate and to gather preliminary results of immune responses induced by the candidate. The total duration of the trial was approximately 24 months. The volunteers recruited for this trial were 32 healthy, HIV-uninfected men and women between 18 and 50 years of age, from all socio-economic strata. Three intra-muscular injections of TBC-M4 or placebo were administered to the volunteers.

The results of the trial suggest that further research is warranted, the release said. Currently, two additional Phase I trials testing the MVA-based candidate in a prime-boost regime are planned and under review by the relevant authorities in India and approved in the UK. The trials are designed to use different modes of administration of the priming vaccine, different dosages and different vaccine regimens.

Simultaneously, IAVI has undertaken work to modify the vaccine candidate so that it is ready for large-scale manufacturing.

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6. OTHER PREVENTION APPROACHES

"HIV campaign targets Sugar Daddies"

Date: 26 August 2008

Source: *Edmonton Journal (Alberta)*

<http://www.canada.com/edmontonjournal/index.html>

A pretty, young university student was persuaded by her roommate to meet a Sugar Daddy who, in exchange for casual sex, would shower her with gifts, nights out on the town and even help pay tuition.

She slipped into the darkened car parked outside her dormitory for the first meeting and discovered the man behind the wheel was her father.

The story, told by a girl in a series of interviews held with university students by Population Services International (PSI), helped inspire a sobering and highly controversial billboard campaign that lines the streets of Kampala. The face of a grimacing and prosperous man looks down at passing cars with the caption: "Would you let this man be with your teenage daughter? So why are you with his?"

The billboards are part of a massive campaign aimed at stopping the reckless sexual behaviour that is driving up the prevalence of HIV/AIDS, especially among young women. Those posters are supposed to create shock and fear among the often married men who cruise university campuses in their Mercedes, warning them that their daughters, nieces or little sisters are potential Sugar Babes, victims of a philandering culture that -- left unchecked -- could roll back Uganda's early gains in battling HIV.

Uganda stands out as one of world's success stories in battling and preventing the disease that nearly 20 years ago infected 15 per cent of adults -- and up to 30 per cent of pregnant women in some places. Today, some experts fear a new and more complacent generation is picking up the same dangerous sexual behaviour of multiple partners that fanned the spread of the disease like wildfire during the early to mid-1980s.

Indeed, the resurgence of HIV in Uganda has spurred some researchers to prod aid agencies, backed by western donors, to rethink the prevention strategies they're funding -- promoting condoms, abstinence, drug treatment and HIV testing.

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EDITOR'S NOTE: *The full text of this article is available with a subscription at the above website.*

"Uganda: Country may not achieve universal access to HIV prevention by 2010"

Date: 23 August 2008

Source: *The Monitor*

Author(s): Kakaire A Kirunda

<http://allafrica.com/stories/200808250070.html>

Two years ago, Uganda and other 156 UN member states boldly committed to a plan to ensure that everyone of its citizens would have access to services designed to prevent the spread of the HIV virus by 2010. But now, that goal appears beyond our reach - and, indeed, beyond the reach of much of the developing world.

According to the Vice Chairperson of the Parliamentary Committee on Social Services, Dr Chris Baryomunsi, also a member of the committee on HIV/Aids, there are challenges that each country faces.

"That is why between now and 2010 we may not be able to attain universal access. What we should do as a country is to define our universal access our own way to set realistic targets," he said in an interview.

An estimated 1 million adults and 110,000 children are said to be living with HIV the human immunodeficiency virus which causes Aids.

With an estimated 360 new infections everyday, the country is no longer being cited as the HIV/Aids success story. Rather, the mention of Uganda in international HIV/Aids circles is followed by a country that is now having its HIV prevalence rising again.

From a high prevalence of 18 per cent of the population having HIV in the early 1990s, to a reduced 5 per cent by 2000, it now stands at an estimated 6.4 per cent of the adult population. This clearly shows that prevention efforts are not working as they should.

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EDITOR'S NOTE: The full text of this article is available for public access at the above website.

"Untold stories"

Date: 21 August 2008

Source: Health-e

Author(s): Khopotso Bodibe

<http://www.health-e.org.za/news/article.php?uid=20032058>

Films showing real-life experiences that put us at risk of HIV infection and how people are dealing with the epidemic have been produced for television. The nine short films were produced by film-makers from nine countries in southern Africa.

