

Exploring differences in violence and abuse-related healthcare utilization and mortality among people living with and without HIV in British Columbia, Canada

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Background

- The syndemic of HIV and violence is well documented, however, the prevalence of health care encounters due to violence and abuse and mortality among people with HIV (PWH) is unclear
- While limited in its ability to capture complex experiences, administrative data has been used to explore experiences of violence and abuse in North American settings healthcare settings.^{1,2}

- OBJECTIVE:** This study seeks to characterize violence/abuse-related health care utilization (VARH) and mortality among people with and without HIV in British Columbia (BC), Canada

Methods

- The Comparative Outcomes and Services Utilization Trends (COAST) study is a population-based cohort examining health outcomes and healthcare utilization of all PWH ages ≥ 19 in BC (n=12,057) and a randomly selected 10% general population comparison sample (n=514,952).
- We identified unique episodes of health care encounters due to violence/abuse in administrative health records¹
- VARHs were identified through practitioner billing codes (MSP) or hospital records (DAD) using abuse and assault-related ICD-9/ICD-9-CM [all practitioner claims; hospital data up until 2001] and ICD-10-CA [hospital data 2001-onward] codes) among people with and without HIV from April 1, 1996 to March 31, 2013
- We examined differences in the prevalence of VARH records as well as annual prevalence of violence abuse-related hospitalization episodes by HIV status
- For those who with VARH, we assessed differences in all-cause and cause-specific mortality using linked vital statistics data.

Results

- Between 1996-2013, 5,668 (1.0%) participants in COAST had ≥ 1 occurrence of VARH(s) (3.5% among PWH, and 1.0% among those without HIV).
- 75% of codes were hospitalization codes (vs. physician billing)
- Among 5,668 participants with ≥ 1 VARH(s), violence/abuse-related hospitalization episodes ranged from 3.6% (1996/97) to 8.0% (2000/01) among PWH and 5.2% (2010/11) to 6.9% (1997/98) among those without HIV.

