CONFERENCE CAHR 2019

Conference Highlights



Overview

The Canadian Association for HIV Research (CAHR) hosted the 28th annual CAHR Conference in Saskatoon, SK on May 9-12, 2019. The conference brought together world-renowned speakers, researchers, frontline public health and community-based workers, policy makers, people living with HIV and AIDS, and others interested in the field of HIV research. Co-chaired by Dr. Alexandra King and Dr. Linda Chelico (University of Saskatchewan), the four-day conference included plenary sessions, panel discussions, topic-based research presentations, and ancillary meetings. The conference continued the success of the Key Populations abstract sessions and offered the greatest number of special sessions in the history of the conference.

Under the theme of "Wuniska" (a Cree and Saulteaux word meaning wake up, awaken, arise, wake up and rise), community members were central to the conference this year. Saskatchewan has the highest rate of HIV in Canada, and Indigenous populations within Saskatchewan and throughout Canada continue to be disproportionately affected. Hosting the conference in Saskatchewan provided a platform to illustrate this stark reality, and allowed area researchers and students to participate and showcase their work. CAHR 2019 also included ancillary events and workshops, which brought together Indigenous community members, peer research associates and research leaders. Highlights from the key sessions are included in this document.

Table of Contents

Red Ribbon2	2
Wainberg Lecture2	2
Special Sessions	3
Basic Science Plenary	1
Epidemiology & Public	
Health Plenary4	Ļ
Special Sessions	5
Clinical Sciences Plenary6	5
Social Sciences Plenary6	5
Special	
Sessions/Plenaries/Lunch	
Symposium7	
Lunch Symposium/Poster	
Highlights8	
CAHR 20209)

CONFERENCE CAHR 2 19

Conference Highlights



The 2019 Red Ribbon Award (which is presented annually by CAHR for outstanding service to the cause of research in HIV/AIDS) was presented to Trevor Stratton.

Dr. Mark A. Wainberg Lecture Does HIV Cause AIDS?

Dr. Mark Tyndall of the UBC School of Population and Public Health examined the reason why people are still dying from AIDS, despite astonishing scientific discoveries made in the last 35 years.



He described how it has little to do with HIV, but rather with a wide range of social and structural factors that: continue to put people at risk for infection; undermine testing and treatment initiation; and disrupt ongoing engagement in care. Dr. Tyndall spoke on how AIDS has become a massive natural experiment on the devastating impact of structural violence, poverty, discrimination, sexism, racism, and the failure to uphold basic human rights. He highlighted the many examples of this in Canada – including our treatment of Indigenous peoples, the criminalization of people who use drugs, the denial of harm reduction programs in prisons, the criminalization of HIV transmission, the lack of mental health and youth services, the failure to support the rights of sex workers, and ongoing discrimination against the LGBTQ community. This lecture examined some of the major structural barriers that perpetuate HIV/AIDS in Canada, and how the medical community can better advocate for the changes that are so urgently needed.

Special Session CIHR HIV/STBBI Strategic Plan Consultation Session

Dr. Charu Kaushic of the CIHR Institute of Infection and



Immunity engaged researchers and stakeholders during this consultation session in preparation for the development of the next phase of HIV/AIDS and STBBI Research Initiative strategic plan (2020-2025). Those in attendance had the opportunity to have their voices heard and contributed to defining the future research priorities to inform the development of the HIV/AIDS and STBBI Research Initiative strategic plan during this group discussion.

CAHR CAHR

Conference Highlights



Special Session Responding to Lived Realities: The Role of Community-based Peer Researchers

James Watson moderated this session which included people with lived experiences, and those who work or are involved in their communities as community-based peer researchers. People with lived experiences face complex realities, and community-based researchers must respond to these realities. These researchers also conduct work that "is not only highly technical but also deeply symbolic and political." In these conversations, presenters discussed the ethical, political, and social challenges in responding to these realities when being situated as a peer researcher.

CIHR Canadian HIV Trials Network Postdoctoral Fellowship Awards

The CIHR Canadian HIV Trials Network Postdoctoral Fellowship Awards Program offers career opportunities to outstanding young clinical scientists.. During this session, current CTN fellows presented their research findings.

