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treatment information

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British Columbia Persons With AIDS Society

The British Columbia Persons With AIDS Society seeks to empower persons living with HIV disease and AIDS through mutual support and collective action. The Society has over 4400 HIV+ members.

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think ⊕

opinion & editorial . . .

Year-end reflections and new year's resolutions

by Glyn Townson

Whether 2008 was a year of advancement in the fight against HIV/AIDS remains debatable. That 2008 brought significant changes and promise to our community is certainly undisputable.

The XVII International AIDS Conference, held this past August in Mexico City, proved to be a remarkable venue for new ideology and voices that challenge the very identity of this disease.

Dr. Julio Montaner—our Vancouver-based, worldwide authority on HIV/AIDS and current president of the International AIDS Society (IAS)—introduced the concept of HIV as a chronic inflammatory disease. The implications of this new approach could be momentous: rest assured that the BCPWA Society will be closely following this new development.

Locally, 2008 was also a landmark year for *In*site, Vancouver's supervised injection site. Though the final months of the experimental phase of this project saw the release of several scientific studies reaffirming *In*site's benefit both to the community at large and to the smaller community of injection drug users on the city's Downtown Eastside, the end result was the federal government's blatant denial of overwhelming positive scientific evidence, and the ultimate withdrawal of federal support for this groundbreaking initiative.

BCPWA will continue—now with more energy and experience than ever—to assert the needs of our community against the ideological attack of evidence-based science. We find ourselves in a strong position to do so with new board members elected in August at our Annual General Meeting, with our community partners who helped raise over $430,000 at the Scotiabank AIDS WALK for LIFE in September, and a staff team determined to make 2009 a progressive year in our fight against HIV/AIDS.

To recognize the past year and our movement forward—and to celebrate the spirit of the holiday season—we invite you to join us at our 19th annual BCPWA Christmas dinner. This event gives BCPWA's staff and board the opportunity to thank our members and volunteers for the knowledge and inspiration they share with us every day.

Date/Time:
Thursday, December 11th; 6:00PM
Location:
BC Provincial Law Courts,
800 Smithe Street
(Smithe & Hornby), Vancouver

Members can purchase their tickets for $10, (with $5 refunded at the venue). Guest tickets are $20 and must be purchased in advance. Food and entertainment promises to be plentiful. Please contact BCPWA at 604.893.2200 to register ASAP. ⊕

***Glyn Townson** is the chair of BCPWA.*

REALITYBITES

News from home & around the world

AIDS experts reveal plan to treat BC's vulnerable

The BC government is considering new methods of luring the province's most hard to reach HIV patients into treatment. The strategy is aimed at highly vulnerable people with HIV, including drug addicts, the homeless, the mentally ill and some Aboriginals. Many aren't taking antiretroviral drugs. AIDS professionals in British Columbia—with the backing of the provincial government—want to target these groups with the hope of persuading them to get treatment.

Dr. Julio Montaner, who heads the BC Centre for Excellence in HIV/AIDS in Vancouver, said he could envision a program in which HIV-positive patients who are also addicts would receive daily antiretroviral drugs at the same clinic where they received drug addiction therapy.

BC Premier Gordon Campbell and Health Minister George Abbott have pledged support for the aggressive tack.

Dr. Montaner said the aggressive HIV treatment strategy is cheaper in the long run. The cost of treatment for one AIDS patient over his or her lifetime ranges from $250,000 to $500,000. Each year, there are about 400 new cases of HIV in BC. Dr. Montaner said the infection rate can be cut in half if most infected people get treatment.

Source: Globe and Mail

Measuring viral load in plasma and semen

Earlier this year, the Swiss Federal Commission for HIV/AIDS sparked controversy when they suggested that HIV infected individuals on antiretroviral therapy who are fully adherent and maintaining undetectable plasma viremia for at least six months and having no concurrent sexually transmitted infections, essentially cannot transmit HIV through heterosexual vaginal intercourse (see "Undetectable vs. uninfectious," *living*⊕, Sept/Oct 2008).

At the XVII International AIDS Conference, Australian researchers presented a study looking at how well different antiretroviral agents penetrate semen. Findings showed all treated individuals had undetectable HIV RNA in both blood plasma and semen. Median blood and semen concentrations for atazanavir were 630 and 87.5 mg/l, respectively. Corresponding concentrations for lopinavir were 7,428 and 465 mg/l, respectively. In contrast, 80 percent of patients taking nevirapine exceeded the therapeutic blood concentration (> 3,450 mg/l), and the mean semen concentration was right about this level (3,462 mg/l). All participants taking efavirenz attained therapeutic blood concentrations (at least 1,000 mg/l), but no efavirenz penetrated semen. Investigators concluded that antiretroviral agents that suppress blood viral load also suppress seminal viral load, despite differential drug penetration of semen.

Source: AIDS Review

First shipment of affordable AIDS drugs finally sent to Africa

The first batch of a lower-cost, generic AIDS drug to be exported under Canada's Access to Medicines Regime was finally shipped to Rwanda on September 24, 2008. "The delivery of these medicines is way past due," said Canadian HIV/AIDS Legal Network Executive Director Richard Elliott.

Canada's Access to Medicines Regime was created in May 2004. It is meant to allow compulsory licensing of patented medicines, so that generic drug companies in Canada can legally produce and export lower-cost versions of patented, brand-name medicines to developing countries. Earlier this year, the Government of Rwanda chose to purchase a low-cost AIDS drug from Ontario-based generic pharmaceutical manufacturer Apotex, Inc. The initial order is for enough medicine to treat more than 21,000 people for a year.

But, according to Elliott, the process has been full of red tape. "Canadian generic drug makers and people who do drug procurement in developing countries are saying it's unlikely they will use it again because [the licencing process is] too cumbersome." The Legal Network called on the federal government to fix Canada's unnecessarily complicated process and make it more user-friendly for both developing countries and Canadian generic manufacturers.

Source: Canadian HIV/AIDS Legal Network

HIV-positive man sentenced to 14 years for sex assaults

An HIV-positive Winnipeg man has been sentenced to 14 years in prison for having unprotected sex without informing his partners of his medical condition.

The man was sentenced on October 10, 2008 on convictions for six counts of aggravated sexual assault as well as invitation to sexual touching and sexual interference. He was cleared on charges involving three other women. The court heard that the man had unprotected sex with six females, one only 12 years old.

continued on next page

None of them were infected with HIV. He will have to serve nine years of the 14 year sentence and was credited with five years for the 30 months he has already spent behind bars. The Crown had sought a 24 year sentence in the case.

The man, a Sudanese immigrant, also faces deportation.

Source: cbc.ca

HIV drug resistance spreading in China, researcher says

As HIV spreads beyond high-risk groups into China's general population, drug-resistant strains of the virus also are appearing in parts of the country, Chen Zhiwei of the AIDS Institute in Hong Kong said recently. According to Chen, the two trends are "alarming" and people living with HIV in China could face treatment obstacles because relatively few antiretroviral drugs are available in the country. "All these drug-resistant mutations are in China now," he said, adding, "The major worry is whether the drug-resistant virus will spread. We are studying whether that is happening, but that will be the case if you don't provide proper treatment. If drug-resistant virus (strains) spread in China, we don't have enough selection of (drugs) that are made available."

About seven of the more than 20 different antiretrovirals are available in China, meaning that HIV-positive people might be left with limited options if they develop resistance to certain drugs. In addition, treatment adherence can be low in rural parts of China because of a lack of knowledge among patients, low access to health care, and inadequate numbers of healthcare workers to explain the importance of adherence.

Source: Reuters

Novel procedure appears to have eliminated HIV

A poster presentation at the 2008 annual Conference on Retroviruses and Opportunistic Infections in Boston by a group of physicians from Germany described a 40 year old man whose HIV had been under good control for several years using HAART. Then he developed acute leukemia.

In an attempt to cure the leukemia, he underwent radiation and chemotherapy in preparation for a stem cell transplant. But rather than simply using the best match among available stem cell donors, his physicians also screened for a natural mutation known as delta32 CCR5. CCR5 is the primary means by which most types of HIV infect cells. Individuals lacking this CCR5 receptor are completely resistant to infection by the most common forms of HIV.

Now off all anti-HIV drugs for almost two years, the patient continues to show no detectable signs of HIV in his blood, bone marrow, lymph nodes, intestines, or brain. At the very least this patient represents a functional cure: he is off all anti-HIV meds, has a normal T-cell count, and exhibits no evidence of virus. The cost of such a stem cell transplant procedure can run up to $250,000. It is also associated with a high death rate from infectious and immunologic complications, and the number of delta32-CCR5 donors of appropriate tissue type would be very small.

Source: amfAR.org

South Africa's new health minister acknowledges link between HIV and AIDS

South Africa's new health minister broke dramatically recently from a decade of discredited government policies on AIDS, declaring that the disease was unquestionably caused by HIV and must be treated with conventional medicine.

Health Minister Barbara Hogan's pronouncement marked the official end to ten years of denying a link between HIV and AIDS by former President Thabo Mbeki and his health minister Manto Tshabalala-Msimang. Activists also accused Tshabalala-Msimang of spreading confusion about AIDS by saying she did not trust antiretroviral medicines and preferred nutritional remedies such as garlic, beetroot, lemon, olive oil and the African potato.

"We know that HIV causes AIDS," Hogan said in a speech. It was her highest-profile public appearance since she became health minister after Mbeki was turned out of office by his party in early October. Hogan said government policies over the past ten years had failed and said South Africa needed to do much more to improve access to anti-AIDS medicines. South Africa now has the world's highest number of people with HIV, counting some 5.4 million people as infected with the virus.

Source: Associated Press ⊕

Homophobia and HIV

Conference presentations make a strong link between HIV transmission and homophobia

by Lorne Berkovitz

Watching same-sex lovers walk hand in hand down Davie Street in Vancouver, it's easy to be complacent and believe that homophobia no longer exists. However, presenters at the XVII International AIDS Conference in Mexico City made it clear that homophobia is alive and well—and impacting HIV transmission.

A recurring theme of the conference was how the absence of human rights effectively fuels the spread of HIV. Every speaker at the opening ceremonies spoke about the relationship between homophobia and the battle against HIV. And for the first time since the 1993 International AIDS Conference in Berlin, HIV and men who have sex with men (MSM) was the subject of a plenary presentation. Dr. Jorge Saavedra López, head of *Centro Nacional para la Prevención y el Control del VIH/SIDA*, Mexico's national HIV/AIDS program, presented on this topic.

Throughout the conference, statistics drew convincing connections between homophobia and the spread of HIV.

Back in the 1980s, the gay community mobilized in response to HIV/AIDS. It's hard to imagine what might have happened had gay men encountered fear of legal retribution in their organizing efforts. As it stands now, consensual male-to-male sexual activity remains a criminal offence in 86 countries. In 21of those countries, having sex with another man is punishable by up to ten years in prison. In seven of those countries, it is punishable by death.

It's no coincidence that the highest incidence of HIV transmission among MSM occurs in countries where both social stigma and prosecution of homosexual acts are common. In Kenya, 43 percent of MSM have HIV, as opposed to 6.1 percent of the general population. In Jamaica, 25 - 30 percent of MSM are seropositive, versus 1.6 percent of the general population. In both countries, the law has actively persecuted MSM. In Bolivia, where the stigma of homosexuality is still strong, MSM are 179 times more likely than the general public to be HIV-positive.

Rates of HIV among MSM are high because homophobia—and more specifically, the criminalization of gay sex—hinders prevention messages for MSM and treatment for people living with HIV. Men won't go to public health clinics to be tested for HIV out of fear of being perceived as gay. If they test positive, they're unlikely to access antiretroviral therapy because of the double stigma of being gay and HIV-positive. Some men would prefer to risk their lives than expose the secret that they have sex with other men.

Speaking at the conference, Dr. Peter Piot, executive director of the Joint United Nations Program on HIV/AIDS (UNAIDS), stated that "knowing your epidemic means knowing your community." A public health system can't treat a community without knowing people's habits and behaviours. But this is the case in over half the countries in the world. Sixty-two percent of nations don't report on HIV among MSMs. MSM-targeted HIV programs comprise less than one percent of the total HIV spending in Latin America, despite the fact that a quarter of the people in Latin America living with HIV are MSM.

It's no coincidence that the highest incidence of HIV transmission among MSM occurs in countries where both social stigma and prosecution of homosexual acts are common.

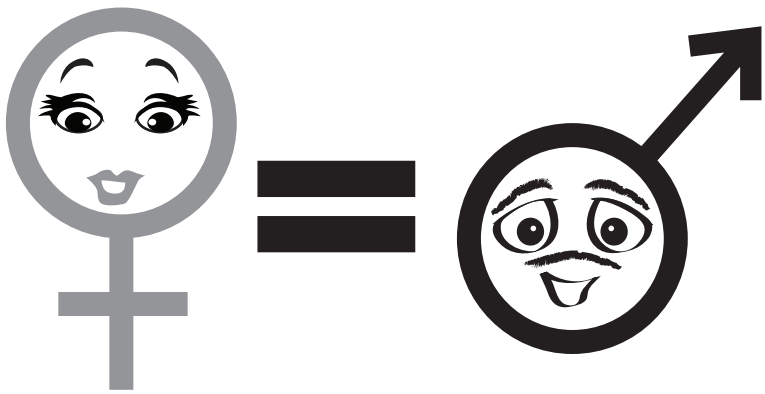
Homophobia and ignorance of the MSM community remains a significant barrier to effective HIV education and prevention. Dr. Saavedra's philosophy is that if you ignore the MSM population, you will lose the fight against AIDS.

Society can change, however. In Mexico, bold initiatives to tackle both homophobia and the spread of HIV have begun. The Mexican government now has a policy that covers universal access to antiretroviral drugs. In 2004, Dr. Saavedra initiated an anti-machismo education campaign, followed by a government endorsed anti-homophobia campaign. And civil unions for gays and lesbians in Mexico now exist.

The message at AIDS conference was clear: to fight HIV, you have to fight homophobia. ⊕

***Lorne Berkovitz** is a BCPWA Society board member and a volunteer in the Treatment Information Program.*

Gender equity in HIV:



Are we there yet?

AIDS conference presentations show that women's issues are slowly coming to the forefront

by Shari Margolese

The theme of "Universal Action Now!" echoed through the halls of the Centro Banamex convention centre; however, it was *Todas las Mujeres, Todos los Derechos* (All Women, All Rights) that resonated the loudest as women united from around the world to demand action on gender equality during the XVII International AIDS Conference in Mexico City.

But are we there yet? The answer is definitely no. Nevertheless, many signs at the conference showed that we're headed in the right direction.

As is often the case, there were many celebrities and other notable women at the conference lending their voices and support in the fight for gender equality, including singer Annie Lennox and the former President of Ireland, Mary Robinson. But far more impressive were the dozens of Canadian women—predominantly PWAs—attending not only as delegates, but also as presenters, volunteers, and organizers. Their presence suggests that the 2006 International AIDS Conference in Toronto had an impact in encouraging greater involvement of women living with HIV at the international level.

Many presentations involving the global community of women advocates emphasized the need for equality for women in access to treatment, in research, and for legal and human rights. Also high on the agenda was a focus on the ever-present threat of violence against women and its direct link to HIV infection.

More trials are exploring gender differences

On the treatment front, an increasing number of women are being enrolled in clinical trials, allowing for gender analysis on more data than ever before. The CASTLE study, conducted in more than 130 sites in 30 countries, compared atazanavir/ritonavir with lopinavir/ritonavir (Kaletra) in treatment-naïve patients, and showed similar efficacy and safety data in both men and women. Women, however, were more likely to experience nausea and less likely to experience diarrhea than men.

