

HIV PREVENTION From condoms to U=U

John McCullagh
Opening Doors Toronto
March 7, 2019



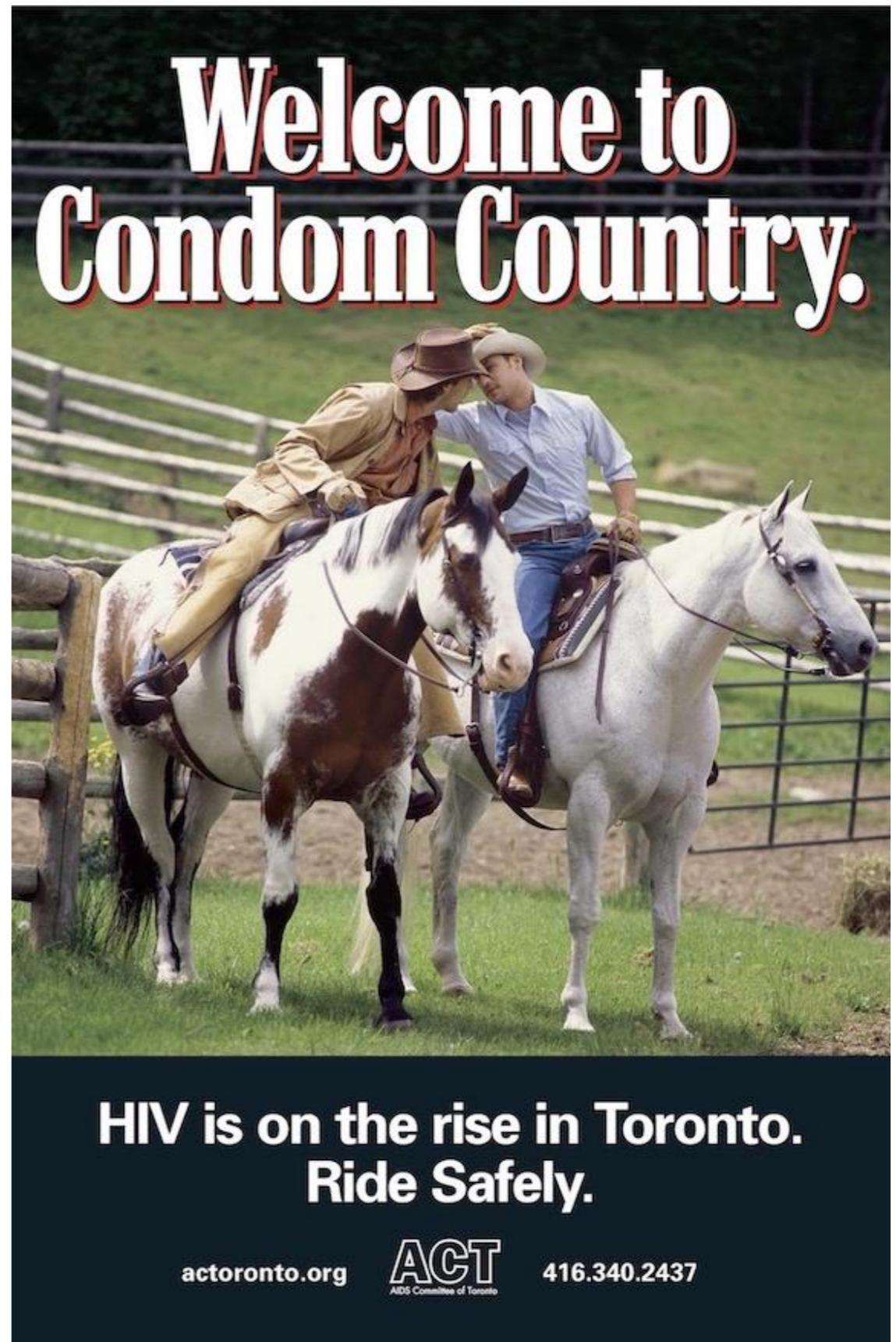
Back to 1981

- The advent of AIDS in 1981 was a shocking, epochal event that had a devastating impact on the gay community, at that time the community most affected
- The response was a good one: emphasizing human rights, compassion, solidarity, activism, generosity; in Canada, it was also sex-positive
- It has set the tone for the global response ever since; without that kind of response, AIDS might have been handled in a more punitive, authoritarian way

Condoms, all the time

- Behaviour change was the focus until other approaches became available: “abstain from sex”; “limit your partners”; “have ‘safer sex’”
- Safer sex meant condoms. All the time.
- This initiated an unprecedented cultural shift, for gay men in particular, to change our sexual practices

ACT's iconic Condom
Country poster
campaign
2001



Combination prevention

- About 15 years ago, it became evident we needed to do more
- Antiretroviral meds had slowed AIDS deaths, but people were still contracting HIV
- So we began to look at the underlying social, cultural, economic, political, legal and other factors
- Combination prevention – three types of intervention in a single, integrated approach – largely replaced the behaviour change of earlier years, although the emphasis on condoms remained

See pages 7, 13, 14 and 15 for examples and case studies of targeted combination prevention strategies.