The series, titled "Untold", forms part of a mass media health communication project led by the Soul City Institute, working in partnership with organisations in eight other southern African countries to address HIV and AIDS. At the series launch in Johannesburg, head of Soul City's regional programme, Harriet Perlman, said that southern Africa has the highest HIV infection rates in the world.

"Of the five million new infections globally in HIV recorded in 2005, 3.2 million live in this region. And there's a strong historical interconnection between the countries: The ever-increasing travel, movement (and) communication between us means that we must act together to stem the tide of this epidemic..." she said.

The films have been made in various languages indigenous to the nine countries where they were produced. These are Lesotho, Swaziland, Namibia, Zambia, Zimbabwe, Botswana, Malawi, Mozambique and South Africa. They tell moving, true to life tales of love and hope, courage and betrayal, and secrets and lies in a time of HIV and AIDS. "Secrets and lies" is the South African produced film in the series. It tells the story of a young, middle-class, career-driven couple - yet the marriage is sexually and emotionally unfulfilling to both husband and wife. Each then resorts to cheating instead of communicating their unhappiness. Then the wife gets pregnant and is conflicted as to who the father of her unborn baby is. During the pregnancy, she also discovers that she has HIV. "Secrets and lies" was directed by Vincent Moloi.

"You know what? To be very honest with you, it's the things that we know. It's the things that I've heard people talk about, and you probably know a few people, and whoever is listening probably knows of a couple that's going through the same problems of cheating to each other and to themselves... But it's amazing how we all pretend like we have no idea about it until we see it on the screen... And sometimes I guess that's why films like this are important... That's when you realise, 'wow! This is actually a story of my life, or of my cousin, or of my friends, or even of my parents!'," said Moloi of the film.

"Secrets and lies" and the other short films in the "Untold" series will soon be shown on SABC TV.

"Will male circumcision protect women, ask advocates?"

Date: 18 August 2008

Source: *AIDSmap.com News*

Author(s): Roger Pebody

<http://www.aidsmap.com/en/news/53D24703-6284-4A8E-B702-9C4CB3F6B001.asp>

Male circumcision is the only HIV prevention intervention that does not offer some protection to both partners, and may actually put a man's sexual partner at greater risk of infection, argued the women's health advocate Marge Berer at the International AIDS Conference in Mexico City on August 7th.

Randomised controlled trials in high prevalence African settings have demonstrated that circumcision reduces female-to-male transmission of HIV by 50-60%. Circumcision does not reduce male-to-female transmission, and may actually increase transmission, particularly if men with HIV resume sex before healing is complete. However modelling studies do suggest that reductions in HIV prevalence among men in a community will lead to reductions in infections among women.

Marge Berer highlighted confusion among men about the degree of protection that circumcision affords, and the danger that men may use condoms less frequently or not at all following the operation. To counteract such problems, she suggested that circumcision should be publicly described as like a cheap condom that breaks 40% of time.

Berer gave the hypothetical example of a man who had refused an HIV test at the time of circumcision, and was unknowingly HIV-positive. He thinks that circumcision will now protect him from HIV and so stops using condoms. "If he continues depositing semen in his partner's body every time they have sex, his partner is in a worse position than he or she was before," she said.

Berer suggested that there needs to be couple counselling before circumcision, so that both partners fully understand the implications. Moreover she railed against circumcision being rolled out as a top-down solution with minimal involvement or advocacy from those affected, especially women.

Urging a renewal of condom promotion, she noted that condoms were one of the least discussed topics at the Mexico conference. In response to several criticisms of the recommended roll-out of circumcision, Catherine Hankins from UNAIDS insisted that circumcision had to be seen as part of combination prevention” – in other words, it is one extra choice, rather than the replacement for another intervention.

In the same session, Mogomotsi Supreme Mafalapitsa noted that circumcision is often imbued with religious and cultural meanings, and very often forms part of ceremonies that mark a transition from boyhood to manhood.