The ARTEMIS trial compared efficacy and safety of once-daily darunavir/ritonavir with lopinavir/ritonavir in treatment-naïve patients. The study concluded that darunavir/ritonavir is an effective, well-tolerated once-daily treatment option for treatment-naïve patients. ARTEMIS analyzed data not only by gender, but also by race; there were few differences exhibited either between men and women or among various races. B.A. daSilva, et al. measured the impact of gender in a comparison of once-daily versus twice-daily lopinavir/ritonavir tablets, again showing similar outcomes for both men and women. Women who entered this trial with CD4 cell counts under 50 showed

more significant increases in CD4 cell counts than men who entered the trial with similar counts.

An increasing number of women are being enrolled in clinical trials, allowing for gender analysis on more data than ever before.

Of particular note is the GRACE study, which was designed to assess sex and race differences in efficacy, safety, and tolerability of darunavir/ritonavir over 48 weeks among treatment-experienced patients. GRACE enrolled 287 women and 142 men, thus demonstrating that North American women can be successfully recruited to participate in clinical trials of antiretrovirals.

Exploring meds and pregnancy

Several studies also examined the impact of protease inhibitors (PIs) during pregnancy. Atazanavir (Reyataz) as well as lopinavir/ritonavir were two PI combinations shown to have lower than recommended levels present in pregnant women. It remains uncertain whether or not these and other PIs require dosage adjustments; however, the Antiretroviral Pregnancy Registry showed good long-term safety data for lopinavir/ritonavir for both women and children, suggesting that a dose adjustment might not be required.

Have we managed to achieve all rights for all women? Certainly not—particularly in the area of human and legal rights. However, the international community of women fighting for gender equality has shown real progress in changing the landscape of policy, program, and study design. It remains to be seen if Vienna—the site for the XVIII International AIDS Conference in 2010—will show movement in a similar direction. ⊕

__Shari Margolese__ has been an active voice for women living with HIV since her own diagnosis in 1993.

Way ti'kw xast – an honoured welcome

__by Tia Eagles-Claw I__

In August, I traveled to Mexico City for the XVII International AIDS Conference. It was an honour to attend the conference by way of a scholarship awarded to me through the International AIDS Society. The conference was well done, and the people were very hospitable.

My extensive knowledge of my Aboriginal heritage and the origins of my people gave me a wonderful opportunity to present a series of workshops entitled *Sk-lx's ti o-kin? A-xn. N jitx. P-txn*—A Traditional Healing Zone. For the first part of my presentation, I spoke in my Native language with English subtitles shown behind me on a screen; in the last part of my presentation, I spoke in English.

The primary message of my workshop was that First Nations approach HIV in a unique way from many other cultures. We do not see HIV as a death sentence or a punishment for wrongdoings. In the early years of AIDS, many of our communities were not accepting. There was denial about HIV on our reservations and amongst our people. Back then, there was a lot of fear. In those days, I visited many traditional territories and spoke with Elders. I explained to them that our communities were no longer the pure protected places of the past, and that we must accept realities such as HIV and how they affect our people.

So much has changed. Today, First Nations approach the virus as a rebirth. The disease has enabled us to put our differences aside, replenish that bond and love we once had, and share our knowledge so it will never be forgotten again.

In my workshops, I spoke about the medicinal origins of our people and its importance to our culture and health. I specifically talked about the medicine wheel and the meaning

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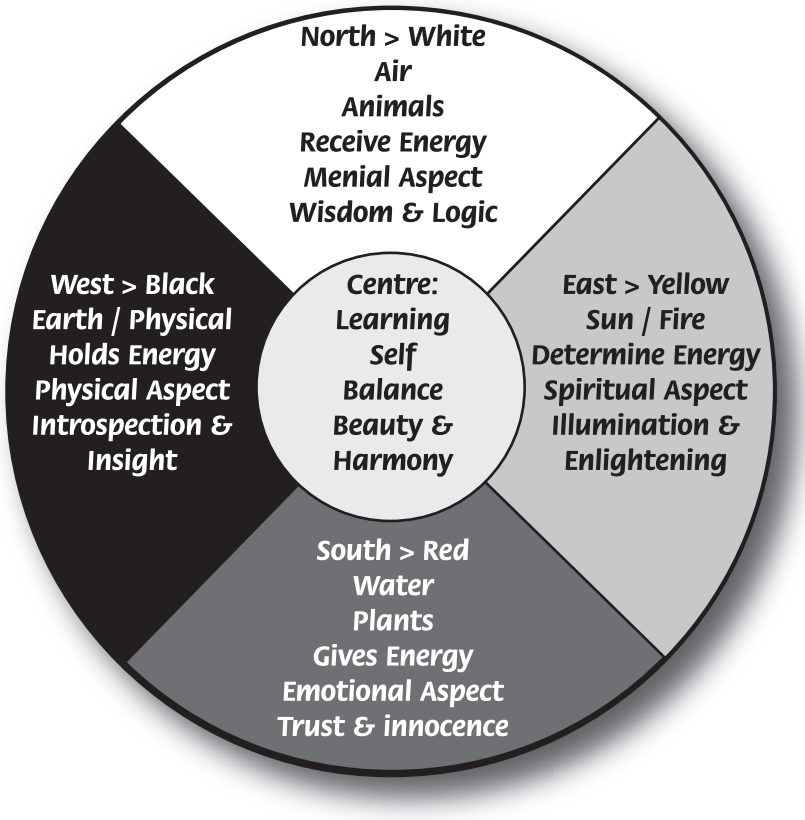

of this sacred circle to First Nations, especially as it relates to living with HIV.

The medicine wheel is a model for the cycle and the meaning of life through a circular path of growth, learning, healing, and harmony. The four quadrants have many different meanings. In nature, they represent the four directions (east, south, west, north); cycles of time (sunrise, noon, sunset, night); and seasons of the year (spring, summer, fall, winter). In human nature, they represent the human life cycle (child, youth, adult, elder) and the four dimensions of life (physical, emotional, mental, spiritual). Each of these parts makes up a whole. In life, we use the sacred circle as a guide to live in balance and harmony.

When the medicine wheel is applied to HIV, it explains the progression of the virus in the context of the natural life cycle and the emotional journey of acceptance and insight. The virus moves from the starting point of infection to the early asymptomatic phase; after some time, the symptomatic phase begins; finally, the AIDS stage sets in. The medicine wheel and the cycle of life have two other sacred influences: our Mother Earth—nature—where the body eventually returns, and also our Father Sky—the Creator—where our spirit returns.

In total, almost 80 people—from countries and cultures all over the world—attended my workshops. My presentations were well received, and I believe I opened doors that no one has opened before at an International AIDS Conference. Many wanted me to hold more workshops, and others asked me to travel to their communities to speak about my people and our traditions. I am aiming for the XVIII International AIDS Conference in Vienna in 2010!

All in all, presenting at the conference was an incredible opportunity, and something that I will not forget in the years to come. I took over 120 photographs—with memories behind each one. Now I am a global princess, with new two-spirited sisters everywhere! The people I met there will always have a place in my heart and in the hearts of my people. ⊕

Tia Eagles-Claw I *is a member of the Okanagan Nation and a volunteer with the BCPWA Society.*

A radical SHIFT

Scientists are now seeing HIV as a chronic inflammatory process

by Dr. Marianne Harris

Unexpected results from the Strategies for Management of Antiretroviral Therapy (SMART) study, which examined two different approaches to the use of highly active antiretroviral therapy (HAART), have changed our thinking about the nature of HIV disease and its effects on the human body. Scientists now recognize that HIV is a chronic inflammatory process that affects the body's organs and tissues, causing damage long before CD4 cell counts drop to levels where a person is at risk for AIDS-related opportunistic infections and cancers.

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The damaging effects of ongoing viral replication on the immune system—as measured by CD4 cell counts and other markers—are well known and documented. Over time, as the body's immune system is compromised, it loses its ability to fight off AIDS defining opportunistic infections and cancers. These effects are reversed through HAART: viral replication is shut down and immune recovery (measured by an increase in the CD4 cell count) results.

However, in the era of HAART and the associated decrease in AIDS-defining conditions, people living with HIV/AIDS (PWAs) are also at risk for a number of serious conditions not traditionally associated with AIDS, including diseases of the heart, liver, and kidneys. In fact, the SMART study showed that among people with high CD4 cell counts, serious conditions not typically associated with AIDS occurred three to four times more often than serious AIDS-related conditions. Thus, it appears that HIV may be causing illnesses by a mechanism independent of its effects on CD4 cells.

Surprising results from the SMART study

SMART was a very large international study, enrolling almost 5,500 HIV-positive participants with CD4 cell counts greater than 350 cells. Participants were randomly assigned into one of two treatment groups: viral suppression or drug conservation/treatment interruption.

The 2,752 participants in the viral suppression group were treated with HAART continuously to keep their viral loads as low as possible, regardless of their CD4 cell counts. The 2,720 participants in the drug conservation group were given HAART whenever their CD4 counts fell below 250 cells; HAART treatment was interrupted whenever CD4 counts were consistently above 350. The theory behind this treatment strategy was to minimize the risk of opportunistic infections by maintaining a high CD4 cell count, and also minimize the risk of drug-related toxicities by reducing cumulative exposure to HAART.

As well as the usual AIDS-associated effects, researchers monitored participants closely for any non-infectious cardiovascular, liver, and kidney diseases, which are often attributed to complications of HAART. These conditions would be expected to occur more often in the viral suppression group, where participants received antiretroviral drugs continuously.

Surprisingly, after an average follow-up time of 16 months, participants in the treatment interruption group were 2.6 times more likely to have an AIDS-related opportunistic disease or die than those in the viral suppression group. Even more unexpectedly, participants in the treatment interruption group had a 70 percent greater risk of serious non-AIDS associated illnesses or death due to cardiovascular, liver, or kidney disease. In other words, taking HAART continuously reduces the risk of illness and death caused by AIDS-related conditions, and by non-AIDS related organ diseases.

Interpreting the findings

These findings were so significant that investigators stopped the SMART study early. Presenting the findings at the 4th International AIDS Society Conference on HIV Pathogenesis, Treatment, and Prevention in Sydney, Australia in July 2007, Dr. Anthony Fauci said that "it is possible, if not likely, that some of the toxicities attributed to accumulative drug toxicities actually might relate to the cumulative effects of sustained viremia [the presence of virus in the bloodstream] that has gone unchecked with therapy."

HIV-related chronic inflammation can lead to multiple non-AIDS defining diseases—including heart, liver, and kidney disease—as well as non-AIDS cancers like lung, anal, head and neck cancers, and Hodgkin's lymphoma.

So how is HIV causing illness, if not through its effects on the CD4 cell count? The current theory is that HIV infection causes chronic activation of the immune system, or, in other words, chronic inflammation. Chronic inflammation is a condition where the body's response to an invader—a virus, bacteria, or cancer cells—is poorly controlled. Excessive amounts of signaling proteins called cytokines are released; these agents cause a heightened immune response and chronic inflammation that can result in serious damage to tissues and organs.

Scientists have known for a long time that HIV disease is characterized by chronic inflammation, like rheumatoid arthritis or cancer. This is why, for example, people with untreated advanced HIV disease tend to lose weight: cytokines cause a hypermetabolic state, resulting in AIDS wasting. However, scientists didn't realize how much

damage can be caused by the chronic inflammatory state induced by HIV, even early in the course of the disease. This new understanding now forms the basis of an argument in favour of earlier HIV treatment—to stop the damage to the body's organs and tissues caused by prolonged immune activation, thus preventing conditions not directly related to immunodeficiency.

Inflammation measured by biomarkers

The SMART study showed that interrupting HAART results in an increased risk of death from non-HIV related causes such as heart disease, liver disease, and kidney disease. Researchers now believe that these conditions result, at least in part, from the chronic inflammation caused by HIV, and the inflammation is reversed by HAART.

Inflammation can be measured by levels of biomarkers in the blood. Studies show that levels of these biomarkers are higher in people with HIV than in their HIV-negative counterparts. Furthermore, biomarker levels are higher in people with advanced HIV disease and decrease with HAART.

The current theory is that HIV infection causes chronic activation of the immune system, or chronic inflammation.

Analysis of coagulation and inflammatory biomarkers in a subset of 500 participants in the SMART study showed that blood levels of two markers—D-dimer and interleukin-6 (IL-6)—increased by 16 percent and 30 percent respectively one month after stopping HAART, in proportion to the increase in viral load. Levels of D-dimer and IL-6 at the beginning of the SMART study were strongly related to the risk of death during the study. In addition, higher levels of these markers have previously been associated with increased risk of cardiovascular disease and death in the general population.

It appears, then, that eliminating HAART allows inflammation to recur, which can ultimately lead to an increased risk of death from heart disease and other non-AIDS conditions. Fortunately, the SMART study also showed that D-dimer levels decrease once people start or resume HAART, reinforcing its effectiveness in decreasing the inflammatory process.

HIV infection linked to cardiovascular disease

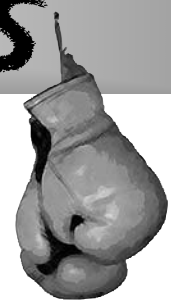
Previous research links HIV infection directly to heart and blood vessel disease. For example, studies show that carotid intima-media thickness, a measure of the thickness of the walls of the carotid arteries that indicates atherosclerosis (hardening of the arteries), is higher in people with HIV than in people of a similar age without HIV. And while atherosclerosis typically advances with age, it progresses more rapidly in people with HIV. Some antiretroviral drugs—such as stavudine (Zerit), zidovudine (Retrovir), and some protease inhibitors—may damage the blood vessels and increase the risk of cardiovascular disease by increasing cholesterol, triglycerides, blood sugar, and possibly other mechanisms.

However, researchers have noted higher than normal intima-media thickness even among PWAs who aren't on HAART. This finding suggests that some of the thickening of the blood vessels appears to be a direct effect of HIV itself. Of course, the absolute risk of cardiovascular disease also depends on the presence of other factors, like smoking, obesity, and family history. Many scientists think that HIV infection itself should be considered a risk factor for early cardiovascular disease.

So, if HIV is now recognized as a chronic inflammatory process, how does that relate to CD4 cell counts? High levels of inflammatory markers and coagulation markers are seen with high viral loads regardless of CD4 counts, posing a high risk of death. At any CD4 count, this HIV-related chronic inflammatory state can lead to multiple non-AIDS defining diseases—including heart, liver, and kidney disease—as well as non-AIDS cancers like lung, anal, head and neck cancers, and Hodgkin's lymphoma. However, the likelihood of these non-AIDS conditions occurring increases progressively as the CD4 cell count falls from 350 to 200.

As a result, the US Department of Health and Human Services and the International AIDS Society–USA Panel have now changed their HIV treatment guidelines, recommending that HAART commence earlier—when CD4 cell counts fall below 350 cells, instead of below 200. There are other potential benefits of starting HAART sooner, including reducing the risk of HIV transmission. However, the major benefit is that people with HIV who maintain a normal CD4 cell count on HAART may have the same life expectancy as the general uninfected population. ⊕

***Dr. Marianne Harris** is a family doctor with the AIDS Research Program at St. Paul's Hospital in Vancouver.*



The big opt-out

A coalition of citizens' organizations is trying to ensure British Columbians retain control over their own personal health information

by Ross Harvey

On the eHealth front, there's good news and bad news.

EHealth is the provincial Ministry of Health's program of electronic health records that, once fully implemented, will include everything from your doctor's office files to your lab work, and from diagnostic imaging (X-rays, MRIs) to your prescriptions—and a great deal more. These digitized records of your personal health information will be available for viewing by any authorized person. Depending on the particular record, those given access could include everyone from medical specialists to neighbourhood pharmacists, to the social workers atyour local public health clinic, to ambulance personnel. And others.