Special Session The Scientific Promise and Challenges of Achieving an HIV Cure

Moderated by Dr. Lyle McKinnon, University of Manitoba, this session examined the progress made in finding an HIV cure, as well as the difficult barriers that still remain. Presenters Dr. Eric Cohen, Montreal Clinical Research Institute and University of Montreal, Dr. Mario Ostrowski, University of Toronto, Dr. Zabrina Brumme, Simon Fraser University, and Dr. Lisa Barrett, Dalhousie University discussed the latent HIV reservoir that was described in the 1990s and still remains the major impediment to curing HIV infection. However, they also highlighted a series of case studies - including the Berlin patient, the Mississippi baby, and others which have re-invigorated the HIV cure field. In addition, they spoke about how the clearance and/or long-term control of HIV from a previously infected individual, without the need for antiretroviral therapy, is now scientifically possible.





Plenary Basic Sciences

Plenary speaker Dr. Guido Silvestri of the **Emory University School of Medicine** emphasized that HIV remains a major global health problem with an estimated 1.1 million deaths worldwide in 2017. Although there have been major declines in morbidity and mortality associated with the introduction of ART, there is still neither a vaccine nor a cure for this infection. He described how the inability to eradicate HIV infection with current therapies is due to the presence of a pool of latently-infected cells harboring integrated replicationcompetent virus (i.e., "viral reservoir"), which persists indefinitely in HIV-infected individuals on ART. Highlighting lessons from CD8 Depletion Studies, this plenary: identified the potential challenges of the "shock and kill" approach to HIV cure; explained the features of SIV-infected ART-treated macagues as an animal model for studies of HIV cure: and discussed novel data on the role of CD8+ T cells in ART treated HIV/SIV infections.

Plenary Epidemiology and Public Health Sciences

Epidemiology and Public Health Sciences Plenary speaker Dr. Stefan Baral of Johns Hopkins School of Public Health challenged the 2019 belief that the HIV pandemic is "over," given the advances in HIV treatment and PrEP. As of 2018, less than 60 per cent of the 37 million people living with HIV are on antiretroviral therapy and almost two million were estimated to have acquired HIV in 2017 including one million across Sub-Saharan Africa. In the era of U=U, he described the disconnect between the results of U=U at an individual level to those results observed at a population level, and made the case for a fundamentally more specific HIV response to achieve and sustain HIV pandemic control. His presentation: reviewed data highlighting the disconnect between the prevention benefits of viral suppression among people living with HIV at the level of the individual and what has been observed at the level of the population; evaluated evidence of significant risk heterogeneity for HIV even in the context of broadly generalized HIV epidemics found across Southern and Eastern Africa: and characterized the data demonstrating the importance of studying structural determinants of HIV risks including stigma to contextualize individual HIV-related risks.





Special Session Tapwewin (Our Truth)

Moderated by Dr. Michelle Johnson-Jennings, PhD, of the Choctaw Nation and of the University of Saskatchewan, this session was an exploration of Indigenous philosophies and undertakings arising from the lands and people of Sturgeon Lake Cree Nation. Knowledge Holders Willie Ermine and Norma Rabbitskin shared their teachings of Ethical Space and the Cultural Responsiveness Framework, both of which have become central to much research and programming with Indigenous peoples. They also discussed the Sturgeon Lake Cree Nation Research Protocol, which upholds how this Cree community will engage in research so it is done in a good way. They also presented some of the projects and findings from research they have undertaken.

Special Session HIV and Hepatitis C Syndemic – A View of Co-Infections from a Broader Lens

Research has shown that hepatitis C virus (HCV) infection is a significant health problem for people living with HIV. It is estimated that HIV/HCV coinfection occurs in 20 to 30 per cent of Canadians living with HIV. End-stage liver disease due to HCV is now considered a primary cause of morbidity and mortality in HIV-infected persons. Indigenous women and youth who inject drugs are at particular risk for HIV and HCV infections. Moderated by Dr. Mark Tyndall, University of British Columbia, this session described the HIV/HCV syndemic in Canada, illustrated how determinants of health that negatively impact Indigenous people and other vulnerable population(s) relate to HIV/HCV syndemic, and best practices in HIV/HCV care.

Special Session Pre-Exposure Prophylaxis (PrEP) Among People Who Inject Drugs – Review of Current Evidence and Use in Practice

This special session recognized that PrEP is an important intervention for HIV prevention, and is more frequently being used worldwide among MSM and heterosexual partners. However evidence is limited for PWID, which is a population that is at high risk for HIV. Speakers acknowledged that it is common for providers to look at PrEP as another tool to reduce HIV risk, and they reviewed current evidence and clinical experience in this scenario.