Drawing on his experience in South Africa, he said that these traditional circumcision rituals often emphasise specific ideas of masculinity which can be harmful to women. He urged that the implementation of circumcision be linked to “gender transformative programmes” which help boys become men “who respect women, respect themselves and are faithful to their partners.”

However he warned that attempts to change practices around circumcision are fraught with difficulties. Health officials may prefer circumcision to take place at a different age, or under medical supervision in a sterile environment, but Mafalapitsa said that “cultures who are already circumcising adolescent males do not take kindly to the possibility of alteration of their culture by medical circumcision and neonatal circumcision.”

In such societies, circumcision of infants would be particularly difficult to promote, he said, as there would be no ritual left to mark adolescence.

Moreover, in many cases, bearing the pain is part of the ritual, so those who opt for a “safe” circumcision in a clinic may be seen as cowards.

Karen Smith underlined how specific and local the impact of religion and culture can be. She gave the example of Indonesia, which is predominantly Muslim, and where circumcision is associated with Muslim coming of age. For Indonesian Christians, practising circumcision would suggest conversion to Islam. However in the neighbouring but largely Catholic country of the Philippines, circumcision does not have those connotations and the practice is common during childhood.

However she said that culture is not always as unchangeable as it is assumed to be, but that cultural and religious sensitivities need to be worked with carefully. Obstacles need to be identified and worked on in partnership with leaders from the communities concerned.

Reference

Male Circumcision: To Cut or Not to Cut. XVII International AIDS Conference, Mexico City, August 7 2008, session THBS01.

"Thembi Maboyana: "Most people were dying alone in the shacks"

Date: 01 August 2008

Source: *PlusNews*

<http://www.plusnews.org/HOVReport.aspx?ReportId=79981>

Thembi Maboyana is a home-based caregiver who works for a community-based HIV/AIDS programme called Tapologo in Rustenberg, in South Africa's North West Province. She talked to IRIN/PlusNews about life in Freedom Park, an informal settlement that has sprung up next to one of the area's platinum mines.

"I came to Freedom Park in 1990 from Vosloorus [a township east of Johannesburg] because my brother is working here [at the mine]. I was selling some fruits and vegetables to the shacks and my brother was also supporting me. It was difficult before we got an RDP [government low-cost] house. In the shack there's no water, no toilet, no roads, and it's worse when it's raining.

"Here we are mixed - we've got legal and illegal peoples from Mozambique, Swaziland, Lesotho, and those without South African IDs [identity documents] can't get RDP houses or disability grants.

"I think the others, they haven't got family at home [to support them] so they find a friend and they say, 'Let's go to Rustenberg, we're going to work'. They come here thinking that they're going to get a job, but there's no jobs.

"Others don't have money to [buy stock so they can] sell something, so they get four to five boyfriends to get money to buy water, paraffin and clothes, and to go back to home [in the rural areas] for big days [holidays].

"The main problem is that when you've got a boyfriend, that boyfriend is not your husband because he has a wife at home, so when you get ill, he just runs away and leaves you in the shack.

"I found out I was positive in 1998, when I had TB [tuberculosis]. I was angry, guilty, shocked, feeling alone. All of my family knows, but I waited three years to tell them.

"Tapologo [a community-centred HIV/AIDS programme run by the Catholic Church] was wanting some caregivers so I joined because I wanted knowledge about HIV and AIDS, and I saw most people here in Freedom Park were dying alone in the shacks. I decided to volunteer because I was thinking about me - what is going to happen to me? Who's going to look after me?

"Most of my patients are women. Most of the men, they don't believe about HIV and AIDS, they just think they've been bewitched by the witch doctors and they don't want to use condoms.

"Our patients are afraid to disclose to their boyfriends because they're afraid the boyfriend will run away; so they continue to spread the virus.

"When we find a patient is living alone, we bathe the patient, we cook porridge for them if they can't do it, and we clean the house. If there's no water in the house, we buy it for them.

"If the patient has a family, we teach the family how to give the patient treatment and we educate them about reactions to the medication. Most of my patients recover and say, 'No more Rustenberg, we are going home'."

7. NON-HIV STIS AND REPRODUCTIVE HEALTH

"Uganda: Home births hamper PMTCT programme"

Date: 26 August 2008

Source: *PlusNews*

<http://www.plusnews.org/Report.aspx?ReportId=80002>

The number of Ugandan children becoming infected with HIV during pregnancy, childbirth and breastfeeding remains high despite the government's ongoing rollout of services to prevent mother-to-child HIV transmission (PMTCT).

