Journal of the BC Centre for Excellence in HIV/AIDS

forecast

BRITISH COLUMBIA CENTRE *for* EXCELLENCE *in* HIV/AIDS

OCT 2017 | St. Paul's Hospital, Vancouver, B.C.

Russell Williams, Diabetes Canada

"Canada needs a new, bold strategy to slow the pace at which the diabetes epidemic is growing, and we believe this approach can be a cornerstone of that strategy."

Treatment as Prevention model (TasP®) and 90-90-90 Target adopted by Diabetes Canada

Diabetes Canada announced it is adapting the made-in-BC Treatment as Prevention (TasP®) strategy to diabetes to make over 6 million Canadians living with pre-diabetes, and diabetes, aware of their status.

Diabetes Canada convened a multi-stakeholder workshop in September with Dr. Montaner providing the keynote address, to discuss the benefits of adopting a 90-90-90 Target for diabetes in Canada and the reaction was overwhelmingly positive.

virologically suppressed by 2020. Achieving the 90-90-90 Target by 2020 would lead to a 90 per cent reduction in HIV/AIDS morbidity and mortality and a 90 per cent decrease in new HIV infections by 2030.

The epidemic of diabetes and prediabetes affects over 11 million Canadians and can cause blindness, kidney failure, heart attack, stroke and lower limb amputation. Diabetes prevalence has more than doubled since 2000 and estimated to increase by 40 per cent by 2025.

"Canada needs a bold, new strategy to slow the pace at which the diabetes epidemic is growing, and we believe this approach can be a cornerstone of that strategy," says Russell Williams, vice president of Government Relations and Public Policy at Diabetes Canada.

Adapting the TasP® strategy, and the related 90-90-90 Target, to diabetes will encourage early diagnosis, treatment, and engagement into care to prevent diabetes-related complications that cost the Canadian healthcare system billions of dollars a year. Studies show that as much as 60 per cent of people with prediabetes who make modest lifestyle changes can delay or prevent developing diabetes.

This is the first time the made-in-BC TasP® strategy, and the related global 90-90-90 Target for the control of HIV/AIDS, will be applied to a non-infectious disease.

"We have always believed TasP® can be applied to other high burden diseases aside from HIV/AIDS including contagious diseases - whether infectious as in viral hepatitis, or socially contagious as in type 2 diabetes," says Dr. Montaner. "Expanding TasP® beyond HIV/AIDS will ease the burden on our healthcare system and substantially contribute to enhanced healthcare sustainability."

Taking lessons from TasP "to heart"

BC-CfE's Dr. Julio Montaner addressed cardiologists, cardiovascular surgeons, researchers and nurses assembled from across Canada, and around the world, at the Canadian Cardiovascular Congress held in Vancouver on October 21st. Dr. Montaner opened the conference with a keynote address – "How to end a pandemic: Taking lessons from the fight against HIV/AIDS to heart".

Dr. Montaner, credited with pioneering the "Treatment as Prevention®" (TasP®) strategy to end the HIV/AIDS pandemic globally, discussed how the healthcare system could look beyond infectious disease to apply his approach to other socially contagious diseases.

"The Minister of Health [The Honourable Ginette Petitpas-Taylor] actually started the conversation around dietary and exercise intervention," Dr. Montaner told the audience. "If we take a holistic approach to the control of high burden diseases that have a social contagion element, we can actually have a tremendous impact."

A Targeted Disease Elimination (TDE) approach based on the successful TasP® strategy, argued Dr. Montaner, can help in the fight against contagious diseases, including infectious diseases (i.e. HCV) as well as socially contagious diseases (i.e. type 2 Diabetes, atherosclerosis) using the successful TasP® model. He urged Canadian Cardiovascular Congress to consider the potential impact Targeted Disease Elimination and TasP® would have on individual health outcomes and healthcare sustainability.


Dr. Julio Montaner and Hon. Ginette Petitpas-Taylor

Montaner ended his keynote with a call to action.

"My hope is that you will incorporate this information into your discussions as you move forward to control the many high burden diseases that affect the cardiovascular system in Canada."

"We were very pleased that the 48 representatives of 30 different stakeholder organizations – people living with diabetes, health-care providers, policy makers and more – all agreed that it's worth investing further in a 90-90-90 Target for Canada," says Mr. Williams. "Not only will it impact the health of Canadians and decrease the diabetes-related burden on our health-care system, but it will also contribute to Canada resuming its place as a global leader in the treatment of diabetes."