COMMUNITY-OWNED

BIOMEDICAL

Interventions that use clinical and medical methods, e.g.

- condoms and lubricants
- antiretroviral treatment as prevention
- pre-exposure prophylaxis (PrEP)
- voluntary medical male circumcision
- needle and syringe programmes

STRUCTURAL

Interventions that promote an enabling environment, e.g.

- decriminalising sex work, homosexuality and drug use
- addressing gender inequality and violence
- laws to protect the rights of people living with HIV and key populations
- interventions to reduce stigma

BEHAVIOURAL

Interventions that encourage safe behaviour, e.g.

- risk reduction counselling
- comprehensive sexuality education
 - peer education programmes
 - social marketing campaigns, e.g. to promote condoms

RIGHTS-BASED

EVIDENCE-INFORMED



Biomedical intervention

- One of the critical components of combination prevention is biomedical intervention (taking antiretroviral meds)
- We've learned that antiretroviral meds **not only treat HIV**, they can also **prevent HIV**
- Initially, it was a challenge to get the preventive nature of antiretroviral drugs accepted; as throughout the HIV epidemic, change was brought about only by the activism of members of impacted communities

PEP

- PEP stands for **Post-exposure** Prophylaxis
- Early data from pre-clinical studies established the efficacy of antiretroviral meds in preventing the transmission of HIV
- In 2005, the first recommendations for non-occupational PEP were issued
- PEP must be started within 72 hours after a potential exposure, but the sooner the better; every hour counts
- PEP needs to be taken every day for a full four weeks; it must be taken consistently as prescribed

PrEP

- PrEP stands for **Pre-exposure** Prophylaxis
- It consists of two antiretroviral meds (tenofovir DF and emtricitabine) in one pill, sold either generically or branded as Truvada
- PrEP was approved by Health Canada in 2016 as a highly effective method of preventing the **sexual** acquisition of HIV
- PrEP requires that people are highly adherent to taking the meds as prescribed



Treatment as Prevention

- While the primary purpose of antiretroviral meds for HIV-positive people is to treat their HIV in order to improve their health and extend their lifespan, a secondary benefit is Treatment as Prevention (TasP) – the concept of using antiretroviral meds to prevent the onward transmission of HIV
- TasP rose to great prominence in 2011 further to the HPTN 052 study, where treating an HIV-positive person with antiretroviral meds was demonstrated to reduce the risk of the transmission of the virus to an HIV-negative partner
- TasP was pioneered in Canada by Dr Julio Montaner of the British Columbia Centre for Excellence in HIV/AIDS

PEOPLE ON EFFECTIVE
HIV TREATMENT
CANNOT PASS ON
THE VIRUS.



Culminating evidence about this began to
emerge over ten years ago

Evidence became definitive with the PARTNER
study

The PARTNER study

- Two phase study: 2010-2014 & 2014-2018
- 75 European clinical sites
- HIV-positive partner on antiretroviral meds for a minimum of six months with a viral load of less than 200/ml of blood
- Couples had to be not using condoms
- HIV-negative partner not on PrEP or PEP

PARTNER: The Evidence

PARTNER 1:

- 888 couples (548 heterosexual, 340 gay male)
- 58,000 condomless sex acts
- Zero transmissions linked to the HIV-positive partner

PARTNER 2:

- 783 gay male couples
- 77,000 condomless sex acts
- Zero transmissions linked to the HIV-positive partner

Undetectable = Untransmittable (U=U)

“It’s very, very clear that the risk is zero. If you are on suppressive antiretroviral treatment, you are sexually non-infectious.”

Dr Alison Rodger

Lead author of PARTNER

presenting at the 22nd International AIDS Conference

Amsterdam, July 25, 2018

HIV Today: The Message

“ A person living with HIV on effective treatment:

- can live a long and healthy life**
- can have HIV-negative children**
- can't pass on HIV to people they have sex with”**

Acknowledgments

Any successes we have achieved in HIV prevention and treatment are due to the involvement and meaningful engagement of people living with HIV, who have given their lives, bodies and experiences in the struggle against HIV. It is to the millions of people with HIV, past and present, to whom we are indebted.

I would like to acknowledge the support of my colleagues in the Ending the Epidemic Advocacy Group (Darien Taylor, Ron Rosenes, Bob Leahy, John Maxwell, Murray Jose-Boerbridge, Jeff Potts, and Tony Di Pede).

john.w.mccullagh@gmail.com