Figure 1- % Violence and Abuse-related Hospitalization Episodes by Fiscal Year

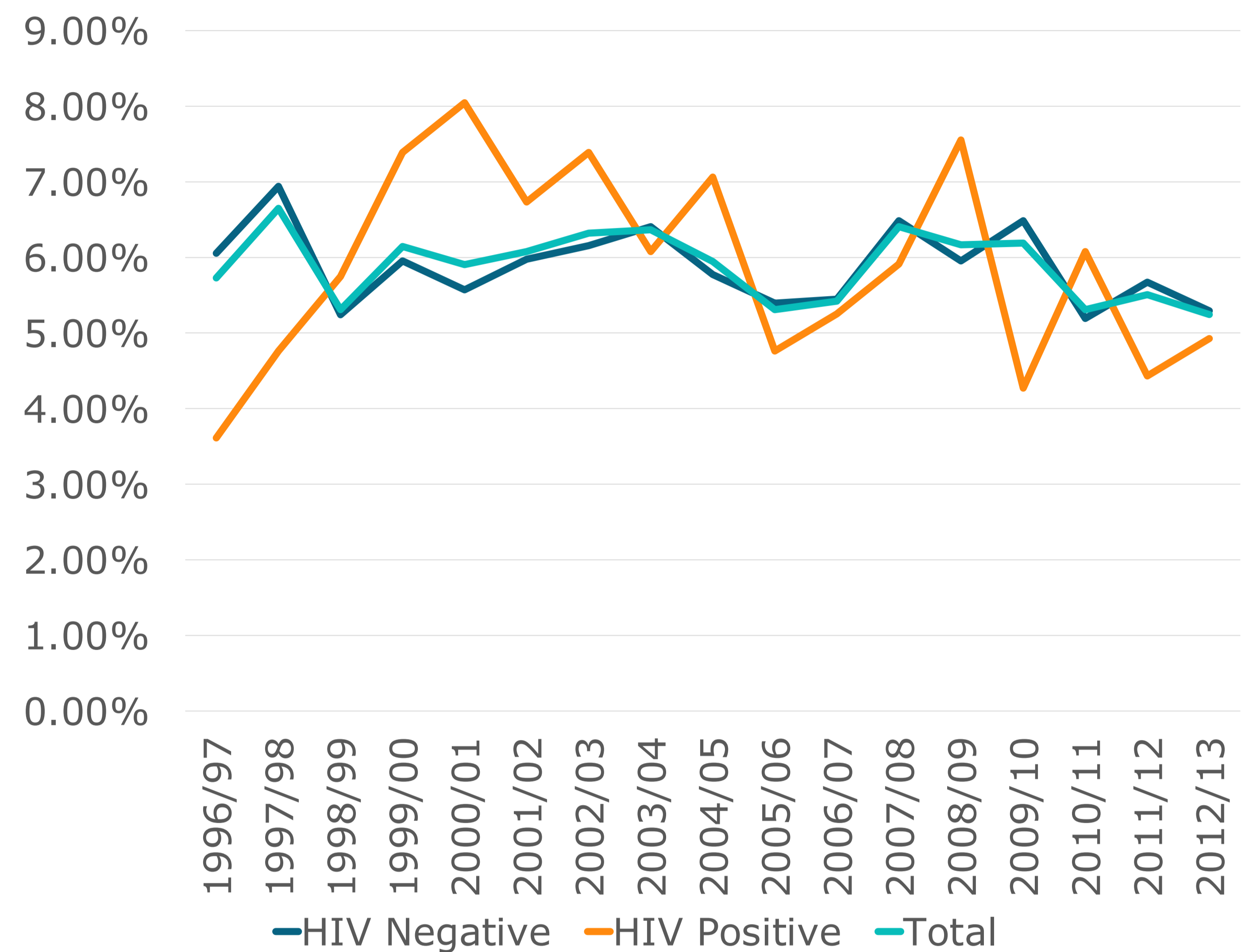


Table 1- List of Administrative codes used to capture violence and abuse-related administrative health records and deaths

Code category	Code Type	Code	Code Definition
Assault	Other	10A	Emergency Care – Assault
Other Abuse	ICD9	V15.4	personal history of psychological trauma presenting hazards to health
Other Abuse	ICD9	V15.41	Physical Abuse and Rape
Other Abuse	ICD9	V15.42	Emotional Abuse
Other Abuse	ICD9	V15.49	Other Abuse
Conflict	ICD9	V61.1	counselling for marital and partner problems
Conflict	ICD9	V61.11	Counselling for the Victim
Other Abuse	ICD10	T74	adult and child abuse
Other Abuse	ICD10	T74.1	Physical Abuse
Other Abuse	ICD10	T74.2	Sexual Abuse
Other Abuse	ICD10	T74.3	Psychological Abuse
Assault	ICD10	V71.5	Observation following alleged rape or seduction
Assault	ICD10	X85	Assault by drugs, medicaments and biological substances
Assault	ICD10	X86	Assault by corrosive substance
Assault	ICD10	X87	Assault by pesticides
Assault	ICD10	X88	Assault by gases and vapours
Assault	ICD10	X89	Assault by other specified chemicals and noxious substances
Assault	ICD10	X90	Assault by unspecified chemical or noxious substance
Assault	ICD10	X91	Assault by hanging, strangulation and suffocation
Assault	ICD10	X92	Assault by drowning and submersion
Assault	ICD10	X93	Assault by handgun discharge
Assault	ICD10	X94	Assault by rifle, shotgun and larger firearm discharge
Assault	ICD10	X95	Assault by other and unspecified firearm discharge
Assault	ICD10	X96	Assault by explosive material
Assault	ICD10	X97	Assault by smoke, fire and flames
Assault	ICD10	X98	Assault by steam, hot vapours and hot objects
Assault	ICD10	X99	Assault by sharp object
Assault	ICD10	Y00	Assault by blunt object
Assault	ICD10	Y01	Assault by pushing from high place
Assault	ICD10	Y02	Assault by pushing or placing victim before moving object
Assault	ICD10	Y03	Assault by crashing of motor vehicle
Assault	ICD10	Y04	Assault by bodily force
Other Abuse	ICD10	Y05	Sexual Assault by Bodily Force
Other Abuse	ICD10	Y06	Neglect and Abandonment by Spouse/Partner
Other Abuse	ICD10	Y07	Other maltreatment
Other Abuse	ICD10	Y07.0	Other Maltreatment by Spouse or Partner
Assault	ICD10	Y08	Assault by other specified means
Assault	ICD10	Y09	Assault by unspecified means
Assault	ICD10	Y87.1	Sequelae of intentional self-harm
Assault	ICD10	Z04.4	physical examine for sexual abuse
Conflict	ICD10	Z63	Problem in Relationship with Spouse or Partner
Assault	ICD9	E96.0	Fight brawl rape
Assault	ICD9	E96.1	Assault by corrosive or caustic substance, except poisoning
Assault	ICD9	E96.2	Assault by poisoning
Assault	ICD9	E96.3	Assault by hanging and strangulation
Assault	ICD9	E96.4	Assault by submersion [drowning]
Assault	ICD9	E96.5	Assault by firearms and explosives
Assault	ICD9	E96.6	Assault by cutting and piercing instrument
Assault	ICD9	E96.8	Assault by other and unspecified means
Assault	ICD9	E96.9	Late effects of injury purposely inflicted by other person

- A quarter (124/493) of PWH with ≥ 1 VARH were female.
- Over the study period, 810 of the 5,668 participants who had ≥ 1 VARH died, including 33.9% and 12.4% of people with and without HIV, respectively
- Among 167 PWH who died, the most common cause of death was HIV-related (38.3%), whereas 12.6% died from assault, homicide, or injury-related causes (compared to 28.8%, among people without HIV).

Conclusion

- Findings revealed higher violence/abuse-related healthcare utilization among PWH (vs. without HIV), and although the proportion of deaths among patients who had violence/abuse health records was higher among PWH, less PWH died of homicides, assault, or injury-related causes.
- As only a small proportion of the population seek medical attention for violence and abuse, these administrative data only capture a small minority of experiences, and likely represent only the most severe cases.
- High levels of mortality and violence/abuse-related healthcare utilization among PWH highlights the physical and social risk environments PWH are in, and the need to integrate monitoring and holistic violence prevention and support services within HIV/AIDS care.

References

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