Developed by Dr. Julio Montaner, the 90-90-90 Target proposes to have at least 90 per cent of all people living with HIV diagnosed, at least 90 per cent of them on antiretroviral therapy and at least 90 per cent of them virologically suppressed by 2020. Achieving the 90-90-90 Target by 2020 would lead to a 90 per cent reduction in HIV/AIDS morbidity and mortality and a 90 per cent decrease in new HIV infections by 2030.

"We plan to implement the 90-90-90 Target to diabetes by encouraging 90 per cent of the 6 million Canadians with prediabetes, and the 1.5 million Canadians who are currently unaware that they are living with diabetes, to learn their status through expanded screening," says Williams. "Our goal is to work toward changing the approach to treating and managing diabetes before it impacts Canadians' quality of life."

90 per cent of those diagnosed with prediabetes and diabetes (along with the 3.5 million Canadians who have already been diagnosed with diabetes) would receive treatment, lifestyle counseling or care to prevent or manage the disease. 90 per cent of those receiving treatment would be seeing improved health indicators, such as lower three-month average blood glucose, with consequent improvements in blood pressure and lipids.

Diabetes Canada will present a report on the progress against the 90-90-90 Target in Canada by 2021 to coincide with the 100th anniversary of the discovery of insulin by Canadians.

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Q&A

Exposure to prison dramatically drives up the risk of contracting HIV

With an overrepresentation of some of Canada's most marginalized citizens — including the poor, people who use drugs, and people living with HIV and other chronic illnesses — Canada's correctional system is an important part of the response to HIV.

We sat down with Dr. M-J Milloy, research scientist with the BC-CfE and assistant professor in the Division of AIDS in the Department of Medicine at the University of British Columbia, to discuss the role of correctional environments in HIV prevention and care.

Why are the rates of HIV among prisoners so high?

Unfortunately, we do not know the precise rates of HIV acquisition in prisons. We do know, however, that the prevalence of HIV is about 10 times higher among people in custody than in the community, largely because incarceration and HIV share some common risk factors like using drugs. Research at the BC-CfE has shown how incarceration complicates the provision of HIV prevention and care. Healthcare providers do not have the same access to people in the correctional system that they do in the community and there are measures people are able to take in the community to reduce their harm and risk that are not available in correctional facilities, such as access to sterile needles. Exposure to correctional facilities dramatically drives up the risk of contracting HIV for people who are already at risk. One analysis estimated one-in-five HIV cases in the Downtown Eastside during the outbreak starting in the mid-90s was the result of incarceration.

How is HIV prevention and care limited in correctional settings?

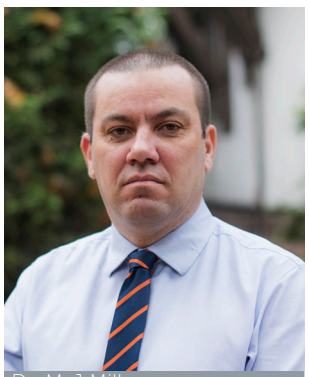
Some preventative measures in prison – such as the availability of condoms – help reduce the risk of HIV transmission. Sterile needles are not available despite repeated calls on the federal and provincial levels of government to introduce prison needle exchange programs. Evaluation of needle exchange programs found they are safe, effective, reduce the risk of HIV transmission and have not been used as weapons against correctional staff.

How would providing methadone and improving access to housing reduce the risk associated with incarceration?

Methadone is available in BC and federal correctional facilities. It's an effective way to lower the risks of overdose and HIV transmission and eliminate opioid withdrawal - reducing the likelihood someone with opioid use disorder will inject illicit opioids. Housing is key to reducing the risk of incarceration and the risks associated with release from custody. People who are homeless are more likely to be arrested or incarcerated. For individuals dependent on opioids - who have lived within the correctional system - the period after incarceration is a very risky one. A study from Washington State estimated the risk of fatal drug overdose was at least 12 times higher in the two-week period following release. This is a crucial period where extra effort is needed to reduce the risks of drug-related harms.

Are people less likely to initiate ARV, and stay in treatment, in correctional environments?

We recently found that between 1996 and 2015, incarceration was associated with approximately 48% lower rates of HIV treatment initiation. In previous years, this might have been because of a lack of specialized medical care in prisons to initiate people on ART. We also know that people with HIV in prisons may fear stigma and discrimination around the disclosure of their status, leading to disengagement from HIV care. It may not be easy, based on your living conditions and lack of privacy, to take your medications without being noticed. Reducing stigma and discrimination, improving patient confidentiality and introducing system level improvements could get people the right treatment at the right time.


