



Left to Right: BC-CfE Post-Doctoral Fellow, Dr. Kate Salters, St. Paul's Hospital Respiriologist, Dr. Janice Leung, and Boston Medical Center Chief of Internal Medicine, Dr. Jeffrey Samet

## Cancer, cardiovascular disease, new PEP guidelines and more: The Fall ARV Update

**PEP: Start early, follow up and start a conversation**

Dr. Marianne Harris, Clinical Research Advisor with the BC Centre for Excellence in HIV/AIDS (BC-CfE), provided an overview of the new BC-CfE PEP (post-exposure prophylaxis) guidelines. Dr. Harris emphasized the safety and tolerability of the PEP regimen will be improved with the use of raltegravir and due to improved lab technology, the final HIV test can be done 3 months (instead of 12) after the event. PEP will be available to everyone who has had a significant HIV exposure, regardless of the circumstances.

For many clients, the challenges to follow-up can be exacerbated by shame and anxiety around accessing PEP, according to registered nurse Liz Kirkpatrick. In applying PEP guidelines to clinical practice, Fitzpatrick encouraged clinicians to develop a rapport with clients to understand their individual circumstances and the role played by social and behavioral determinants of health. Kirkpatrick recommends nurturing an inclusive, respectful discussion about healthy sex and risk reduction into conversations about PEP treatment.

### Risk of cancer higher and occurring earlier in people with HIV: Salters, Ramji and Leung

Dr. Janice Leung, a Respiriologist at St. Paul's Hospital, showed lung cancer appears earlier and more aggressively in people with HIV and is often deadlier in this group compared to the general population. People with HIV are at increased risk of not receiving stage appropriate treatment, "falling through the cracks", and suffering higher mortality from lung cancer. The research shows 40-84% of HIV patients are current smokers compared to 20% in the HIV-negative population.

Dr. Kate Salters, Post-Doctoral Fellow with the BC-CfE, addressed the HIV/ARV Update with preliminary data from the COAST (Comparative Outcomes And Service Utilization Trends) study suggesting cancer incidence is twice as high in people with HIV, compared to the general population, but varies significantly based on the type of cancer. The largest disparities in cancer rates occur earlier in life - before age 50 - and for infectious-related cancers. Although unclear, there is some promising evidence that early initiation of cART (combination antiretroviral therapy) with higher CD4 cell counts may reduce the risk of infectious-related cancers, such as HPV-related cancers.

As the sixth most common cancer in people with HIV, says Dr. Alnoor Ramji, Clinical Associate Professor at the University of British Columbia, hepatocellular carcinoma (HCC) results in 700,000 deaths a year worldwide. HIV is not an independent cause of HCC, but there is more incidence in the HIV positive population related to Hepatitis C and Hepatitis B co-infections. Active screening of HCC in persons with HBV or HCV co-infection, particularly in baby boomers, is strongly encouraged.

### Cardiovascular risk underestimated in people with HIV

Data collected over the last two decades shows the chances of having heart attack goes up by 50% for people with HIV - this is above the traditional risk factors. Dr. Greg Bondy, a specialist at St. Paul's Hospital, revealed virtually all men with HIV over the age of 35 and women over 50 will be at moderate risk of cardiovascular disease. However, there is some promising news related to a large HIV trial with Evolocumab. It shows the drug is effective in people with HIV, driving down risk from cardiovascular disease

60-70%. It is safe, free of side effects; however, access is limited due to cost.

### Opioid treatment for people with HIV

Chronic opioid therapy for chronic pain and prescription opioid use disorder appears to be more common in people with HIV who are much more likely to be prescribed opioids for pain compared to uninfected patients. One in five people with HIV are prescribed chronic opioid therapy for pain. Dr. Jeffrey Samet, Chief, Section of General Internal Medicine, Boston Medical Center, discussed practice guidelines for managing pain using inter-disciplinary teams for complex chronic pain, considering non-opioid options and prescribing smaller doses with routine monitoring. Most importantly, Dr. Samet says, "judge the treatment, not the patient". Most people living with HIV recognize there is a danger in becoming addicted to opioids.