There are also truly Orwellian plans afoot to create a government-wide personal information sharing system that would include the Ministries of Health, Children and Families, Housing and Social Development, and others. At this point, the only way you will be granted any control whatsoever over who gets to see your personal health information is through a primitive and cumbersome keyword system.

The good news is that the planned launch of eHealth in the Northern Health Authority (see "Big Brother is Coming," *living*⊕, July/Aug 2008) has been delayed, and possibly scrubbed altogether in favour of a later launch in some other health authority. Regardless, nothing will proceed until some time in 2009.

No more public consultation

The bad news is that the only means previously available through which ordinary healthcare consumers—in other words, patients—could have any input into the development of the whole eHealth system has been "suspended" indefinitely. Along with a handful of other citizen groups, the BCPWA Society (BCPWA) was represented on both the Ministry of Health's eHealth privacy working group and the eHealth privacy and security stakeholders advisory committee.

But that's history. With the passage last spring of Bill 24, eHealth's enabling legislation, nothing now stands in the way of rapid eHealth implementation. Well, nothing except for a host of technological problems. But that's another story.

There are truly Orwellian plans afoot to create a government-wide personal information sharing system that would include the Ministries of Health, Children and Families, Housing and Social Development, and others.

But there's more good news. A coalition of concerned citizens' organizations—including the BC Civil Liberties Association, the BC Freedom of Information and Privacy Association, the BC Coalition of People with Disabilities, and the BCPWA Society—has come together to help British Columbians do whatever they can to retain control over their own personal health information and so protect their privacy and medical confidentiality.

You can do two key things to help

This new coalition, called The Big Opt-Out (named after a similar organization in Britain), will officially kick off its activities next March.

Right off the top, The Big Opt-Out will be urging all British Columbians to take two crucial steps.

First, place a keyword on all your pharmacy transactions. You can do this right now. Keywords function like a computer password. Once it's in place, only those people to whom you give your keyword will be able to view the government's PharmaNet records of your pharmacy purchases.

You create the keyword at your pharmacy. The next time you get a prescription filled, ask the pharmacist to implement your keyword. Your pharmacist should make the necessary preparations on the PharmaNet computer screen, then ask you to key in your keyword. You can use any alpha-numeric combination you wish.

The drawback to this system is that once you've given out your keyword to someone, they can view all of your PharmaNet records—every prescription you've had. Unfortunately, it's the best privacy protection we have at the moment.

Second, download a copy of the physicians letter from the BCPWA website at www.bcpwa.org/empower_yourself/publications/eHealth/doctor_letter. Date the letter, sign it, and deliver it to your regular general physician and any specialists you may consult.

If your physician hasn't heard about eHealth and your right to "self-determination of [your] health care and, to the extent possible ... the management of [your] information," direct her or him to page 23 of the College of Physicians and Surgeons' *Data Stewardship Framework*. This document can be found at www.cpsbc.ca: click on physician resources; then click on briefing documents under publications.

Doing these two things is a good start in protecting your personal health information. But it's only a start. As things develop and—we hope—more options become available to you, BCPWA will do everything it can to keep you informed. ⊕

***Ross Harvey** is BCPWA's executive director.*

A bill of goods—or bads?

Bill C-51 raises concerns about the availability of natural health products

by Mark Abbott

On April 8, 2008, Prime Minister Stephen Harper and Health Minister Tony Clement introduced Bill C-51 in the House of Commons. The proposed bill amends the *Food and Drug Act* by implementing tougher regulations and heavier fines for violations of the Act. The purpose of the bill is to protect and promote the public's health and safety, and to encourage accurate and consistent product representation by prohibiting and regulating certain activities in relation to therapeutic products.

Under this bill, natural health products (NHPs) such as vitamins and minerals would be categorized as unique therapeutic products subject to *Natural Health Product Regulations*.

The classification of NHPs as therapeutic drugs will lump vitamins and minerals into the same category as a range of products sold for therapeutic purposes, including drugs, medical devices, biologics, and natural health products. Essentially, NHPs will become regulated prescription products instead of accessible over-the-counter items. The proposed legislation claims that "only a practitioner who is authorized to prescribe the prescription therapeutic product" will be able to sell such products.

People living with HIV/AIDS (PWAs) often use NHPs to enhance their health and well-being. Bill C-51 has raised speculation and fear regarding the potential impact the new amendments could have on the PWA community.

Will PWAs and others who depend on NHPs need to schedule appointments with healthcare practitioners in order to get a prescription for natural health products that were previously available as over-the-counter items?

Under Bill C-51, companies authorized to manufacture and sell NHPs will be required to pay exorbitant licensing fees. NHP manufacturers could effectively be squeezed out of business while pharmaceutical companies assume control over the manufacturing and sales of these products—driving up prices in the process. The bill also proposes to increase fines for violations to the legislation. The proposed fines could similarly force NHP manufacturers out of business, creating a monopoly on the market for pharmaceutical companies. And without reasonably priced NHPs made easily and readily available, PWAs who use and rely on NHPs will be left out in the cold.

NDP MP Libby Davies raised concerns about Bill C-51 in the House of Commons on June 10, 2008. Davies echoed the sentiments of the PWA community as well as other NHP community leaders by reiterating concerns that the reclassification and proposed regulation of NHPs will result in big pharmaceutical companies usurping control and power over the industry.

Some amendments have been made to Bill C-51 since it was first introduced in the House of Commons. Health Minister Clement has bowed to some pressure from the NHP community and its supporters. The bill will be amended to recognize NHPs as a different category from drugs and food. In addition, natural products can be approved based on a history of traditional use of the substances. Also, health inspectors will only be allowed to seize a product to identify or stop a health risk or prevent inaccurate claims.

Bill C-51 was presented to the House of Commons and made it through a second reading before the Legislature closed for the summer months. The bill is expected to move forward and will more than likely become law by the end of the year—unless enough opposition prevents a third reading and royal assent.

Although additional amendments are possible, Prime Minister Stephen Harper and Health Minister Tony Clement are determined to see the bill go through and tougher restrictions brought to fruition.

If Bill C-51 becomes law, the fate of NHPs and the grassroots organizations that often produce and support them could be forced out of business. ⊕

***Mark Abbott** is a volunteer with the BCPWA Society's Treatment Information Program and has worked for over ten years within the legal community.*

BCPWA Advocacy gets results!

The BCPWA Society's Advocacy Program continues to work hard to secure funds and benefits for our members. The income secured for August 2008 and September 2008 is:

- **$24,029 in debt forgiveness.**
- **$115,521 in housing, health benefits, dental and long-term disability benefits.**
- **$40,250 in monthly nutritional supplement benefits.**
- **$2,250 in ongoing monthly nutritional supplement benefit for children**

Get off your couch

Physical activity can have many benefits if you're HIV-positive

by Kristi Serwa

The healthy living movement has surged in recent years. These days, you would be hard pressed to find someone who isn't informed about the benefits of daily physical activity. However, it wasn't too long ago that doctors discouraged certain groups, like pregnant women and the elderly, from exercising as it was considered too strenuous for their fragile state. People with chronic illnesses like HIV/AIDS have only recently been encouraged to exercise, once physicians and researchers concluded that physical activity is safe—and, more importantly, beneficial—for them.

Not only is exercise good for your heart, blood, body composition, and cholesterol, it can also ease difficulties in performing daily tasks and improve your quality of life. Regular exercise in a group setting also creates social bonds and friendships, which, according to research, has additional health benefits. Exercise can also alleviate mental health issues such as anxiety and depression by boosting the release of endorphins (the "feel-good" hormones) in the brain and reducing cortisol (the stress hormone).

The benefits of exercise for people living with HIV/AIDS (PWAs) are numerous and indisputable. Research suggests that HIV-positive people who regularly participate in physical activity have a slower disease progression, fewer symptoms, and a lower rate of mortality compared to PWAs who don't exercise. In addition to the physical and mental health benefits, including exercise as part of your treatment regimen is a cost-effective alternative to many medications and may help alleviate some symptoms and side effects.

Offsetting the side effects of HIV meds

Regular physical activity can help counter some of the physical side effects of HIV medications such as lipodystrophy. Research has shown that with regular physical activity, PWAs experience more fat loss from their trunk than from their limbs. Furthermore, limbs affected by muscle wasting respond to weight training in the same way a healthy muscle does; as a result, exercise can help you increase muscle mass in your arms and legs while losing fat mass in your torso.

Research suggests that HIV-positive people who regularly participate in physical activity have a slower disease progression, fewer symptoms, and a lower rate of mortality compared to PWAs who don't exercise.

Hormones released into the body after exercise essentially control muscle growth and fat loss. Interestingly, synthetic hormones, including growth hormone or anabolic steroids such as testosterone, are sometimes used to treat lipodystrophy. Although these drugs reduce fat deposits in the abdomen and shoulders, negative side effects such as swollen joints, carpal tunnel syndrome, hyperglycemia (high blood sugar), and elevated blood cholesterol frequently occur. Since hyperglycemia and high cholesterol are common health issues for PWAs, it's

continued on next page

best to avoid synthetic hormones if possible. Regular exercise can mimic the effects of these treatments and improve body composition associated with lipodystrophy.

Another common side effect of highly active antiretroviral therapy is hyperlipidemia (high cholesterol) which can lead to high blood pressure and cardiovascular disease. Exercise reduces blood lipid levels by using the lipids as an energy source. Physical activity also improves blood pressure by reducing stress levels and by strengthening the heart, allowing it to pump more blood with less effort.

Anemia is a deficiency of red blood cells or hemoglobin, which provides oxygen to tissues in the body. Without enough oxygen-carrying hemoglobin in the blood, tiredness, shortness of breath, or even dizziness can result. Anemia can be caused by medications as well as HIV itself, and can be controlled or improved with exercise. Exercise stimulates the release of insulin-like factors and helps the kidneys to release a hormone called erythropoietin, which stimulates the bone marrow to produce more red blood cells.

Tailor your exercise regimen to your abilities

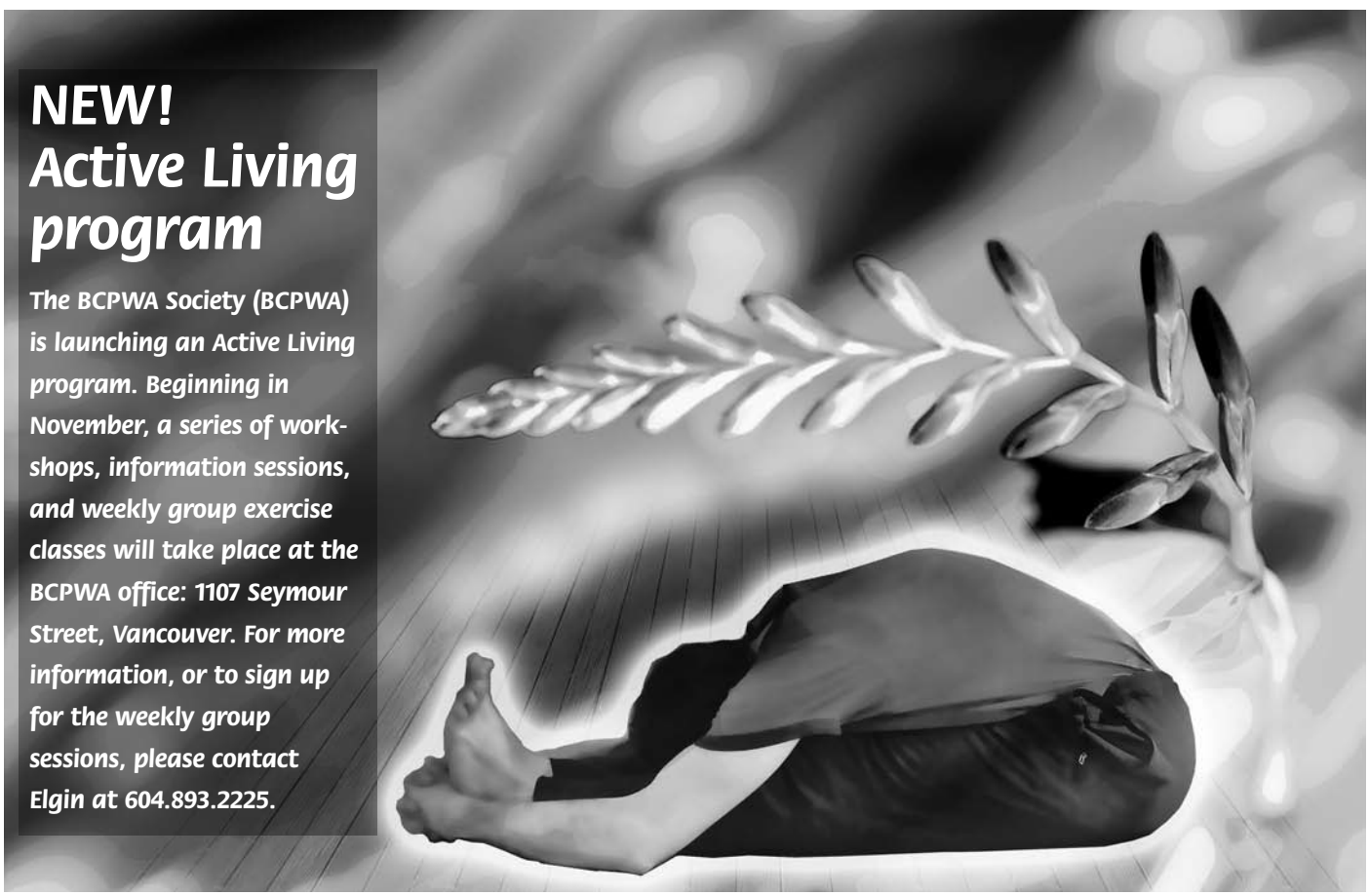
The mode and intensity of exercise are important considerations when embarking on a healthier lifestyle. Most importantly, consult your doctor before starting any physical activity to determine the appropriate amount of exercise for you.

Exercise guidelines for PWAs vary depending on the stage of infection, medications you're taking, functional capacity, and symptoms. Typically, one hour of exercise three days a week is recommended. The session should include 30 minutes of low intensity cardio exercise, such as walking, biking, or swimming at a comfortable pace. An additional 30 minutes of resistance exercises such as lunges, sit-ups, and push-ups is also recommended.

You don't need a gym membership to exercise, especially if finances are a concern. You can target most, if not all, muscle groups by using common household objects as weights. Try using a can of soup as a weight to do bicep curls, flys, and arm extensions. You can also incorporate small exercises throughout the day, such as trading in your desk chair for a balance ball to improve core strength.

Most importantly, be as active as you can. Start slow and increase intensity as your fitness level improves. You may feel a bit sore at first, but be persistent. At the same time, don't push yourself more than your body can handle. In the end, you'll feel healthier and happier for your efforts. ⊕

***Kristi Serwa** is a recent graduate from the faculty of Human Kinetics at UBC, specializing in Kinesiology.*



treatment. information

TREATMENT INFORMATION PROGRAM MANDATE & DISCLAIMER

In accordance with our mandate to provide support activities and facilities for members for the purpose of self-help and self-care, the BCPWA Society operates a Treatment Information Program to make available to members up-to-date research and information on treatments, therapies, tests, clinical trials, and medical models associated with AIDS and HIV-related conditions. The intent of this project is to make available to members information they can access as they choose to become knowledgeable partners with their physicians and medical care team in making decisions to promote their health.

The Treatment Information Program endeavours to provide all research and information to members without judgment or prejudice. The program does not recommend, advocate, or endorse the use of any particular treatment or therapy provided as information. The Board, staff, and volunteers of the BCPWA Society do not accept the risk of, or the responsibliity for, damages, costs, or consequences of any kind which may arise or result from the use of information disseminated through this program. Persons using the information provided do so by their own decisions and hold the Society's Board, staff, and volunteers harmless. Accepting information from this program is deemed to be accepting the terms of this disclaimer.