Dr. M-J Milloy,
BC-CfE Research Scientist

How can correctional facilities be effective sites for HIV prevention and care?

It is clear that one humane, compassionate and effective response to the issue of HIV in prisons would be to stop incarcerating people who use drugs in the first place. Most people who use drugs find themselves in prison for drug use or income generation to support drug use. As a country, we are in the process of regulating cannabis, and I believe this is the right time for us to consider an approach to drugs that doesn't rely on prisons and jails. Until we get there, an approach based on public health, not just public security, would include improvements in harm reduction, increasing the availability of HIV prevention tools such as condoms and opioid substitution therapy and expanded access to sterile syringes. Ultimately, the decriminalization of drugs will ensure that we keep people at risk or living with HIV out of prison.

EDUCATION FUND

Education fund established in memory of Bonnie Devlin

A new fund, spearheaded by an anonymous donor and introduced by St. Paul's Foundation is designed to support BC-CfE Division of Epidemiology and Population Health data analysts, programmers and statisticians in upgrading their work skills.

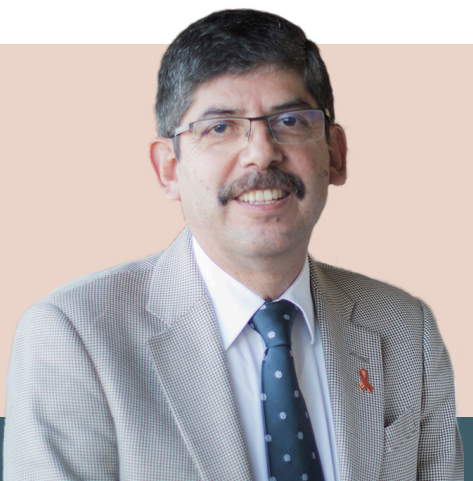
The Bonnie Devlin Memorial Bursary Endowment Fund for Education has been established by an anonymous donor in memory of BC-CfE program/research coordinator Bonnie Devlin. It is an "open" fund, meaning St. Paul's Foundation may accept further contributions to help it grow.

Bonnie worked at St. Paul's Hospital for the Vancouver Lymphadenopathy AIDS Study (VLAS) between 1986 and 1992, and later for BC Centre for Excellence in HIV/AIDS between 1992 and 2007.

"I was lucky enough to work with Bonnie at the BC-CfE in 1992 in the drug treatment program," says Dr. Bob Hogg, Professor in the Faculty of Health Sciences at Simon Fraser University and Senior Research Scientist at the BC Centre for Excellence in HIV/AIDS. "She had a tremendous amount of knowledge about the gay community, HIV/AIDS and was widely respected for her kindness, energy and work ethic."

Bonnie was not only a Research Coordinator, but a resource for staff on everything ranging from operational questions to improving communication among co-workers. Hogg says, "She was a very caring supervisor and great at helping people communicate in a professional and empathetic way."

Bonnie passed away at 51 in 2008 after a long and courageous battle with breast cancer.



"The aim is not only to improve the outcomes for people known to the teams, but also to ensure access to these services for other patients that may need treatment but are not currently on treatment."

— Dr. Rolando Barrios, Assistant Director, BC-CfE, speaking on the BOOST Collaborative.

For more information see: **http://stophivaids.ca/oud-collaborative/**

LECTURES & EVENTS

What's New in Addiction Medicine?

Title: TBA

Speaker: Dr. Dania Notta

Tuesday, November 28, 2017, 12–1PM

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

Forefront Lecture

Unraveling Molecular Barriers to HIV-1 Immune Evasion: Implications for a Vaccine and Cure

Speaker: Dr. Mark Brockman

Thursday, November 9th, 2017, 12–1PM

Hurlburt Auditorium, Providence Level 2, St. Paul's Hospital

Title: TBA

Speaker: Dr. Hugo Soudeyns

Monday, November 27th, 2017, 12–1PM

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

HIV Care Rounds

Evidence Update on HCV Testing and Emerging HCV Research

Speaker: Dr. Lianping Ti

Thursday, November 23, 2017, 8–9AM

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

Title: TBA

Speaker: Dr. Mark Hull

Thursday, December 7, 2017, 8–9AM

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

For more information, contact us at **Education@cfenet.ubc.ca or visit** our website at **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.

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