### Generic ARVs in BC: A work in progress

The potential economic impact of generic antiretrovirals in BC continues to be a work in progress, according to Dr. Viviane Lima, BC-CfE Research Scientist & Senior Statistician. However, the results so far suggest generic ARVs may have a beneficial and substantial impact on the fiscal needs of the ARV program in BC. Dr. Lima encouraged caution, saying the projections and estimates presented are only intended to give an overall sense of the anticipated cost-savings trends over time. While the preliminary, short-term projections are encouraging, Dr. Lima recommends monitoring the trends in the use of generic ARVs in the long-term to get a clearer picture of their economic impact in BC.



» "It is well-documented that HIV jumps jurisdictional boundaries. This is how the HIV epidemic transitioned from Africa to become a global epidemic. BC-CfE's revolutionary phylogenetic research program shows us how HIV spreads across provinces. By identifying HIV transmission outbreaks, we can work together to identify and action outbreaks crossing boundaries of different jurisdictions."

— Dr. Jeffrey Joy, BC-CfE Research Scientist



## Stigma, Trauma, and the Social Forces Shaping Women's Sexuality after HIV



BC-CfE Research Assistant, Allison Carter

» HIV stigma, gender-based violence, relationship quality, poverty, depression, and other social and emotional factors have far more influence on HIV-positive women's sexual experiences than HIV treatment factors, according to a review of studies from 1997 to 2017.

The research, published in the journal *Sex Roles*, examined how sex and sexuality changes for women after a diagnosis of HIV. Led by researchers at the BC Centre for Excellence in HIV/AIDS and Simon Fraser University, in collaboration with care providers and women living with HIV, the review found just 32 quantitative studies focused on sexuality globally since antiretroviral therapy became available – half of them did not take gender into account.

Study findings indicate while some women remain sexually active and report few changes to the quality of their sex life after an HIV diagnosis, others have less sex and experience a smaller range of sexual practices, and lower sexual desire, arousal, and orgasm. Although it is assumed that type of regimen, CD4 count, and viral load adversely affect sexual functioning, the strongest predictors of sexual health were women's emotional wellbeing, relationship characteristics, and societal oppression including HIV stigma.

"Sexual trajectories after an HIV diagnosis are diverse and reflect women's unique personal history and social environment," said Allison Carter, PhD Candidate and lead author of the study. "This huge variation in experience and clear influence of context demonstrates that women's sexuality is perfectly normal, and any changes are a response to chronically stressful conditions."

Commenting on the review, senior author Dr. Angela Kaida added: "Research tends to pathologize sexuality of women with HIV. But this review highlights the need to completely reframe our approach and affirm sexual rights and desires". Yet, she noted, few studies ask women about their sexuality. What's more, much of the research concerning sexual health for women isn't about women's sexual health at all. It's about protecting the public from HIV.

"A satisfying sexual life—however women themselves want to define that—is a human right," says HIV activist and study co-author Jessica Whitbread. "It's time we realize that and support women's own sexual needs and wellbeing, inclusive of pleasure and free from discrimination and violence."

The team advocates for a new, feminist approach to care and research regarding women's sexual health and rights, one that is women-centred, trauma-informed, and culturally-safe.

## STUDY

## BC making good progress on global UNAIDS 90-90-90 targets to eliminate AIDS

» A study conducted by the BC Centre for Excellence in HIV/AIDS (BC-CfE) shows BC is on track to meet the UNAIDS 90-90-90 Target, designed to accelerate efforts to end the AIDS epidemic. By 2020, 90% of people living with HIV in BC will be diagnosed, 91% of those on treatment and 90% of those on effective treatment and unable to pass on HIV (virologically suppressed). Not only that, the province is expected to reach 97%-99%-97% by 2030.