Plenary Clinical Sciences

Hepatitis C in HIV-Coinfection on Its Way to Microelimination: Which Challenges Remain?

Clinical Sciences plenary speaker Dr. Jürgen Rockstroh of the University of Bonn in Germany summarized the epidemiology of hepatitis C coinfection in HIV-infected individuals and key affected populations, reviewed updates on current HCV management guidelines in HIV-coinfection, and explored and provided insights into HCV micrelimination in HIV-coinfection. While direct-acting antivirals (DAA) have revolutionized HCV and HIV/HCV treatment, challenges remain for HIV/HCVcoinfected patients, which require careful evaluation of potential drug-druginteractions between HCV drugs and HIV antiretroviral therapy, medication for substance abuse and other comedications. He emphasized that the biggest challenge globally remains the access to treatment, and the inclusion of all patient populations affected - in particular, people who inject drugs (PWID).



Plenary Social Sciences

Social Sciences plenary speaker Dr. Sean Hillier, scholar from the Qalipu First Nation and of York University, discussed the shift that has taken place in the diversity of peoples and communities that we see most at risk of HIV infection. While white gay men are no longer at the forefront of the fight, they still seem to take up a disproportionate amount of the resources dedicated toward the treatment and care of individuals living with HIV/AIDS. He emphasized that social scientists and activists must Wuniska (rise up) to address the inequities that many continue to face, and critically examined the current social science literature from a queer decolonial framework as it relates to Indigenous Peoples living with HIV and the call for reconciliation. His presentation: discussed ways to foster resiliency research that strengthen Indigenous health and wellness in Canada: identified and accessed the importance of addressing system level issues (i.e., policy and funding) within all forms of social science research; and proposed the need to critically examine research from an intersectional approach that views the HIV epidemic from a neo-colonial, anti-oppressive, and queer perspective.



Special Session Testing, Reaching the Undiagnosed and Linkages to Care: Action Strategy to Diagnose >95% in 5 years

Moderated by Dr. Sean Rourke of St. Michael's Hospital in Toronto, this session emphasized the importance of HIV and STBBI testing in priority populations, and how this testing is critical to preventing new HIV infections. Undiagnosed cases of HIV are the source of more than 50 to 80 per cent of new HIV infections, and pragmatic approaches to STBBI testing are necessary to reach the undiagnosed, link them to care, and keep those who are high-risk healthy and STBBI -free. Throughout this session, presenters: described the advances, challenges and opportunities in implementing and scaling up HIV and STBBI testing options in Canada and the approaches and contexts for ensuring successful linkages to, and retention, in care; and discussed how implementation science can offer an approach and the pragmatic solutions to testing and linkage to care for the undiagnosed that can lead to the end of the HIV epidemic in Canada in five years.

Plenary CATIE "Implications for the Front Lines"

Moderated by CATIE, this session utilized a program science lens to highlight evaluated HIV programs across the continuum of care that were presented at CAHR. The session identified different evaluated HIV programming approaches in use in Canada and analyzed the implications for community programming and impact on reaching the 90/90/90 goals.

Lunch Symposium Steps Towards HIV Elimination in Canada: Prevention, Treatment, U=U, and Cure

Moderated by Stephen Shafran of the University of Alberta, this symposium reflected on how far research has come in the journey towards HIV elimination. Speakers highlighted new and emerging strategies including prevention, treatment and progress towards a cure. Speakers also discussed the role of social determinants of health and progress that has been made towards achieving 90 per cent diagnosed, 90 per cent on treatment, 90 per cent virally suppressed and 90 per cent living with good health.

Lunch Symposium Really...Another NNRTI? Research in HIV, a Lifelong Journey

Moderated by Dr. Alex Wong of the University of Saskatchewan, this session examined the latest clinical studies for the new NNRTI, doravirine, and discussed why it is an option that should be considered. The presenters also provided a clinician's perspective on how to integrate it into the management of PLWH, including selected patient cases. Attendees were updated on the evolution of HIV management, and how novel molecules such as MK-8591 will offer new opportunities for dosing and formulation.

CAHR 2019 Poster Highlights





Conference Highlights

CONFERENCE CAHR 20220

29th Annual Conference on HIV/AIDS Research

April 30 to May 3, 2020 in Quebec City, QC

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