Good eats and good times in community gardens and kitchens

by Louisa Lee

As I ride on the bus from the farm at the University of British Columbia (UBC) to Vancouver's Downtown Eastside (DTES) with three Aboriginal Elders, one of the Elders says to me, "This program changed my life. I eat a lot healthier now with lots of fresh fruits and vegetables in my diet. I used to eat really bad. As kids, we would go to the store every week and get pop and chips."

This grandmother is referring to the Urban Aboriginal Community Kitchen Garden Project (UACKGP)—a Vancouver Native Health Society project that started in spring 2006. The UACKGP is located on traditional Musqueam territory at the UBC Farm and is an oasis of sustainability. This combination of community garden and kitchen not only supports healthy eating in a social atmosphere, it also provides participants with cultural and spiritual connections back to the land through gardening, seasonal harvesting, and eating from the land.

Healthy cooking in community kitchens

A community kitchen is a group of individuals who meet regularly to cook healthy, nutritious

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meals together. Everyone has a say in what to eat and how to prepare it, and shares in meal planning, shopping, and cooking activities. The only requirement under this model of community food sharing is an interest in food. Because of the focus on home-cooked meals, kitchen members often spur one another to try new foods and to develop healthier eating habits.

In the DTES, community kitchens are a creative, healthy alternative to food handouts: they're a hand up rather than a handout. The community kitchen format relies less on donated food. While some donated foods such as whole grain rice and pastas, low sodium canned goods, and nut butters are considered healthy and nutritious, the majority of donated food items have limited nutritional value, such as sugary pop and fruit drinks, high fat pastries, high carbohydrate white bread and pastas, high sodium canned soups, and deli meat sandwiches.

Many organizations have a mandate to feed the hungry in the DTES, but nutritional health often takes a back seat. The community kitchen model is a food security strategy that addresses both health and hunger. The Fresh Choice Kitchens program of the Greater Vancouver Food Bank Society (GVFBS) and the Aboriginal Diabetes Awareness, Prevention and Teaching program (ADAPT) of Vancouver Native Health Society are prime examples of organizations that have embraced the community kitchen model and now lead the way by providing health-conscious programming for community kitchens in the DTES.

Since 1996, the GVFBS has had a community kitchen project. Today, in the DTES, Fresh Choice Kitchens facilitates and supports about 15 community kitchens. The Fresh Choice Kitchens program also provides leadership training for people wanting to start their own community kitchens.

Similarly, Vancouver Native Health Society is helping people eat better through its ADAPT program, by supporting healthy behaviour change and building community capacity. A couple of ADAPT community kitchen members have already started their own community kitchen groups in their residences.

Fresh produce from community gardens

The other component of healthy eating is community gardens, where groups of people plant and cultivate a plot of land. These gardens provide access to fresh produce and offer satisfying exercise. They also promote neighbourhood improvement, a sense of community, and connection to the environment. Gardeners from youth to elders have the opportunity to experience the source of their food, eating their garden grown fruit and vegetables while developing friendships and learning from one another.

On the UBC Farm, UACKGP participants from the DTES maintain almost one acre on the 40 acre farm. During growing season, garden participants from the DTES access the UBC Farm garden through vanpooling or bus fare provisions. At the Farm, they participate in traditional Aboriginal activities: gardening, foraging, identifying edible and medicinal plants, cooking, preserving, and storing foods.

The pairing of the garden with community kitchens reflects the Aboriginal tradition of communal eating during ceremonial gatherings. The UACKGP also has a staff cultural coordinator to ensure that Coast Salish traditions around food, harvest, and ceremonies are observed.

The UACKGP is moving urban Aboriginal people to greater levels of self-sufficiency with respect to food. The project is gearing up for its next phase of growth and expansion by training peer leaders to work in gardens closer to home.

There are many reasons to get involved in a community kitchen, garden, or both. Community kitchens and gardens invite people to help themselves, each other, and contribute to their communities. And joining a community kitchen or garden can be an important first step in an individual or family's journey to health.

With the rising costs of food and fuel, as well as our efforts to promote a greener world, growing your own food and sharing the cost of a nutritious meal are very sound ideas.

Finally, there is a tremendous feeling of accomplishment in growing, eating, and sharing sunflower seeds, leeks, garlic, radishes, snow peas, cabbage, lettuce, spinach, onions, sweet corn, pumpkin, zucchini, carrots, oats, ceremonial tobacco, white sage, tomatoes, celery, basil, blueberries, salmon berries, strawberries, blackberries, melons, and much more! ⊕

PROGRAM INFORMATION

For information about the Urban Aboriginal Community Kitchen Garden Project (UACKGP), or the Aboriginal Diabetes Awareness, Prevention, and Teaching (ADAPT) program, contact Vancouver Native Health Society at 604.254.9949.

Other resources:

- The Environmental Youth Alliance has a list of community garden projects in Vancouver you can join: www.vancouverurbanagriculture.ca/communitygardens1.html
- City Farmer has a list of community gardens in Greater Vancouver and Victoria: www.cityfarmer.org/vanccomgard83.html
- Fresh Choice Kitchens, a website highlighting the food security initiatives of the Greater Vancouver Food Bank Society, has a database of local community kitchens you can join: www.communitykitchens.ca

***Louisa Lee** is the program coordinator and dietitian for the Aboriginal Diabetes Awareness, Prevention and Teaching program (ADAPT) at the Vancouver Native Health Society.*

ONE year later: LISA Project reaches 500 interviews!

The Longitudinal Investigations into Supportive and Ancillary Health Services Project (or LISA) was launched in July 2007 by the B.C. Centre for Excellence in HIV/AIDS.

The aim of this three-year project is to examine the effects of various supportive health services on the health status of HIV-positive persons on medications. Data is collected through face-to-face interviews, allowing the opportunity for people living with HIV to voice the challenges, concerns and successes they face in daily life. The project will also look at differences in services by region, gender, and vulnerable groups.

Some results to date about the participants

- **25 percent women / 75 percent men**
- **33 percent Aboriginal**
- **Median age: 46 years**
- **91 percent of participants are currently on HAART**
- **61 percent of participants have a suppressed viral load**
- **77 percent of participants have CD4 counts above 200 cells/mm3**
- **68 percent of participants have good medication adherence (over 80 percent of the time)**
- **23 percent of participants are currently employed**
- **35 percent of participants live in stable housing**
- **Quality of life scale showed that participants have high levels of life satisfaction and trust in HIV care providers, and low levels of medication concerns**

LISA publications in the works

- Clinical outcomes and quality of life: a preliminary look at HIV-positive participants enrolled in a DOT program
- Better body image, better health among HIV-positive persons on HAART: addressing the roles of stigma and depression
- HAART-full of life: variations in quality of life among Aboriginal and non-Aboriginal peoples ever on antiretroviral therapy in BC
- Patient understanding about resistance and the implications for treatment success
- Likelihood of testing for HIV drug resistance:characterization by socio-demographic and clinical factors
- Home is where the HAART is: an examination of the factors affecting neighbourhood perception for people living with HIV/AIDS
- Socio-demographic and behavioral correlates of temporal sexual abstinence among individuals on HAART

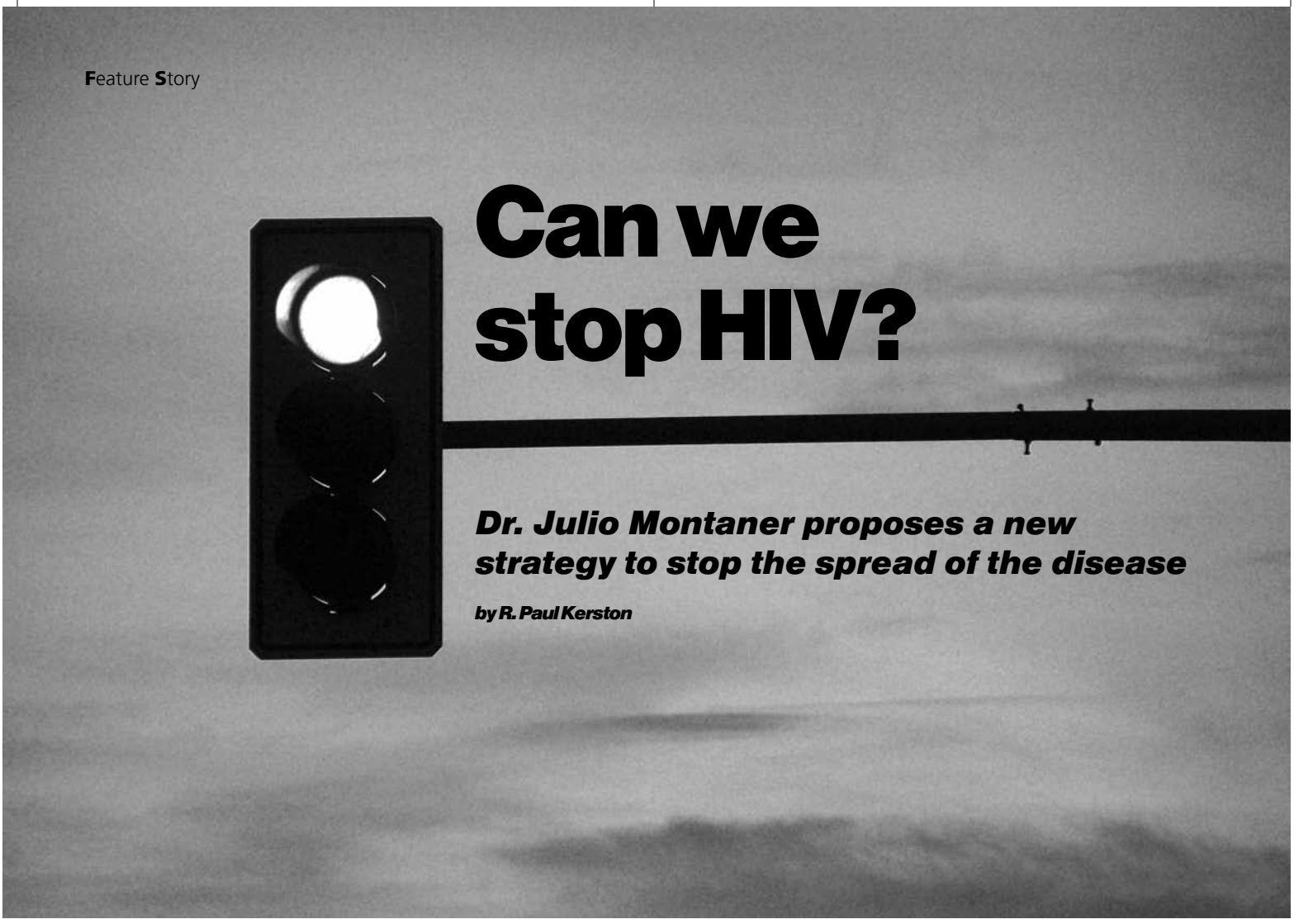
How to participate?

1) Interview in person at one of these Vancouver Lower Mainland locations:
   - **St. Paul's Hospital** IDC Clinic in Vancouver
   - BC Women's Hospital **Oaktree Clinic** in Vancouver
   - Surrey North Community Health Centre **Positive Haven** Program
   - **Spectrum Health Clinic** in Vancouver
   - Downtown Community Health Centre **MAT/DOT** Program in Vancouver
   - BC Aboriginal HIV/AIDS Society **Healing Our Spirit** in Vancouver
   - Vancouver Native Health Society **Positive Outlook Program** in Vancouver
2) Interview in person in Victoria at AIDS Vancouver Island or in Prince George
3) Phone interview at your convenience, which can be arranged once we have received your signed consent form
4) Interview in your community with a local public health nurse

LISA
Longitudinal Investigation into Supportive & Ancillary Health Services

British Columbia Centre *for* Excellence *in* HIV/AIDS

Eligible participants are those who are HIV-positive and started antiretroviral therapy after 1996.
For more information or to get involved, please contact Eirikka Brandson at 604.682.2344 ext. 66067 or 1.800.665.7677 (press 5 and ask for LISA).



Can we stop HIV?

Dr. Julio Montaner proposes a new strategy to stop the spread of the disease

by R. Paul Kerston

How do we stop HIV? Some say we can't; others disagree. After 25 years of research, we're not close to a cure or a vaccine. And if we accept that prevention and behaviour change is a difficult business at best—an endless array of strategies to turn knowledge (about condom use) into action (using them)—then we need to find other solutions.

So, is there an answer?

One option that has recently been put forward is to treat more HIV-positive individuals who are medically eligible; the rationale behind this idea is that widespread antiretroviral treatment would not only contribute to a healthier HIV-positive population, it would also reduce the spread of the disease.

Dr. Julio Montaner presented his proposal at the XVII International AIDS Conference in Mexico in August. Dr. Montaner has many titles: professor of medicine and chair of AIDS research for Providence Health Care – University of British Columbia; director of the BC Centre for Excellence in HIV/AIDS (BC-CfE); and more recently, president of the International AIDS Society. His research and clinical expertise on HIV is recognized worldwide.

A "combination" approach

"The key word emerging from this conference is combination," Dr. Montaner said at the conference's close. "Combination prevention strategies tailored to decrease HIV transmission; combination antiretroviral therapy to dramatically reduce morbidity and mortality among those infected; combination antiretroviral therapy to reduce community viral load as an aid to prevention; combination strategies to enhance HIV testing; and combination strategies to reduce poverty, homelessness, and discrimination."

What Montaner is advocating is not a single solution but an additional strategy to manage this epidemic: greater use of highly active antiretroviral therapies (HAART) targeting individuals that, according to medical guidelines, should be on treatment but are not. In other words, his goal isn't to get everyone on treatment, it's to get those who should be treated on to appropriate regimens.

HAART requires three or more antiretroviral drugs, taken daily, for life. In recent years, however, twice and multiple daily doses have given way to once-per-day regimens, while refrigeration requirements and food restrictions are falling away. Side effects are better understood and, to some extent, easier to manage. Most importantly, an effective HAART regimen reduces viral loads to undetectable levels, rendering HIV a chronic but manageable disease.

Roughly 50 percent of those in medical need in the province are believed to be on HAART. Montaner developed a

mathematical model to predict the potential effects of expanding treatment. An increase in coverage from 50 percent to 75, 90, or 100 percent of those in need could lead to a decrease in the annual number of new HIV infections by over 30, 50, and 60 percent, respectively.

Montaner cautions that these figures are estimates. "When you talk about HAART stopping transmission, then you're talking about an absolute," he says. "Absolutes are very difficult to prove. Decreasing is a fact; stopping is full of qualifiers."

Supporters and supportive evidence

One proof of the potential viability of this theory is the fact that mother-to-child transmission has been reduced to near zero levels where the expectant or new HIV-positive mother has been placed on appropriate antiretroviral treatment. In addition, HAART has decreased rates of transmission among serodiscordant couples (where one person is HIV-positive and the other remains HIV-negative).

This initiative needs to be buried within a larger structure so that people ... [will] not be stigmatized.
– Glyn Townson, chair, BCPWA

An impressive array of individuals and organizations support this expanded approach to HIV management, including: the Joint United Nations Program on HIV/AIDS, the World Health Organization, the US-based National Institutes of Health and its associated National Institute on Drug Abuse, the International AIDS Society, former US President Bill Clinton, and Canada's former Ambassador to the United Nations and special envoy for HIV/AIDS in Africa, Stephen Lewis.

There is good reason to support this approach. The rate of undetectable plasma viral load among those monitored is currently around 85 percent or greater in BC. And these are promising figures with which to go forward with an expanded treatment proposal.

Challenges in the DTES

Yet, people who are medically eligible for HAART in Vancouver's Downtown Eastside (DTES)—a mere 13 blocks from the BC-CfE, where HIV drugs are distributed at no cost to eligible PWAs through the Drug Treatment Program—aren't accessing antiretroviral treatment. For many people in the DTES, basic survival needs—safe, affordable housing and proper nutrition—are more pressing priorities. Some need help dealing with abusive relationships before they can consider treatment. Others need nutritional supplements before they can take antiretrovirals.