The provision of antiretroviral (ARV) drugs to pregnant women living with HIV can reduce transmission of the virus to below two percent, yet 20,000 children in Uganda become infected with HIV annually, accounting for an estimated 42 percent of all new infections in the country, according to government figures.

"The large and growing unmet need for paediatric HIV/AIDS [services] demonstrates the failure of our PMTCT programmes to avert parent-to-child transmission of HIV," said Keith McKenzie, country representative for the UN Children's Fund (UNICEF).

Of 100,000 people currently on ARV treatment in Uganda, only 10,000 are children, the Ministry of Health notes. An additional 40,000 children are thought to be in need of the drugs, but only just over half of Uganda's 310 ARV sites provide paediatric treatment.

The World Health Organisation recommends that every HIV-positive child under one year old should be put on treatment, but Uganda would need to start at least 20,000 children on ARVs every year to meet this target.

"If we prevent HIV infection in children then we do not have to take care of them when they are infected," said Dr Phillipa Musoke, chairperson of the health department's paediatric committee.

PMTCT programmes were first piloted in 2000 in the capital, Kampala, and in the northern districts of Arua and Gulu, but the services are now available at most county-level and district health centres in 76 of the country's 83 districts.

Even in northern Uganda, where conflict has severely affected health services, an estimated 70 percent of women have access to PMTCT services. The ministry of health intends to scale up services to all county-level health centres by 2010.

Although most pregnant HIV-positive women in Uganda now have access to PMTCT services, between 60 percent and 70 percent of pregnant women still give birth at home, making it impossible to administer the ARV drugs that can prevent transmission to the mother and her new infant.

Dr Dennis Tindyebwa, technical director of the Elizabeth Glaser Paediatric AIDS Foundation, noted that 98 percent of pregnant women in Uganda agreed to HIV testing and counselling, but only 67 percent returned for their results; of those who tested HIV-positive, very few came to health facilities to have their babies.

"For some women it is the distance to the health centre, or the poor quality of services and personnel, as well as lack of infrastructure," he said. "But there is also low male involvement in PMTCT, as the men deny their spouses the opportunity to participate in the programme."

Studies have also shown that knowledge of the availability of services and correct infant feeding options after birth was still low. "Many women did not know that giving food or a drink to the breastfeeding baby of an HIV-positive mother was not allowed," said Dr Deogratius Mugisa at the ministry of health in central Uganda's Kayunga district.

"Cultural beliefs, social stigma, ignorance and economic status influenced the mother's attitudes and preference for the different [feeding] alternatives."

Uganda's HIV prevalence declined from over 20 percent in the 1990s to about six percent in 2000, but has recently crept up again slightly. Dr David Apuuli Kihumuro, head of the Uganda AIDS Commission, pointed out that controlling infection levels among adults would mean fewer paediatric infections.

"If the mothers do not get infected, then the children will not," he said. "I am convinced that in this country we can reduce new infections; political will must be re-energised."

"We were born in an AIDS-free generation," he added. "We have a moral obligation to ensure that our children and grandchildren are born, and remain free from, HIV/AIDS."

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8. POLITICS AND POLICY

"South Africa: No final say on new drugs for Minister"

Date: 20 August 2008

Source: *Business Day (South Africa)*

Author(s): Tamar Kahn

<http://allafrica.com/stories/200808200633.html>

In a surprise move yesterday, Parliament's health committee scrapped a controversial Medicines and Related Substances Amendment Bill clause which gave the health minister the final say on whether new medicines could be sold in SA.

The bill's original two-tier system ran into fierce opposition from industry and activists during public hearings earlier this month. They said it would allow unfettered political interference in the proposed Health Products Regulatory Authority's decisions on whether to allow new products on the South African market.

The authority will replace the Medicines Control Council (MCC), and oversee medicines, medical devices, and foodstuffs containing drugs.

The bill originally provided for the authority to assess the safety, efficacy and quality of new medicines and devices, and then refer certified products to the health minister for further scrutiny. The minister would be given the power to decide whether or not to register them on ill-defined grounds such as "public interest".

