



HIV-related complications and overdose are primary drivers of mortality among women living with HIV in the modern treatment era (January 1/2000-December 31/2018)

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Nalin Dhillon, MSc, Research Coordinator

Co-Authors: Kate Laird, Wendy Zhang, Yolanda Ma, Neora Pick, Mary Kestler, Melanie C M Murray, Angela Kaida, Paul Sereda, Julio SG Montaner, Rolando Barrios, Kate Salters

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For correspondence, please contact Nalin Dhillon (ndhillon@cfenet.ubc.ca) or Kate Salters (ksalters@cfenet.ubc.ca)

Study Rationale / Drivers

- Younger HIV age profile and unique barriers to accessing care for WLWH, such as intimate partner violence and sex-work
- Unknown impacts of recent overdose crisis on WLWH in BC
- Gaps: women's HIV health underrepresented in research with focus often being on sexual/vertical transmission

Objectives

- 1) Characterize overall mortality rate
- 2) Identify clinical and demographic correlates of mortality

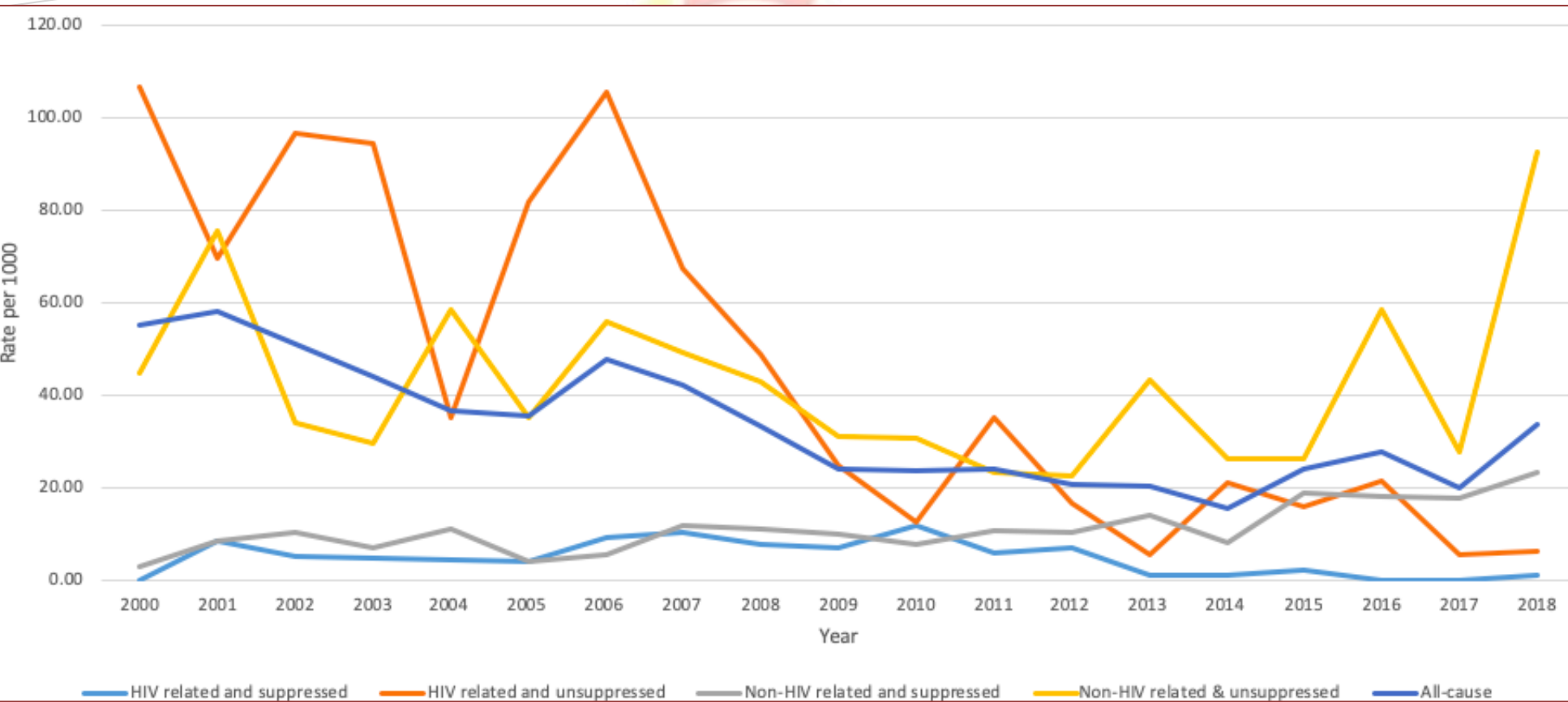


Counts and proportions of selected explanatory variables, 2000-2018, N=1,921

Cohort inclusion criteria:

- Female sex-at-birth
- Active in BC Drug Treatment Program (DTP)--defined as having received ART or updated viral load measure within 12 months of last follow-up date
- Censoring: inactive in DTP or 12/31/2018

Explanatory Variables	Died (%) n=514 (27% cohort)	Alive (%) n=1,407 (73% cohort)	P-value
Virally suppressed			
Yes	226 (44%)	1,145 (81%)	<0.001
No	288 (53%)	262 (19%)	
Treatment interruption			
No	187 (36%)	660 (47%)	<0.001
Yes	327 (64%)	747 (53%)	
Provincial Health Authority, last recorded			
Fraser	125 (24%)	483 (34%)	<0.001
Interior	36 (7.0%)	113 (8.0%)	
Northern	42 (8.2%)	97 (6.9%)	
Vancouver Coastal	238 (46%)	525 (37%)	
Vancouver Island	64 (12%)	178 (13%)	
Unknown	9 (1.8%)	11 (0.8%)	
HCV co-infection			
Negative	59 (11%)	632 (45%)	<0.001
Confirmed	376 (73%)	602 (43%)	
Unknown	79 (15%)	173 (12%)	
Year of HIV baseline (being connected to HIV care)			
<2000	290 (56%)	368 (26%)	<0.001
2000-2003	99 (19%)	223 (16%)	
2004-2007	79 (15%)	251 (18%)	
2008-2011	28 (5.5%)	237 (17%)	
2012-2015	14 (2.7%)	176 (13%)	
2016-2018	4 (0.8%)	152 (11%)	
Median age at baseline, (Q1, Q3)	36 (30, 43)	34 (27, 42)	<0.001
Median age at death, (Q1, Q3)	46 (39, 53)	not applicable	



Temporal trend in mortality rate, stratified by HIV/non-HIV deaths^a and viral suppression^b status at time closest to death

^aDeaths resulting in infectious and parasitic diseases, viral infections, non-Hodgkin lymphoma, malignant neoplasms, other specified diseases and conditions, and unspecified HIV disease (adapted and derived case-finding algorithms from ^{1,2})

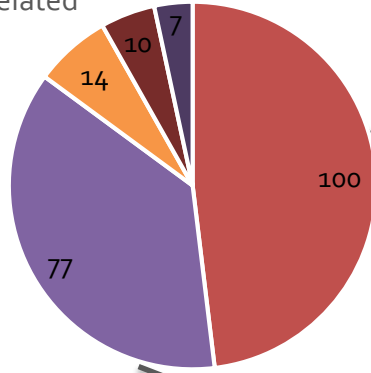
^b<200 copies/mL of viral load testing most recently confirmed within one year of end of follow-up

¹Alves DN, Bresani-Salvi CC, Batista J d'Arc L, et al. Use of the Coding Causes of Death in HIV in the classification of deaths in Northeastern Brazil. *Rev Saúde Pública.* 2017;51. doi:10.11606/S1518-8787.2017051000124
²Lima VD, Lourenço L, Yip B, Hogg RS, Phillips P, Montaner JSG. Trends in AIDS incidence and AIDS-related mortality in British Columbia between 1981 and 2013. *Lancet HIV.* 2015;2(3):e92-e97. doi:10.1016/S2352-3018(15)00017-X