Still, Montaner concludes that we can stop HIV with this proposed combination approach. "First, you need a social and legislative environment that will allow you to create a positive environment so that people with HIV—plus people at risk for or vulnerable to HIV—will feel comfortable coming forward for testing and to be identified," he says. "Second, there has to be intensification of the prevention effort, and we have to measure the efficacy of our interventions." In other words, it doesn't matter how many people know what they need to do, it's whether they actually do it.

Programs need to be tailored to the needs of the community. Elgin Lim, the director of prevention programs with the BCPWA Society (BCPWA), notes that standard procedures for treatment and care don't work for all segments of the population. "I'm encouraged to see efforts are being made to respond to the needs of the DTES population," he says. "It appears that the daily routines of DTES residents are being considered and programs are being tailored to respond to their specific requirements."

The goal isn't to get everyone on treatment, it's to get those who should be treated on to appropriate regimens.

Can expanded HAART work in the DTES?

Many healthcare workers in the DTES support an expanded use of HAART because despite the investment to date, more needs to be done. Dr. Sue Burgess, a physician working in the DTES, believes the solution won't come with more stovepipe organizations—agencies providing a narrow range of services—that don't know one another, don't work together, are in flux, or aren't serving people effectively. "People aren't served when the organization isn't open; they aren't served when they get dropped for not showing up," she says. In society, such behaviour isn't tolerated, but in this community it may be unavoidable.

On the flip side, service providers sitting behind their desks in offices, waiting for appointments or drop-ins won't work either.

Expanding HIV treatment in the DTES is easier said than done. Treating HIV requires trust between healthcare providers and the individuals. This means respecting the individual, "not owning them as a client until they become 'difficult' and then abandoning them," Burgess says. Among the DTES population, "forms given to patients don't work;

pills given to patients don't work," she says. "Saying 'go get tested' doesn't work, either."

In addition, budget limitations restrict client follow-ups outside the clinic to certain hours, and these aren't necessarily times of the day when people in the DTES can be easily located. Nevertheless, Burgess insists that if people can't make it to a clinic twice a month, it's possible to see 30 of them on the street twice a week to make adjustments to medication dosage and do blood work.

Clearly, strategies need to be resource-light rather than resource-heavy. It requires efficiency, not an army of people in the field. If anything, the fewer number of healthcare providers who can provide multiple services, the better.

A more multi-pronged, holistic approach

A multi-pronged, interdisciplinary approach may be the best bet, in particular for the DTES. The approach entails treatment, but also emphasizes social support and services for housing, infrastructure development, mental illness, and various co-morbidities. Burgess says that healthcare teams must be dedicated to helping patients with the four basic principles of HIV: know your status; know your CD4 count; get treatment, when indicated; and once on treatment, maintain adherence.

HAART expansion can help, but those already working in the community firmly believe they have a lot of lessons learned and a lot of localized experience to offer.

Montaner agrees that those on the frontlines need to be involved. "The current thinking is that implementation of the expansion of HAART will not be a BC-CfE role and responsibility," he says. "BC-CfE will be acting as an intelligence resource, as a consultative resource, and as a monitoring resource." He expects health authorities and the established clinics in the DTES and elsewhere will be tasked with expanding HAART.

The BC government appears to be behind this initiative as well. Minister of Health, George Abbott, sent an email in lieu of being interviewed for this article. He noted that the province set a goal in 2003 to improve HIV treatment coverage by treating 25 percent more HIV-positive people by 2008.

"Although we've met and exceeded this goal, we know there is still more work to be done," Abbott stated. "As part of this work, we continue to look at what may be required to foster a broader uptake of HIV care and treatment, and what outcomes might be expected from such efforts. We are also looking at the body of evidence supporting the changes in treatment guidelines recently proposed by the International AIDS Society, and will work with the BC Centre for Excellence in HIV/AIDS to determine how this evidence might inform any changes here in BC."

Montaner is encouraged by this statement, and he's confident that the government is committed to making the strategy happen, although the recent economic downturn is expected to delay approvals and implementation plans.

BCPWA raises concerns

BCPWA has been involved and vocal throughout the development and proposed implementation of this initiative. BCPWA board members and key staff attended several stakeholder meetings coordinated by the BC-CfE, asking questions about the intent, targets, and methods surrounding the strategy. Also, Dr. Silvia Guillemi, a physician with the Immunodeficiency Clinic at St. Paul's Hospital in Vancouver, visited BCPWA in early July 2008, to address questions about the project.

One person who expressed concerns was BCPWA chair Glyn Townson. He argued that you can't expect people to worry about taking pills when they don't have a roof over their head, don't know where their next meal is coming from, and their welfare cheque—if they even qualify as a recipient—doesn't cover expenses.

"What we need is something seamless. Whether it's hepatitis C or HIV, it's basic medical health care," says Townson. "We need something that doesn't further stigmatize people. This initiative needs to be buried within a larger structure so that people might be there for any number of reasons and not be stigmatized." In other words, someone could be going to a clinic to access housing or other social services, or be there to collect medication. Walking into an HIV-identified or other specialty clinic is a public announcement.

Although expanded HAART access raises many associated social and health-related issues—still unresolved—assuming this project proceeds, it represents an important step forward that could turn the tide in fighting the HIV/AIDS epidemic in BC. It could also prove to be a model for other provinces and countries around the world. ⊕

Read BCPWA's position paper on HAART as prevention: a positive perspective

www.bcpwa.org/about_us/position_papers/

***R. Paul Kerston** is BCPWA's treatment outreach coordinator and community representation and engagement (CRE) coordinator.*

Treatment news from the International AIDS Conference

by Zoran Stjepanovic

While there were no significant treatment breakthroughs presented at the XVII International AIDS Conference in Mexico City, some interesting developments show promise.

New drug developments: RDEA806 and IDX899

In a late-breaking presentation at the conference, researchers presented information on two non-nucleoside reverse transcriptase inhibitors (NNRTIs, or non-nukes) that have shown effectiveness and favourable safety profiles in seven-day monotherapy trials. Forty-eight untreated HIV-positive men participated in a phase II trial. RDEA806 produced a rapid decline in HIV viral load, with a mean reduction of about 1.8 logs, compared to a 0.2 log reduction in the placebo group. There were no serious adverse events, no clinically significant abnormalities, and no discontinuation of treatment due to side effects.

Researchers noted that in pre-clinical testing, RDEA806 showed antiviral activity against a variety of HIV strains that were resistant to other NNRTIs and also had a high barrier to resistance—meaning that more viral mutations are required before the treatment's effectiveness is impacted. So far, information looks promising, and this drug will proceed to a larger multi-dose phase II study.

In a second study, investigators found that IDX899 was well tolerated and demonstrated strong antiviral activity in early phase II trials. This study had a smaller sample size, involving only 30 individuals. Participants were randomly assigned to receive either IDX899 monotherapy at one of three different doses or a placebo for seven days. The average decline in viral load was about 1.8 logs across all IDX899 doses compared with a 0.05 log increase in the placebo group. The mean CD4 cell count increased by about 65 cells in all three IDX899 groups, while it fell by 84 cells in the placebo group. Look for more information about these drugs in the future.

News from clinical trials: raltegravir versus efavirenz

Raltegravir (Isentress) is an integrase inhibitor, a new class of HIV drug that is being studied in both treatment-experienced and in treatment-naïve individuals. Efavirenz (Sustiva) is an NNRTI and has been around for a few years. Researchers compared raltegravir to efavirenz at 96 weeks among 198 HIV-positive individuals: 160 were given raltegravir and 38 were given efavirenz.

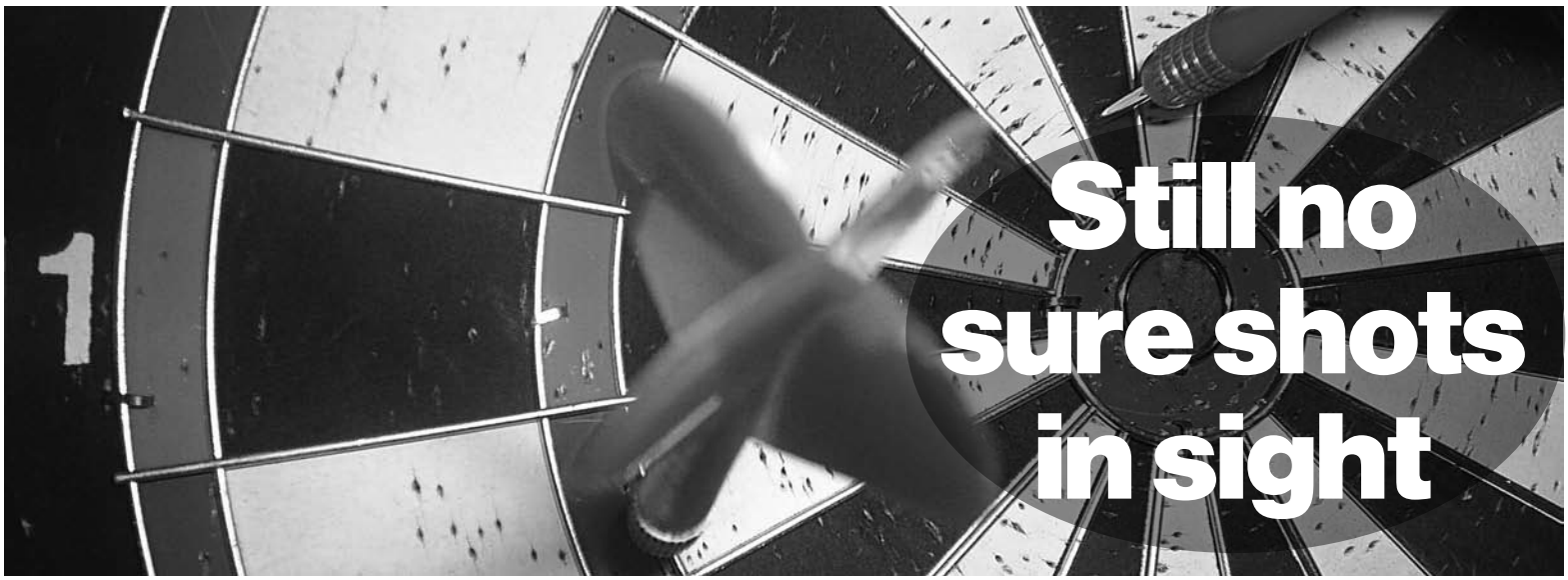
After 96 weeks, raltegravir and efavirenz remained neck and neck in terms of effectiveness. HIV viral load was suppressed to below 400 copies/ml in 84 percent of individuals in each group and to below 50 copies/ml in 83 percent and 84 percent in the raltegravir and efavirenz groups respectively. Increases in CD4 cells counts were also very similar in both groups: on average, a 221 CD4 cell count increase for participants taking raltegravir and a 232 CD4 cell count increase for those taking efavirenz.

As for side effects, 51 percent of people in the raltegravir group experienced adverse events, compared to 74 percent of people in the efavirenz group. Side effects included nausea, dizziness, headache, diarrhea, abnormal dreams, insomnia, and nightmares.

Tenofovir and kidney toxicity

Tenofovir (Viread) is a well known antiretroviral drug typically used in first-line drug regimens; although a rare occurrence, this treatment can occasionally cause serious kidney toxicity. Investigators presented data showing the frequency of kidney toxicity in HIV-positive individuals taking tenofovir. Kidney toxicity was more likely to occur in HIV-positive individuals taking tenofovir if they were simultaneously controlling high blood pressure with potentially kidney toxic drugs and/or if they were also taking protease inhibitors (PI). The researchers outlined the predictors of developing nephrotoxicity, including taking nephrotoxic medications, other medical co-morbidities, high blood pressure, chronic pain, previous or current PI use, and history of opportunistic infections. ⊕

***Zoran Stjepanovic** is the BCPWA Society's treatment information coordinator.*



Still no sure shots in sight

Report on vaccines from the International AIDS Conference

by David Yemchuk

The XVII International AIDS Conference in Mexico City provided an excellent opportunity to discuss AIDS vaccine research. At this conference, the International AIDS Vaccine Initiative (IAVI) unveiled their 2008 AIDS vaccine blueprint entitled *A Challenge to the Field, A Roadmap for Progress*. Three central areas of focus at the conference included current challenges in vaccine development, knowledge about HIV vaccine science to date, and emerging strategies in this field.

HIV vaccine research and development face several unique scientific challenges. First and foremost, the genetic code of HIV is extremely diverse, with multiple strains emerging through continuous viral mutation and adaptation. A successful vaccine requires protection against exposure to a multitude of strains or subtypes. Second, HIV targets CD4 cells—the very source of the body's immune response. Third, HIV evades host immune surveillance by altering infected CD4 cell surface markers, rendering it unrecognizable to host antibodies. And fourth, after a CD4 cell is infected and viral DNA is permanently incorporated into the host genome, a period of latency follows; once the infected lymphocytes are activated, new HIV particles are produced.

The disappointing 2007 announcement of the failure of MRKAd5, a cell-mediated HIV vaccine, stimulated a great deal of discussion within the HIV/AIDS community. The STEP trial was designed with the hypotheses that the vaccine would decrease HIV acquisition rates, and that viral load would decrease among individuals who had seroconverted after being vaccinated. Unfortunately, the vaccine was ineffective on both counts.

But, what has happened in the STEP study since these results were released? And what are some of the lessons learned from this pivotal trial? Long-term effects from the MRKAd5 vaccination will be studied in the unblinded trial volunteers. In addition, researchers will further analyze findings from the STEP study by investigating reasons for failure, such as confounding variables like herpes simplex type-2 status and altered risk behaviour over time. Control of viremia will be studied in select volunteers, and mechanisms for enhanced infection will also be investigated. The STEP study has also reinforced the need for researchers to refine animal models in view of their limitations, to develop better functional assays, to review vector immunity, and to strengthen communication and engagement within the AIDS vaccine community.

Future research strategies in the vaccine field include a collaborative, cross-disciplinary approach to develop and test new ideas and innovative technologies. In addition to improved assays and pre-clinical models, efforts are being made to better understand both the correlates of immune protection and the human immune response to HIV. Clinical research will focus more heavily on solving the neutralizing antibody problem, as well as unraveling the mechanisms for cell-mediated immunity.

A significant intermediate step will be to demonstrate that an AIDS vaccine does provide benefit in humans. Vaccine candidates will need to meet more rigorous criteria, and emphasis will be placed on smaller efficacy trials. Clearly, the tangible goal of achieving a safe and effective vaccine remains the world's best hope for ending the AIDS pandemic. ⊕

***David Yemchuk** is a third year pharmacy student at UBC and a Treatment Information Program volunteer with the BCPWA Society.*

Dangerous liaisons

A recent study examines why HIV-positive men who have sex with men are getting hepatitis C

by Sean Hosein

Over the past several years, reports from Australia, Western Europe, and the US reveal an emerging trend of outbreaks of HCV infection–hepatitis C–among HIV-positive bisexual and gay men who don't inject drugs. These findings suggest the possibility that HCV may be a sexually transmitted infection (STI). To find out why some men who have sex with men (MSM) are susceptible to HCV, researchers in the UK conducted a study with extensive interviews in addition to a molecular analysis of HCV.

In the past, sexual transmission of HCV was considered uncommon. That conclusion was based on research involving HIV-negative heterosexual couples in monogamous relationships where one partner was HCV-positive. Indeed, sexual transmission of HCV in these couples has traditionally been considered low risk.

However, reports of HCV infections among a number of HIV-positive MSM with no history of injection drug use have emerged in recent years. Some researchers concluded that sexual transmission of HCV was a possibility (see "A new twist," *living*⊕, Nov/Dec 2007).