MPs across the political spectrum yesterday backed committee chairman James Ncgulu's proposal to ditch these provisions. The state law adviser's office was instructed to redraft the bill so that the power to register medicines would rest solely in the hands of the authority.

MPs also agreed to introduce measures to allow aggrieved parties to lodge appeals with the health minister if their applications to register new products were rejected.

The minister would then be obliged to appoint an independent committee to consider their appeals within a time frame still to be determined.

The development was hailed widely as one that would strip politics out of the science of assessing whether medicines were safe, effective and of appropriate quality.

"We welcome the decision to implement a single registration system where the minister cannot decide which medicines can or cannot be registered," Treatment Action Campaign spokeswoman Leslie Odendaal said.

The Democratic Alliance's Mike Waters said the committee's decision would "avert a chaotic situation in medicines regulation where medicines were denied to South Africans for political reasons".

"The MCC is in desperate need of reform. Its antiquated structure creates enormous delays in approvals, (denying) South Africans access to life-saving drugs," he said.

Pharmaceuticals Made in SA spokesman Stavros Nicolaou said: "Our preference was for registration that stuck to scientific criteria, evaluated by people with competence.

"We didn't want politicians getting involved."

The Pharmaceutical Industry Association of SA and Innovative Medicines of SA (Imsa), which represent multinational drug makers, welcomed the committee's decision cautiously, saying it would like to see the details of the new draft before being completely reassured.

Imsa said that a separate decision by the committee to introduce provisions in the bill that would compel the authority to draw up rules specifying timelines for applications to register new products was also an important development. It gave the industry some standards against which to measure the authority by.

The MCC does not commit itself to deadlines, and usually takes more than two years to approve new drugs.

9. ANNOUNCEMENTS

CHAMP Announces New Executive Director

Earlier this year, Community HIV/AIDS Mobilization Project (CHAMP) initiated a search for a new Executive Director, as part of a transition plan to ensure our continued sustainability and flexibility as a national organization bridging HIV/AIDS, human rights, and social and economic justice. Vanessa Brocato will join the staff in our New York City office on September 3.

Vanessa brings a wide range of experiences and skills, as well as tremendous energy and creativity to her new position. Her HIV/AIDS work began as a Stop AIDS Chicago trained peer educator in high school and then as president of her college LGBTQ organization. After receiving her degree in Women's Studies from Bradley University, she earned a law degree from Georgetown University Law Center, where she received the human rights award for her graduating class.

Most recently, Vanessa has been working as the Assistant Director for Prevention Policy at Gay Men's Health Crisis (GMHC).

She has also served in various capacities at amfAR, the Foundation for AIDS Research; Family Care International; Housing Works; the Sexuality Information & Education Council of the U.S. (SIECUS); Whitman-Walker HIV/AIDS Clinic, Legal Services; and the Women's Law and Public Policy Fellowship Program.

Vanessa is also a founding member of the Caucus for Evidence-Based Prevention (<http://www.hiv-prevention.org/>). This year, she served as a contributing editor to the Caucus's daily newsletter at the International AIDS Conference held in Mexico City. At the IAC, she also co-presented the sexuality education advocacy workshop at the YouthForce Pre-Conference and blogged for www.AIDS2008.com.

In 2007, Vanessa was a key member of the coordinating team for the Women Deliver conference and advocacy campaign launched in London (www.womendeliver.org). In this capacity, Vanessa worked with advocates worldwide to facilitate the involvement of HIV+ women, harm reduction advocates, women with disabilities, women who have experienced imprisonment, and young people into this pivotal conference on maternal health (MDG 5).

Her publications include "National Human Rights Commissions" in *Voices of African Women: Women's Rights in Ghana, Uganda, and Tanzania* (Carolina Academic Press); *Understanding Religious and Political Opposition to Reproductive Health and Rights: a Resource Guide*; and the SIECUS PEPFAR Country Profiles: *Focusing in on Prevention and Youth* (2005).

Congressional Briefing on Men Who Have Sex With Men (MSM) and the Global HIV & AIDS Epidemic - Save the Date

In co-operation with The Honorable Congresswoman Barbara Lee (C-DA).