The data shows the province is leading the way in Canada with 80% of people living with HIV diagnosed, 76% of those on treatment and 89% of those virally suppressed, according to the Public Health Agency of Canada.

"The BC-CfE and Dr. Julio Montaner pioneered HAART (highly active antiretroviral therapy), the most effective HIV treatment for HIV/AIDS, now being used worldwide," says Dr. Viviane Lima, BC-CfE Research Scientist and Senior Statistician. "We also helped set



Dr. Viviane Lima

the UNAIDS 90-90-90 Target based on the Treatment as Prevention® model developed here in British Columbia – essentially diagnosing and treating people with HIV earlier will stop disease progression to AIDS. Once the epicenter of AIDS in Canada, BC has not had a baby born with HIV since 2008."

While the numbers show good progress, there are a couple of concerns for researchers. Women are 30% less likely to be on HIV treatment compared to men, people with a history of injection drug use are 49% less likely to be on treatment than other groups, and people under 30 were also 35% less likely to be on treatment.

"These are disparities that cannot be allowed to exist in British Columbia," says the BC-CfE's Director, Dr. Julio Montaner. "We need to make sure Treatment as Prevention® is being practiced in every single community, so no one is left behind. This is not just a Target that must be met, we need to make sure every British Columbian has a fair shot at an HIV-free future."

## WORLD AIDS DAY

Dr. Julio Montaner acknowledged in BC Legislature ahead of World AIDS Day

In advance of World AIDS Day, West Vancouver Capilano MLA Ralph Sultan and Vancouver-West End MLA Spencer Chandra Herbert highlighted the leadership of Dr. Julio Montaner and BC Centre for Excellence in the global fight against AIDS.

"With support from all sides in this House, British Columbia has in fact shown the world how to fight one of the deadliest infectious diseases the planet has ever faced. AIDS-related deaths worldwide have been cut in half since 2005. Globally, we are winning, and the most important impacts started right here in British Columbia."



"Thankfully, because of people like Dr. Julio Montaner at the B.C. Centre for Excellence.... to all of those who rallied, who raised a ruckus, who said: 'We will not go gently into that good night. We will fight for that light...'"



## LECTURES &amp; EVENTS

### What's New in Addiction Nursing?

**Creating Cultural Safety for Transgender Clients in Substance Dependence Care**

Speaker: Dr. Kendrah Rose

Thursday, December 7, 2017, 12–1PM

Hurlburt Auditorium (2nd floor), St. Paul's Hospital

### HIV Care Rounds

**Is fatty liver an issue in HIV positive patients?**

Speaker: Dr. Mark Hull

Thursday, December 7, 2017, 8–9AM

Conference Room 7, Providence Level 1, St. Paul's Hospital

### Forefront Lecture

**Age and Genetic Diversity of the Latent HIV Reservoir: Implications for Cure**

Speaker: Dr. Zabrina Brumme

Friday, December 8, 2017, 12–1PM

Large Lecture Theatre, Providence Level 1, St. Paul's Hospital

For more information, contact us at [Education@cfenet.ubc.ca](mailto:Education@cfenet.ubc.ca) or visit our website at [www.education.cfenet.ubc.ca](http://www.education.cfenet.ubc.ca)

### BC Centre for Excellence in HIV/AIDS

- > Improve the health of British Columbians with HIV through comprehensive research and treatment programs;
- > Develop cost-effective research and therapeutic protocols;
- > Provide educational support programs to health-care professionals;
- > Monitor the impact of HIV/AIDS on B.C. and conduct analyses of the effectiveness of HIV-related programs.

Physician Drug Hotline  
1.800.665.7677

St. Paul's Hospital Pharmacy Hotline  
1.888.511.6222

Website  
[www.cfenet.ubc.ca](http://www.cfenet.ubc.ca)

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Funding for the BC Centre for Excellence in HIV/AIDS is provided by the BC Ministry of Health..