The big question

Researchers are questioning why these outbreaks of HCV are occurring among HIV-positive MSM but not among HIV-negative MSM men who engage in the same sexual practices. So far, there haven't been any detected outbreaks of HCV among HIV-negative men who don't inject street drugs. One theory is that these HIV-negative men engage less frequently in risky behaviours or have fewer encounters with the healthcare system. Another possibility is that HIV infection makes some people more susceptible to HCV infection.

Support for this idea has arisen because studies have found that the immune system in the intestinal tract of HIV-positive people is particularly weak. This weakness could also be present in the anus and rectum. It may also explain why HIV-positive people are susceptible to HCV infection regardless of CD4 cell counts.

Another factor could be that high levels of HCV have been found in the semen of HIV/HCV co-infected men. Therefore, their risk of transmitting HCV through unprotected sex would be relatively high.

Studies have also found that STIs are common in some MSM. Indeed, for the past several years, outbreaks of syphilis and gonorrhea have been reported among HIV-positive MSM in several high-income countries, including Canada. Many STIs can cause sores or lesions which can weaken local immunity in the genitals. These factors increase the risk that STIs facilitate the transmission of HCV.

Drugs and risky sex play a role

As part of a study tracing the origins of a recent outbreak of HCV in HIV-positive men, researchers in the UK asked research participants to complete detailed questionnaires, with questions about the men's sex lives and substance-using behaviour. Sixty

Rapid liver damage after recent HCV co-infection

HCV infection of the liver triggers a process of gradually increasing damage to that organ. With HCV, healthy liver tissue is replaced with inflamed and scarred tissue (fibrosis). Among people with HCV, it can take up to several decades before severe liver damage, liver cancer, and death occur.

HCV-related liver damage can result in many complications, including kidney dysfunction and damage. When HCV-positive people are given a kidney transplant, they also receive drugs that suppress their immune system so that it doesn't attack or reject the transplanted organ. But this immune suppression escalates HCV-related liver damage.

A similar effect is also noted in HCV-positive drug users who later become HIV-positive, as HIV also causes immune dysfunction.

A different picture appears in people whose immune systems are already suppressed when they become HCV-positive. In these cases, the consequences can be dire.

In reviewing cases of HCV infection that occurred later in people with immune dysfunction, researchers found that liver damage and death can occur in as little as three years after HCV infection. Such cases have included recipients of organ transplants, people with bone marrow problems, people with antibody deficits or other inherited immune deficiencies, and people who were infected with HIV via transfusion or needle stick injury.

Now reports have appeared of sexually transmitted HCV in high-income countries. In New York City, researchers interviewed and studied blood and liver samples from 11 HIV-positive men recently infected with HCV. The average profile of men in the study was mid-40s, with CD4 cell counts ranging from between 170 to 842, and with HIV viral loads below 100. None were alcoholics and none had symptoms of HIV or AIDS. All participants came to the attention of the research team because when they sought routine care, their liver enzyme levels were very high.

Researchers found that ten of the men had recently engaged in receptive, unprotected anal intercourse, in some cases with many men. In the past year, none had any sexually transmitted infections known to cause ulcers or sores. Three of the men had recently injected crystal meth; one of them had shared injection equipment. Two others had shared equipment for snorting street drugs, on several occasions with several men. Five of the men identified no use of injection drugs or other street drugs.

Analysis of liver samples revealed, on average, a moderate degree of liver damage or fibrosis. This was graded on a scale from zero to four, and nine of the men had fibrosis graded at stage two. When looking at the liver samples under a microscope, technicians found dead regions and inflamed cells, and nearly all the samples looked similar. Such a degree of liver damage shouldn't occur after recent HCV infection. The study team calculates that liver damage occurs among those co-infected with HIV/HCV at a rate five times faster than in people who have HCV infection alone.

The researchers therefore recommend that physicians should perform "more intensive screening" for HCV infection in HIV-positive men.

men (54 percent of the group) completed the questionnaire. For comparison, researchers collected and analyzed health-related information from 130 HIV-positive men without HCV infection.

The study found that men who became infected with HCV were more likely to have engaged in unprotected anal sex (active or passive) with or without ejaculation, unprotected group sex, fisting, rimming, use of sex toys, and substance use.

Men with HCV were also more likely to have sex while under the influence of street drugs, particularly crystal meth, ketamine (special K), gamma hydroxybutyrate (GHB), poppers, ecstasy, and LSD. It's likely that when using these drugs, the men's judgment, critical thinking, and sense of safety were distorted. Such impaired judgment potentially places them at risk for HCV infection. Also, some of these street drugs can weaken the immune system and dry mucous membranes in the anus, thereby increasing the risk of developing cuts or abrasions, as well as STIs.

It is also possible that the men might have thought they had little to fear from other STIs because they already have HIV, and so they felt free to engage in unprotected sex with other HIV-positive men. Having unprotected sex with multiple partners increases the chance of exposure to more germs, including HCV.

The need for education

In light of all this, educational programs for HIV-positive people need to emphasize that the virus makes the body susceptible to many infections, including HCV. Unprotected intercourse also places HIV-positive people at risk for many STIs. The greater the number of unprotected sexual encounters, the greater the risk of exposure and transmission of HCV, HIV, and other STIs.

Furthermore, in people who are already HIV-positive, subsequent infection with HCV can result in accelerated liver damage, leading to painful complications and, in some cases, liver cancer and death. Indeed, doctors have reported that some people with HIV have died in as little as three years after becoming infected with HCV.

While there are treatments for HCV infection, they are, at best, unpleasant. Moreover, HCV genotype 1, the most common genotype found in North America, responds poorly to therapy in co-infected people. Indeed, it appears that only about 30 percent of HIV/HCV co-infected people with genotype 1 recover from HCV infection.

Overall, these should be compelling reasons to engage in safer sex, regardless of HIV or HCV status. And based on observations of MSM, unprotected intercourse may also pose a risk of HCV transmission to HIV-positive women as well. ⊕

Sean Hosein *is the science and medicine editor at the Canadian AIDS Treatment Information Exchange (CATIE) in Toronto.*

Love your liver

by Kristin DeGirolamo

The liver is the main organ in the body responsible for detoxifying substances we consume. It produces chemicals that break down food, alcohol, and drugs, eliminating toxins and cleaning our blood.

Mild liver inflammation and fat accumulation is known as fatty liver or liver steatosis. Normally, this condition is not serious since it does not interfere with liver function. When fatty liver is unrelated to alcohol use, it is known as non-alcoholic fatty liver disease (NAFLD).

A more severe form of fatty liver disease is non-alcoholic steatohepatitis (NASH). NASH is characterized by more severe inflammation, liver damage, and the formation of fibrous tissue, or cirrhosis. Cirrhosis can be progressive, leading to irreversible scarring or liver cancer.

Usually, the risk of developing NAFLD is associated with obesity and metabolic syndrome. Excess weight, in this case, is measured by a body mass index (BMI) greater than 25kg/m^2, and a waist circumference greater than 102cm for men. High caloric intake, poor diet, and lack of exercise are also factors in obesity and contribute to NAFLD. People with metabolic syndrome frequently have high cholesterol levels, high blood pressure, as well as insulin resistance or diabetes.

Non-alcoholic fatty liver disease is extremely common among people with HIV. A recent Italian study from the University of Modena on the prevalence and risk factors of NAFLD found disproportionately high rates—between 30 – 40 percent—in HIV-positive participants. It is unclear whether rates of NAFLD within the HIV-positive population are caused by the virus itself or the antiretroviral (ARV) treatments, although nucleoside reverse transcriptase inhibitors are known to increase blood glucose levels, lipids, insulin resistance, and mitochondrial toxicity.

Earlier research findings attempting to uncover the source of NAFLD in HIV-positive individuals were published in the August 2007 edition of the *Journal of Acquired Immune Deficiency Syndromes*. In this study, HIV-negative and HIV-positive participants with confirmed NAFLD were compared for severity and type of liver damage, insulin resistance, BMI, waist circumference, dietary intake, and physical activity. The two groups were similar in terms of age, liver histology, insulin resistance, diet, and exercise.

While the overall rates of NAFLD between the two groups were similar at baseline, risk factors for NAFLD differed. The HIV-negative group exhibited a higher BMI and percentage of body fat and lower levels of physical activity. The HIV-positive group displayed almost double the level of blood triglycerides. This finding is likely attributed to 96 percent of the cohort being on ARVs—including 50 percent on protease inhibitors—which increase blood cholesterol levels.

Findings from this study confirm that HIV-positive people are at a higher risk for NAFLD, even in the absence of typical risk factors. However, the data remains unclear on whether HIV or ARVs are the root cause of the NAFLD. The virus can cause changes in lipid profiles and metabolism, and other studies show a correlation between high viral loads and higher cholesterol and triglyceride levels.

Some of the signs of NAFLD are fatigue, malaise, and a dull ache in the upper right area of the abdomen, although many people exhibit no obvious symptoms. In more severe cases, lack of appetite, weight loss, swelling, itching, and yellowing of the skin can indicate serious liver problems.

Maintaining a healthy diet and body weight, exercising, and limiting alcohol and other toxic substances is important both for the treatment and prevention of NAFLD. Getting your cholesterol checked yearly by your healthcare provider is also recommended. ⊕

***Kristin DeGirolamo** is a third year pharmacy student at the University of British Columbia.*

New study to test tailor-made treatment

by Suzanne McCarthy and Jennifer Chung

Researchers at the CIHR Canadian HIV Trials Network (CTN) are investigating a cutting-edge HIV immunotherapeutic vaccine that uses the body's immune system to fight HIV. This tailor-made treatment could allow people living with HIV to take a break from their antiretroviral drugs.

Since its introduction in 1996, highly active antiretroviral therapy (HAART) has significantly reduced the number of serious HIV-related infections, helping many people live longer and healthier lives. However, while HAART improves immune function and raises CD4 cell counts, severe complications such as toxicity and drug resistance are common. HAART is also limited in its effectiveness since it suppresses HIV but doesn't enhance the immune system's ability to control HIV replication.

Given HAART's shortfalls, Dr. Jean-Pierre Routy of the Montreal Chest Institute highlights "a need for new treatment options, such as immune-based therapies that are designed to boost an individual's immune response to HIV."

Dr. Routy is leading a new study testing AGS-004, an immunotherapeutic agent composed of an individual's white blood cells and a sample of his/her HIV strain. Through a process known as leukapheresis, participants' dendritic cells (a type of white blood cell that defends the body from infections) are mixed in the lab with a sample of their HIV genetic material. This customized treatment is then injected back into the individual. Researchers believe that the dendritic cells—exposed to HIV in the lab—will direct the other immune cells in the body to recognize and fight the virus once they are re-introduced into the body.

"If this immunotherapy is effective, it will be good news for people on antiretroviral therapy because it may allow them to take a break from medication, whether it be six months, nine months, or a year," says Routy.

Dr. Evan Collins, a member of the CTN's Community Advisory Committee, says immune-based therapy for people living with HIV is an area of research that requires much needed data and is welcomed by the community.

"All the treatments we currently have available are ones that try to kill or suppress the virus," says Collins. "We hope that the immune system will then recover because it's no longer spending all its effort fighting the virus. Dr. Routy's research is different because it tries to teach our immune systems to fight the virus."

This is a two-year, open label study (where both the investigator and participant know who is receiving the experimental drug), recruiting 38 participants at 11 sites in Calgary, Hamilton, Montreal, Ottawa, Toronto, and Vancouver. ⊕

***Suzanne MacCarthy** replaces **Jennifer Chung** as the information and communications coordinator at the CIHR Canadian HIV Trials Network in Vancouver.*

Trials enrolling in BC

CTN 239— Phase II study of AGS-004 an immunotherapeutic agent in combination with ART followed by ART interruption
BC sites: St. Paul's Hospital, Vancouver

CTN 237— Influenza vaccination strategies using Fluviral in HIV-positive adults
BC sites: Downtown Infectious Diseases Clinic (DIDC), Vancouver

CTN 233— Pharmacokinetics of antiretroviral therapy (ARV) in HIV-positive women
BC sites: Children's and Women's Hospital, Vancouver; St. Paul's Hospital, Vancouver; DIDC, Vancouver

CTN 222— Canadian Co-infection Cohort
BC sites: DIDC, Vancouver; St. Paul's Hospital, Vancouver

CTN 214— Effect of a One-Year Course of HAART in Acute/Early HIV
BC sites: DIDC, Vancouver; Cool Aid Community Health Clinic, Victoria

CTN 194— Peg-Interferon and Citalopram in Co-infection (PICCO)
BC sites: St. Paul's Hospital, Vancouver; DIDC, Vancouver

To find out more about these and other CTN trials, visit the Canadian HIV Trials Network database at www.hivnet.ubc.ca or call 1.800.661.4664.

Winter bugs

Natural remedies that pack a powerful punch against the cold and flu

by Alix Mathias

The days get shorter, the air gets colder, and everywhere you turn someone is promoting the flu vaccine. Posters and pamphlets encouraging vaccination portray smiling, healthy people—utterly confident that they'll coast through the winter in perfect health. You've been on the planet long enough to know that, as with all advertising, these materials tell only one side of the story. Whether you vaccinate or not, there are also natural ways to protect yourself against cold and flu bugs.

The decision to get a flu vaccine is both personal and serious, especially if you're HIV-positive. Do your homework. Even those who recommend the flu vaccine are clear that it is not 100 percent safe or effective. Choosing which strains of flu will be used in each year's vaccine is, at best, a guessing game. Flu viruses mutate rapidly and most years, the strains that strike the worst aren't included in the vaccine.

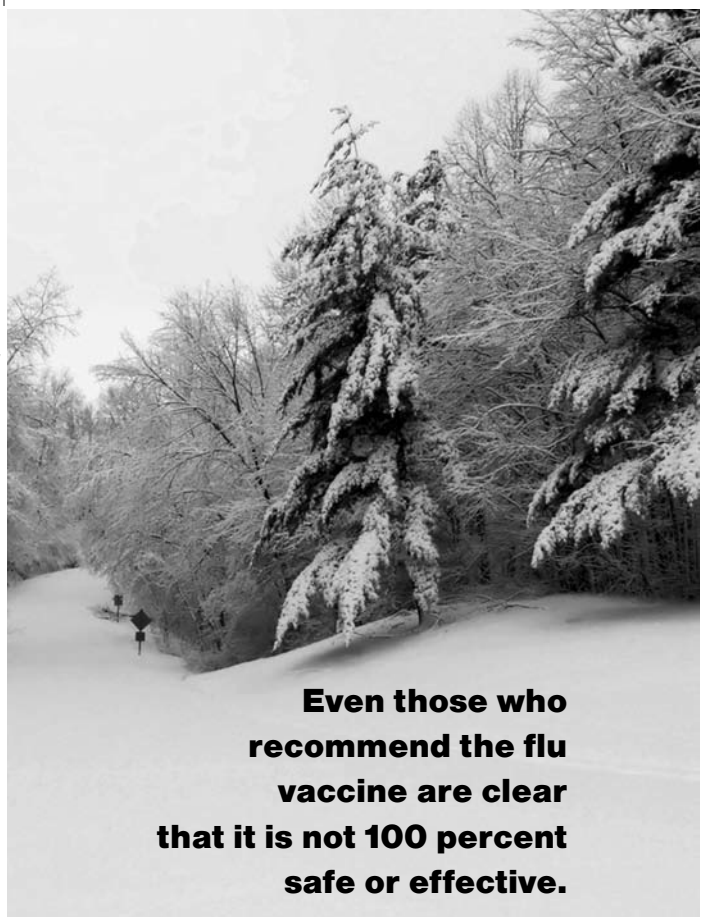
Safety is an issue. Mercury preservatives in the flu vaccine are a major concern. According to immunogeneticist, Dr. Hugh Fudenberg, if you've had five consecutive flu shots, your chance of developing Alzheimer's disease is ten times higher than if you had one, two, or no shots. The bottom-line is that we really have no idea what the long-term impact of vaccinating may be, or what medical problems it may create in the future.