Monday, September 15, 2008

Time: 12:00 to 1:30pm

Venue: Room HC-6 in the Capitol

Lunch will be served.

For more information, please e-mail klauer@apla.org.

Thanks to IRMA for distributing this announcement.

EDCTP Current Grant/Funding Calls

http://www.edctp.org/Calls_and_Grants.185.0.html

Ethics Review Committee

Published on 30 July 2008

Deadline: 30 November 2008

EDCTP wishes to promote the establishment and strengthening of National Ethics Committees (NEC) and Institutional Review Boards (IRB) that are competent and independent. The NECs and the IRBs are encouraged to establish themselves administratively and financially so as to ensure sustained optimal function beyond the EDCTP funding. Strengthening of NEC or IRB aims at making them operational and gives support to their ongoing functions. Networking and training is encouraged and supported. Additional support in the form of online literature access, documents, access to websites on ethics and GCP will be facilitated.

Senior Fellowship

Published on 30 July 2008

Deadline: 30 November 2008

Through this call, EDCTP intends to identify and support senior researchers capable of building and leading research groups at Sub-Saharan African institutions that will be internationally competitive and capable of winning grants from international funding bodies. This grant is both available for researchers already working in Africa as well as those looking to return to the continent (re-entry grant).

Small Grants

Published on 13 August 2008

Deadline: 13 August 2010

Kindly note that this announcement is a replacement to the previous call on Small Grants Programme which has been stopped. EDCTP accepts applications for grants to support a limited amount of small-scale one-time activities.

EDCTP's Fourth Annual Forum Report Now Available

http://www.edctp.org/EDCTP_Forum_Investigators_Meet.436.0.html

The report from EDCTP's Fourth Annual Forum under the theme 'Building Bridges for Better Health' is now available in print and electronic format. At the forum, stakeholders involved in EDCTP-funded research presented an overview of ongoing clinical trials on HIV/AIDS, TB and malaria in Africa, and identified future priorities. The report summarises presentations and discussion held around the following themes:

- Ongoing clinical trials in Africa
- Clinical trials networks in Africa
- Challenges in building clinical trial capacity in Africa: Regulatory and ethics environment and Networks of Excellence

Furthermore, forum participants reflected and discussed on the future of EDCTP beyond 2010. The forum was held from 22 to 24 October 2007 in Ouagadougou, Burkina Faso, and was attended by around 180 participants from both Europe and Africa.

EDCTP's Fourth Annual Forum report is available in print and on EDCTP's website.

Empower Women and Girls to Stay HIV-Negative

<http://iwhc.org/resources/hivprevention.cfm>

A new Resource from the International Women's Health Coalition on Health and Rights to Empower Women and Girls to Stay HIV-Negative is now available. The text is available for download at the above website.

International Conference: "Challenges for the Future: Research on HIV/AIDS, Malaria and Tuberculosis"

<http://poverty-related-diseases.teamwork.fr/>

The European Commission, Directorate General for Research, is organising an international conference entitled: "Challenges for the future: Research on HIV/AIDS, Malaria and Tuberculosis", on 13 and 14 November 2008 in Brussels. Leading scientists, research managers, decision-makers, funding agencies and representatives of relevant international NGOs will attend, with significant participation from disease-endemic countries.

The goals of the conference are to:

- regain political momentum for continuing and intensifying research addressing the three major infectious diseases (HIV/AIDS, malaria, tuberculosis) linked to poverty in developing countries;
- report on research efforts supported by the Commission since 2002, when HIV/AIDS, malaria and tuberculosis became a separate research focus under the EU's 6th Framework Programme;
- gather input from relevant stakeholders in order to set the research agenda on poverty related diseases for the remainder of the present (7th) Framework Programme.

The conference will be organised in plenary and breakout sessions. In the morning on the first day, the conference will have the plenary session focusing on the political aspects of poverty related diseases. During the afternoon, the conference will be divided into breakout sessions dedicated to each specific disease (HIV, Malaria and TB) and chaired by a key scientist of the respective area. On the second day, the results of the breakout sessions will be discussed in plenary. The programme, registration form and all other information are available at website: <http://ec.europa.eu/research/health/infectious-diseases>.

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