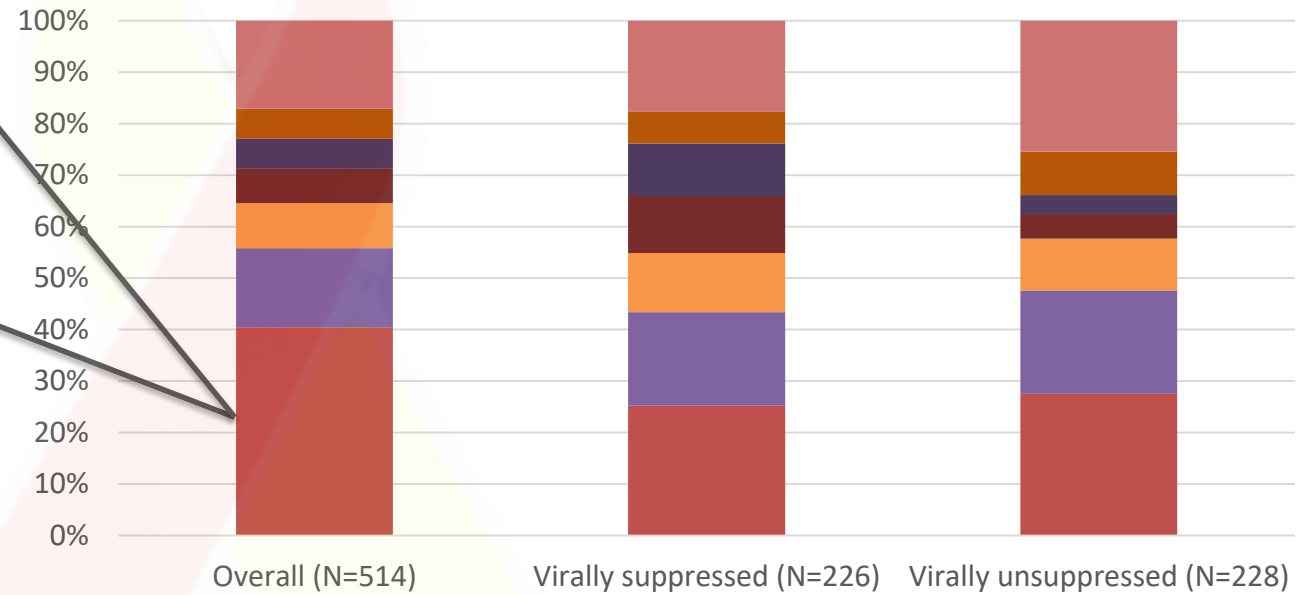


Count breakdown of overall HIV related deaths (n=208) due to:

- Unknown causes
- Other infectious and parasitic diseases
- Unspecified HIV
- Other malignant neoplasms

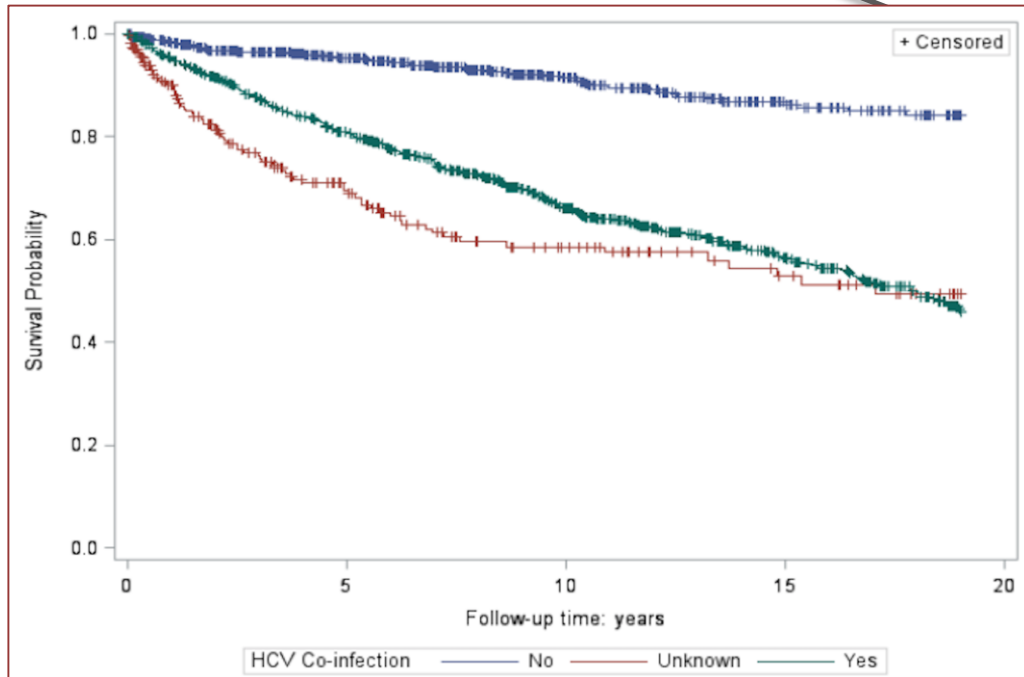


Main causes of mortality, stratified by viral suppression status at death



- HIV
- Unknown/to be determined
- Respiratory illnesses
- Other causes
- Accidental poisonings/overdose-suspected^a
- Malignancies
- Circulatory system diseases

^aDeaths resulting from exposure to antiepileptics, sedative-hypnotics, psychotropics, narcotics, psychodysleptics, and other unspecified drugs, and biological substances



Probability of survival, 2000-2018, stratified by HCV co-infection status