While flu shots are generally recommended if you're HIV-positive, there are also natural treatments using common household products that pack a powerful punch against winter viruses.

First, there's hydrogen peroxide. We all have a bottle of the stuff at the back of our bathroom cabinet. A bottle of hydrogen peroxide (H_2O_2) in three percent solution is available at any drug store for a couple of dollars.

Administer a few drops of hydrogen peroxide into one ear. You may experience a mild stinging at first, as well as some bubbling. The hydrogen peroxide starts working within two to three minutes, eradicating the cold and flu virus. After the bubbling and stinging sensation subsides—usually within five to ten minutes—drain the remaining liquid onto a tissue or small towel and repeat the process in your other ear.

For the best results, begin this treatment within 12 to 14 hours of the onset of cold and flu symptoms, such as an itchy throat, runny nose, body aches, and fever. Early treatment seems to be about 80 percent effective in preventing the development of colds and flu.



Even those who recommend the flu vaccine are clear that it is not 100 percent safe or effective.

If you do get a cold, try a salt-water nasal rinse. Mayo Clinic asthma and allergy specialist James Li, MD suggests using a neti pot and salt-water solution to clear up nasal congestion due to a cold. A neti pot is a container designed to rinse the nasal cavity.

First, fill the neti pot with warm salt water (use sea salt) or an over-the-counter saline nasal solution. Standing over a sink, tilt your head to one side and place the spout of the neti pot in your upper nostril. The salt water will flow through your nasal cavity and out the lower nostril. Repeat on the other side.

You can buy a neti pot at your local health food store or from your naturopathic doctor. But if you don't want to spend $20—or if the procedure seems too intense—you can prepare the solution in a cup and use a teaspoon to fill your nostril with a small amount of solution.

Remember, rest and plenty of fluids will do you a world of good. Save your money and don't buy useless over-the-counter remedies that just suppress symptoms. If you find yourself on the couch for a few days, stay positive and enjoy the down time. Pamper yourself.

When friends ask if they can bring you anything, say yes! Ask them to bring you ginger, honey, and lemons to make a pot of tea. Just resist the urge to kiss them when they arrive. ⊕

***Alix Mathias** is a writer, yogi, and health nut. She operates Catalyst Wellness Services with her husband in the Okanagan.*

Mixing meds

There are potential drug interactions between antidepressants and antiretrovirals

by Kristi Serwa

In this fast paced society, it's easy to become overwhelmed or feel like you're losing control over everyday activities. Depression is a mood disorder characterized by a persistent low mood and a loss of pleasure in daily events.

Among people living with HIV/AIDS (PWAs), depression is the most commonly diagnosed psychiatric condition, due to the interplay of drug side effects, social stigma, and the virus itself. It is believed to affect at least half of all PWAs.

If you've been diagnosed with depression, treatment options range from psychotherapy to antidepressant medication, or a combination of both. Alternative or complementary therapies are also available.

If you are prescribed an antidepressant to treat depression, it's important to consider potential side effects when mixing these drugs with your HIV medication. Keep your doctor and pharmacist informed about all drugs, including over-the-counter and complementary therapies, that you are taking.

The most commonly used antidepressants are selective serotonin reuptake inhibitors (SSRIs); this class of drug is recommended for treating HIV-related depression due to its minimal interactions with HIV medications. SSRIs include fluoxetine (Prozac), sertraline (Zoloft), and fluvoxamine (Luvox). However, some SSRIs combined with certain HIV medications, such as nelfinavir mesylate (Viracept), can cause liver damage.

In a study conducted in San Francisco, researchers found that people with HIV-related depression had poorer adherence and viral response to highly active antiretroviral therapy. However, when treated with SSRIs, they showed marked improvements in adherence, viral load, and mental health.

Another class of antidepressants is tricyclic antidepressants (TCAs). Generally, these are not recommended for PWAs because they can cause heart muscle damage in people with slower metabolisms. TCAs should be taken with caution if you're also taking certain protease inhibitors (PIs) such as saquinavir mesylate (Invirase) and saquinavir (Fortovase).

St. John's wort is an over-the-counter herbal treatment for depression. However, it has several negative drug interactions with PIs as well as some non-nucleoside reverse transcriptase inhibitors (NNRTIs) such as efavirenz (Sustiva). St. John's wort can decrease the levels of PIs and NNRTIs in your blood, allowing HIV to rebound, potentially in a drug-resistant form. Consult your doctor to determine whether St. John's wort is safe to use with your current HIV medication.

If you're diagnosed with depression, there are many options for improving your mental health through medication, therapy, physical activity, and nutrition.

Speak to your doctor if you're concerned about depression and/or drug interactions, and be sure to discuss all over-the-counter and herbal remedies that you are taking along with your HIV medications to avoid complications from drug interactions.

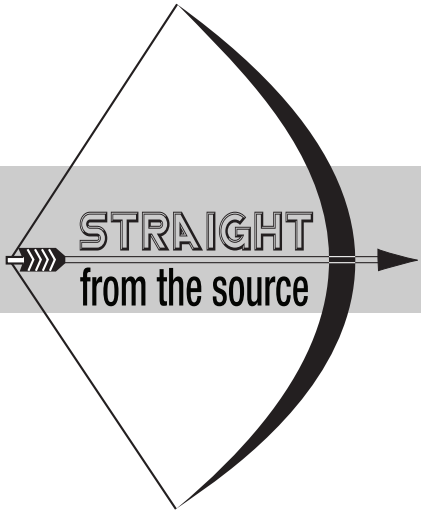
More importantly, stay informed, educate yourself, and be proactive about your mental health! Your body and mind go hand in hand. Health is a measure of your physical, social, and mental well-being. ⊕

***Kristi Serwa** is a volunteer with the BCPWA Society's Treatment Information Program.*

Symptoms of depression

If you experience five or more of the following symptoms for at least two weeks, and they are interfering with your daily activities, see your physician.

- Persistent sad, anxious, or empty mood
- Feelings of hopelessness and pessimism
- Feelings of guilt, worthlessness, and helplessness
- Loss of interest or pleasure in hobbies and activities that you once enjoyed, including sex
- Fatigue, decreased energy, or excessive sleeping
- Difficulty concentrating, remembering, or making decisions
- Insomnia or early morning awakening
- Appetite and/or weight changes
- Thoughts of death or suicide, or suicide attempts
- Restlessness and irritability



Recognizing and reporting adverse reactions to antiretroviral drugs

by Kathy Lepik and Rolando Barrios

Antiretroviral medications are easier to take and better tolerated than ever before. However, managing adverse drug reactions—in other words, side effects—remains an important part of successful HIV treatment. Drugs are carefully tested for safety before they are released on the market, but pre-marketing studies can't identify all possible toxic effects; some rare reactions may take a long time to develop, and some may not be discovered until after a drug has been prescribed to patients and used in real life situations versus a clinical trial.

That's where pharmacovigilance programs come in. These programs gather reports of adverse drug reactions, monitor for new or unexpected drug toxicities, and take action if a problem is detected. The BC Centre for Excellence in HIV/AIDS (BC-CfE) has recently launched an HIV-focused pharmacovigilance program to monitor reactions to antiretroviral drugs. The program encourages all people taking HIV medications to protect their personal health as well as contribute to the advancement of community health by recognizing and reporting possible adverse reactions.

Here's how the program works:

Know what to expect, but notice the unexpected

Be aware of possible adverse reactions to your HIV medications and ask for tips on how to modify your diet or daily routines to reduce unwanted effects. Learn the early signs of serious drug toxicity and know what to do and who to contact if you experience these warning signals. Don't ignore a problem just because it isn't listed among the known possible side effects. Report any new or unusual symptoms to your healthcare provider.

Don't suffer in silence: tell your healthcare provider

Sometimes patients are too patient. Don't wait until you are really sick or just can't take it anymore before telling your doctor or pharmacist about a health problem. Be sure to explain:

- What symptoms you experience and when they started
- How much the symptoms bother you
- Whether you notice anything that makes the symptoms better or worse
- If you began any new activities or medications around the time the symptoms started

Sometimes it's difficult to tell whether or not a problem is related to your HIV medications. The first step towards finding out and resolving the problem is to talk about it.

Pharmacovigilance programs gather reports of adverse drug reactions, monitor for new or unexpected drug toxicities, and take action if a problem is detected.

Notify the BC-CfE Pharmacovigilance Program

BC-CfE's Pharmacovigilance Program collects the same type of adverse reaction information that you discuss with your health-care provider: what's the problem, when it started, how bad it

To report an adverse reaction to the BC-CfE Pharmacovigilance Program

Contact: Ms. Kathy Lepik, MSc, RPh or Dr Rolando Barrios, MD

Fax 604.806.9838

Phone 604.806.8663
(speak to a Pharmacovigilance clinician)

Email ADR@cfenet.ubc.ca

Website www.cfenet.ubc.ca
A downloadable report form is located under *Adverse Drug Reaction Reporting*

Mail BC Centre for Excellence in HIV/AIDS
Pharmacovigilance Program
613 – 1081 Burrard Street
Vancouver, BC V6Z 1Y6

NOTE: Mail, fax, and voicemail communications are received at secure offices at the BC-CfE. Please do not use email to send patient information.

is, which antiretroviral drug(s) might be causing the reaction, and what else might be contributing to the problem.

If you have an adverse reaction that requires a medication change, your doctor can report this reaction on the special prescription form used for antiretroviral drugs. But anyone—patient or healthcare provider—can voluntarily report a suspected adverse reaction to HIV drugs.

The reporting form can be downloaded from the BC-CfE website or obtained by contacting the pharmacovigilance office (see sidebar). The form is also available at medical clinics and pharmacies that provide HIV care, as well as through the BCPWA Society's Treatment Information Program. Completing this form with the assistance of a healthcare professional or a trained peer volunteer will ensure that all the necessary information is provided.

BC-CfE pharmacovigilance forms aren't anonymous. Your full name is requested to permit inclusion of the adverse reaction history into your BC-CfE antiretroviral medication record. Adverse reaction reports are handled with the same care for privacy and confidentiality as is provided for antiretroviral prescriptions.

Telling your doctor or pharmacist about a possible adverse drug reaction protects your health and is always the first priority. Submitting an adverse reaction report to the BC-CfE Pharmacovigilance Program helps protect both your health and the safety of everyone in the community of people living with HIV/AIDS. ⊕

***Kathy Lepik** is a registered pharmacist and project manager of the Pharmacovigilance Program at the BC Centre for Excellence in HIV/AIDS. **Dr. Rolando Barrios** is a community medicine specialist and leader of the Pharmacovigilance Program at the BC Centre for Excellence in HIV/AIDS.*

Your genetic makeup could shed light on your response to antiretroviral treatment

by Kristin DeGirolamo

Could your genetic makeup determine when to begin HIV treatment? New research suggests a link between your genetic makeup and how well your body resists HIV, allowing HIV specialists to predict disease progression and determine the optimal time to initiate treatment.

Current treatment guidelines focus on two laboratory markers, CD4 cell counts and plasma viral load, to establish when to begin highly active antiretroviral therapy (HAART). In a study from the University of Texas at San Antonio, two other markers associated with HIV disease progression are being investigated and compared with these laboratory markers. The first is mutations in the shape of the CCR5 receptor protein on the CD4 cell—the protein that HIV attaches itself to in order to infect a cell. The second is the amount of CCL3L1 protein, a protein that binds to the CCR5 receptor, blocking and effectively suppressing HIV.

The variations in both the CCR5 gene and the number of copies of the CCL3L1 protein were used as genetic markers. These two measures were used to assign individuals into genetic risk groups: high, medium, and low risk. The degree to which these genetic markers predicted the risk for progression of HIV disease was compared with the current standard laboratory markers: CD4 counts and plasma viral load. Both the laboratory and genetic markers were equally effective in some respects. Analysis of the data indicated that the combination of both the laboratory and genetic markers provided a better prognostic tool than either separate set of markers.

Individuals with more copies of the CCL3L1 protein and variations of CCR5 gene associated with a slower disease progression were classified as lower risk. This cohort showed the best results on HAART.

The study also showed participants who were higher risk—with fewer copies of the CCL3L1 and CCR5—initially responded very well to antiretroviral therapy, but their CD4 cell counts declined after two years on treatment. Researchers then analyzed the relationship between CD4 cell counts and genetic makeup. They found that study participants in the moderate and higher risk groups who started treatment with CD4 counts of less than 350 had a less impressive CD4 cell recovery rate than those who initiated treatment with CD4 counts higher than 350.

These findings could conceivably change antiretroviral treatment guidelines. If genetic testing were introduced as part of a standardized series of tests for those newly diagnosed with HIV, healthcare providers could predict each patient's disease progression with greater accuracy and determine the most appropriate time to begin HAART. General treatment guidelines would be replaced with more customized guidelines, based on genetic test results. This change isn't likely to happen any time soon in Canada since genetic testing is expensive and not widely available.

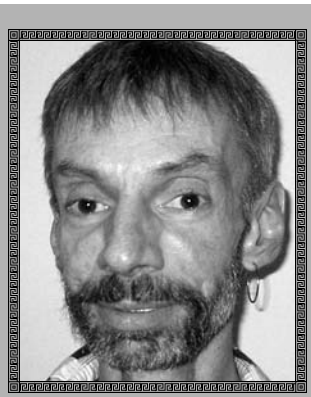
Still, this new thinking could explain why individuals might not respond well on HAART. The current culprits for failed HAART are genetic mutations in the virus. Now, however, if your treatment isn't effective, an additional culprit could be your CCL3L1 and CCR5 genetic makeup.

The study's findings also suggest new treatment avenues to pursue. Evidently, the CCL3L1 protein acts like a shield to suppress HIV, and each extra copy of the CCL3L1 gene can lower the risk of infection by 4.5 to ten percent. Further, there seems to be a correlation between CD4 cell recovery and the number of CCL3L1gene copies. A treatment that could imitate or boost this protein could effectively change an individual's genetic makeup, thereby improving how they respond to HAART. ⊕

***Kristin DeGirolamo** is a third year pharmacy student at the University of British Columbia.*

Volunteering at BCPWA

Profile of a volunteer: Norman Rossetti



"Norm definitely goes above and beyond the call of duty. I don't know what I would do without him."

Richard Harrison,
Support Services Department

Volunteer history

I've been the Lounge leader for 12 of the past 15 years that I've been volunteering with BCPWA.

Started at BCPWA

1993.

Why pick BCPWA?

At the time, a lot of my friends were HIV-positive. I wanted to do something to help the community! Volunteering at BCPWA made sense.

Rating BCPWA

It's a continuous work in progress that grows and changes with the changing times. But its greatest strength has always been and still is the volunteers.

Favorite memory

The time we opened on Christmas Day. We had lots of fun!

Future vision of BCPWA?

To bring more member involvement to all aspects of the Society.

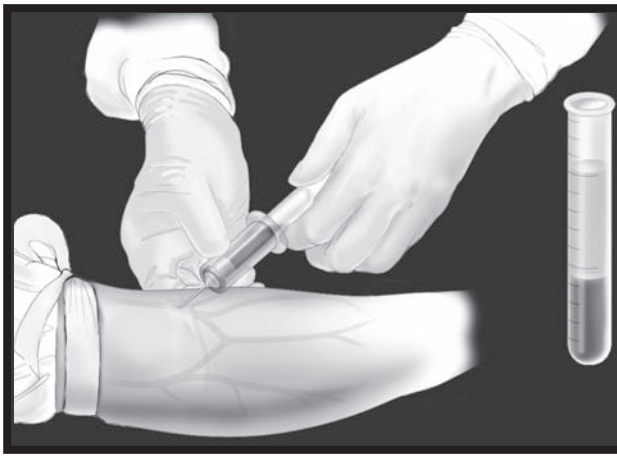
Simply Positive

An easy-to-read page on HIV treatment & care.

At BCPWA we want to ensure that HIV related information is accessible to everyone, regardless of reading ability. So the easy-to-read page aims to explain HIV as simply as the ABCs.

British Columbia Persons With AIDS Society

Get an HIV test



If you think you might be at risk for HIV, get TESTED.

HIV is spread through
- blood
- semen
- vaginal fluid
- breast milk

High risk activities include
- unprotected anal or
- vaginal sex
- sharing needles
- sharing sex toys
- breastfeeding

Your doctor can give you a blood test or you can get tested at a health clinic. If you ask, you will be identified with a number or initials on the blood sample and not your name. The lab keeps all results confidential.

You should be counseled before you get tested and after you receive your test results. Feel free to ask any questions.

The time between infection and testing positive is called 'the window period'. During the window period the risk of infecting someone else with your HIV is higher.

The window period is usually a few weeks, but may be as long as 3 to 6 months.

If you share needles or have unprotected sex, get tested every 6 months.

Do not avoid having a test done because you are afraid of the results.

If you know your HIV status, you can look after your health.

After having the test done, it will take anywhere between 3 days and a week before you get the results. You should make an appointment to see your doctor to get the results in person, not over the phone.

If you test HIV-positive, you can contact your local AIDS service organization for support and information.

www.bcpwa.org

where to find help

If you're looking for help or information on HIV/AIDS, the following list is a starting point.

A Loving Spoonful
Suite 100 – 1300 Richards St,
Vancouver, BC V6B 3G6
604.682.6325
e clients@alovingspoonful.org
www.alovingspoonful.org

AIDS Memorial Vancouver
205 – 636 West Broadway,
Vancouver BC V5Z 1G2
604.216.7031 or 1.866.626.3700
e info@aidsmemorial.ca ***www***.aidsmemorial.ca

AIDS Society of Kamloops
P.O. Box 1064, 437 Lansdowne St,
Kamloops, BC V2C 6H2
t 250.372.7585 or 1.800.661.7541
e ask@telus.net

AIDS Vancouver
1107 Seymour St, Vancouver BC V6B 5S8
t 604.893.2201 ***e*** av@aidsvancouver.org
www.aidsvancouver.bc.ca

AIDS Vancouver Island (Victoria)
1601 Blanshard St, Victoria, BC V8W 2J5
t 250.384.2366 or 1.800.665.2437
e info@avi.org ***www***.avi.org
AIDS Vancouver Island
(Cowichan Valley Mobile Needle Exchange)
t 250.701.3667
AIDS Vancouver Island (Campbell River)
t 250.830.0787 or 1.877.650.8787
AIDS Vancouver Island (Port Hardy)
t 250.949.0432
AIDS Vancouver Island (Nanaimo)
t 250.753.2437
AIDS Vancouver Island (Courtenay)
t 250.338.7400 or 1.877.311.7400

ANKORS (Nelson)
101 Baker St, Nelson, BC V1L 4H1
t 250.505.5506 or 1.800.421.AIDS
f 250.505.5507 ***e*** info@ankors.bc.ca
http://kics.bc.ca/~ankors/

ANKORS (Cranbrook)
205 – 14th Ave N Cranbrook,
BC V1C 3W3
250.426.3383 or 1.800.421.AIDS
f 250.426.3221 ***e*** gary@ankors.bc.ca
http://kics.bc.ca/~ankors/

Asian Society for the Intervention of AIDS (ASIA)
210 – 119 West Pender St,
Vancouver, BC V6B 1S5
t 604.669.5567 ***f*** 604.669.7756
e asia@asia.bc.ca www.asia.bc.ca

BC Persons With AIDS Society
1107 Seymour St, Vancouver BC V6B 5S8
604.893.2200 or 1.800.994.2437
e info@bcpwa.org ***www***.bcpwa.org

Dr Peter Centre
1100 Comox St,
Vancouver, BC V6E 1K5
t 604.608.1874 ***f*** 604.608.4259
e info@drpetercentre.ca
www.drpetercentre.ca

Friends for Life Society
1459 Barclay St, Vancouver, BC V6G 1J6
t 604.682.5992 ***f*** 604.682.3592
e info@friendsforlife.ca
www.friendsforlife.ca

Healing Our Spirit
3144 Dollarton Highway,
North Vancouver, BC V7H 1B3
t 604.879.8884 or 1 866.745.8884
e info@healingourspirit.org
www.healingourspirit.org

Living Positive Resource Centre
Okanagan
101–266 Lawrence Ave.,
Kelowna, BC V1Y 6L3
t 250.862.2437 or 1.800.616.2437
e info@lprc.ca
www.livingpositive.ca

McLaren Housing Society
200 – 649 Helmcken St,
Vancouver, BC V6B 5R1
t 604.669.4090 ***f*** 604.669.4092
e mclarenhousing@telus.net
www.mclarenhousing.com

Okanagan Aboriginal AIDS Society
101 – 266 Lawrence Ave.,
Kelowna, BC V1Y 6L3
t 250.862.2481 or 1.800.616.2437
e info@oaas.ca ***www***.oaas.ca

Outreach Prince Rupert
300 3rd Ave. West
Prince Rupert, BC V8J 1L4
t 250.627.8823
f 250.624.7591
e aidspr@rapidnet.net

Pacific AIDS Network
c/o AIDS Vancouver Island (Victoria)
1601 Blanchard St.,
Victoria V8W 2J5
t 250.881.5663 ***f*** 250.920.4221
e erikages@pan.ca ***www***.pan.ca

Positive Living North
1–1563 2nd Ave,
Prince George, BC V2L 3B8
t 250.562.1172 ***f*** 250.562.3317
e info@positivelivingnorth.ca
www.positivelivingnorth.ca

Positive Living North West
Box 4368 Smithers, BC V0J 2N0
3862 F Broadway, Smithers BC
t 250.877.0042 or 1.886.877.0042
e plnw@bulkley.net

Positive Women's Network
614 – 1033 Davie St, Vancouver, BC V6E 1M7
t 604.692.3000 or 1.866.692.3001
e pwn@pwn.bc.ca ***www***.pwn.bc.ca

Purpose Society HIV/AIDS program
40 Begbie Street
New Westminster, BC V3M 3L9
t 604.526.2522 ***f*** 604.526.6546

Red Road HIV/AIDS Network Society
804 – 100 Park Royal South,
W. Vancouver, BC V7T 1A2
t 604.913.3332 or 1.800.336.9726
e info@red-road.org ***www***.red-road.org

Vancouver Native Health Society
441 East Hastings St, Vancouver, BC V6G 1B4
t 604.254.9949
e vnhs@shaw.ca

Victoria AIDS Resource & Community Service Society
1284 F Gladstone Ave, Victoria, BC V8T 1G6
t 250.388.6620 ***f*** 250.388.7011
e varcs@islandnet.com
www.varcs.org/varcs./varcs.nsf

Victoria Persons With AIDS Society
#330-1105 Pandora St., Victoria BC V8V 3P9
t 250.382.7927 ***f*** 250.382.3232
e support@vpwas.com ***www***.vpwas.com

Wings Housing Society
12 – 1041 Comox St, Vancouver, BC V6E 1K1
t 604.899.5405 ***f*** 604.899.5410
e info@wingshousing.bc.ca
www.wingshousing.bc.ca

YouthCO AIDS Society
205 – 1104 Hornby St. ,
Vancouver BC V6Z 1V8
t 604.688.1441 1.877.968.8426
e information@youthco.org
www.youthco.org

For more comprehensive listings of HIV/AIDS organizations and services please visit BCPWA's website at www.bcpwa.org and click on "Links and Services" under the "Empower Yourself" drop-down menu.

Upcoming BCPWA Society Board Meetings:

Date	Time	Location	Reports to be presented
December 3, 2008	1:00	Board Room	Written Executive Director Report / Standing Committees Director of HR
December 17, 2008	1:00	Board Room	Financial Statements — September / Executive Committee Director of Development
December 31, 2008	1:00	Board Room	Written Executive Director Report / Quarterly Department Reports – 2nd Quarter
January 14, 2009	1:00	Board Room	Standing Committees / Financial Statements — October Director of TIAD
January 28, 2009	1:00	Board Room	Written Executive Director Report/Executive Committee Director of Prevention

BCPWA Society is located at 1107 Seymour St., 2nd Floor, Vancouver.
For more information, contact: Alexandra Regier, director of operations Direct: 604.893.2292 Email: alexr@bcpwa.org

BCPWA Standing Committees and Subcommittees

If you are a member of the BC Persons With AIDS Society, you can get involved and help make crucial decisions by joining a committee. To become a voting member on a committee, please attend three consecutive meetings. For more information on meeting dates and times, please see the contact information on the right column for the respective committee that you are interested in.

Board & Volunteer Development
Contact: Marc Seguin
t 604.893.2298 e marcs@bcpwa.org

Community Representation & Engagement
Contact: Paul Kerston
t 604.646.5309 e paulk@bcpwa.org

Education & Communications
Contact: Adam Reibin
t 604.893.2209 e adamr@bcpwa.org

IT Committee
Contact: Ruth Marzetti
t 604.646.5328 e ruthm@bcpwa.org

***living⊕* Magazine**
Contact: Jeff Rotin
t 604.893.2206 e jeffr@bcpwa.org

Positive Gathering Committee
Contact: Stephen Macdonald
t 604.893.2290 e stephenm@bcpwa.org

Prevention
Contact: Elgin Lim
t 604.893.2225 e elginl@bcpwa.org

Support Services
Contact: Jackie Haywood
t 604.893.2259 e jackieh@bcpwa.org

Treatment Information & Advocacy
Contact: Adriaan de Vries
t 604.893.2284 e adriaand@bcpwa.org

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Province/State _____ Country_____ Postal/Zip Code_____

Phone _____ E-mail _____

I have enclosed my cheque of $_____ for *living⊕*

❍ $25 within Canada ❍ $50 (Canadian $) International
please send _____ subscription(s)

❍ BC ASOs & Healthcare providers by donation: Minimum $6 per annual subscription
please send _____ subscription(s)

❍ Please send BCPWA Membership form (membership includes free subscription)

❍ Enclosed is my donation of $_____ for ***living⊕***

**** Annual subscription includes 6 issues*** ***Cheque payable to BCPWA***

living⊕

1107 Seymour Street
2nd Floor
Vancouver BC
Canada V6B 5S8

For more information visit
www.bcpwa.org
e-mail to living@bcpwa.org
or call 604.893.2206

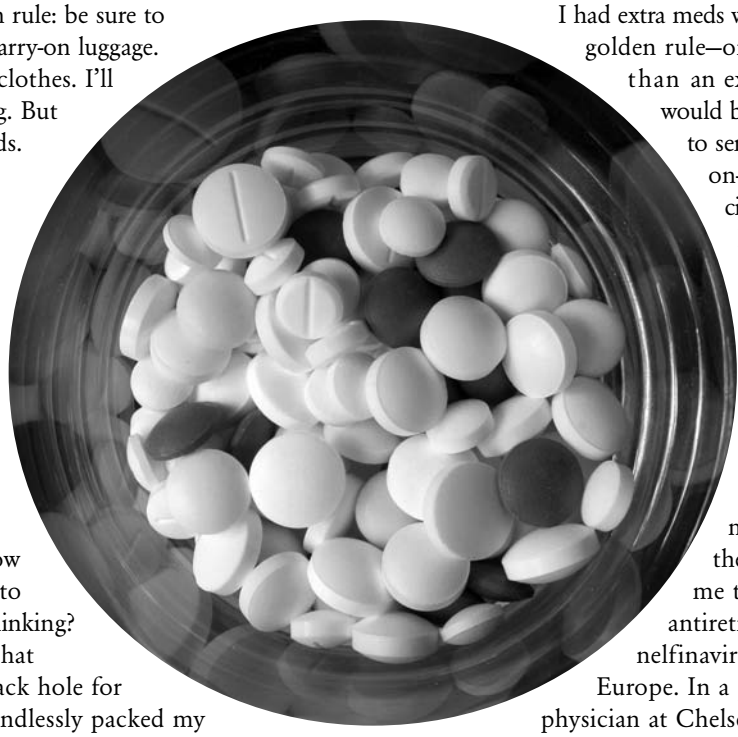
Pill-popping travel adventures

Sticking to your drug regimen while travelling can be tricky—especially when you run out of pills

by Michael Connidis

For me, travelling always requires advanced planning to make sure I'll have all the meds I need for my trip. Being dual diagnosed with HIV and bipolar disease means I have to keep track of two sets of drugs. Staying on schedule—popping pills every 12 hours—can be an added challenge when moving across time zones. I have two crucial rules that help me stick to my regimen in order to ensure a truly *bon voyage*.

The golden rule is: always allow for possible delays returning home; therefore, travel with at least one week's extra supply of pills. Then there's the platinum rule: be sure to travel with all medications in carry-on luggage.



I can manage without my clothes. I'll get by without my toiletry bag. But I'm desperate without my meds.

I admit, the platinum rule has made for some tense border security encounters, but separating me from my meds is far more stressful.

While travelling out of the country this summer, I broke my platinum rule and, due to circumstances beyond my control, my golden rule was...well, tarnished.

Standing at the baggage carousel in London's Heathrow Airport, waiting for our bags to appear, it hit me: what was I thinking? Where was my head? I knew that Heathrow was a notorious black hole for lost luggage. So why had I mindlessly packed my pills into my checked baggage? Between frantic thoughts about how to get replacement meds, I was kicking myself for being so daft.

Through the noise in the arrival area, I faintly heard my name being paged. My partner and I made our way over to the International traveler's assistance counter. The good news was they had located our luggage. The not so good news was that the reunion with our baggage, and its contents, might take up to 48 hours.

The bags were eventually delivered to us and we enjoyed the rest of the trip.

By the end of our vacation, we were looking forward to returning home and sleeping in our own bed.

I was packed and ready to leave for the airport. All of my meds were safely stowed in my carry-on baggage. Just as the taxi arrived, I received an urgent phone call: my favourite uncle had died and his funeral was in Norway in a few days. My 80-year-old mother was flying from Ottawa, my sister was traveling from Toronto, and the family hoped I would meet them for the funeral and a visit afterward. It was a sudden change in plans, but I knew I had to go. My partner returned to Canada, while I remained in London to arrange my trip to Norway.

I had extra meds with me, but—contrary to my own golden rule—only several days worth rather than an extra week's supply. I hoped it would be relatively simple for my partner to send my pills from Canada, but the on-call doctor for my family physician wasn't willing to help; even so, Norway doesn't allow medications into the country by mail.

I had less than 24 hours to get the drugs I needed before leaving for Norway—and it was the weekend! Between bouts of kicking myself—yet again—I scrambled around London on a treasure hunt for meds. Thankfully, volunteers at the Terrance Higgins Trust referred me to a clinic where I could get antiretrovirals. There was one catch: nelfinavir was no longer available in Europe. In a panic, I went to the attending physician at Chelsea Westminster Hospital. She prescribed unboosted atazanavir as a temporary replacement, and assured me I'd be fine until I returned home.

Replacing my bipolar meds was another story altogether.

The next time I go far afield, I'll make sure the meds I need are available at my final destination, should the unexpected happen. I'm also determined to change my antiretroviral regimen so that I'm taking pills that are available worldwide.

And I'm never packing my meds in my checked baggage again. Ever. ⊕

***Michael Connidis** is a BCPWA Society member and a member of the living⊕ editorial board.*