Gender inequities in IAS-USA clinical care outcomes among HIV-positive individuals initiating antiretroviral treatment in British Columbia, Canada

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Background

Compliance with IAS-USA clinical care guidelines during the first year after initiation of HAART is a key predictor of health and survival. In a 2012 study involving a newly validated metric, called the Programmatic Compliance Score (PCS), non-compliance with 6 ‘Quality of Care’ (QOC) indicators was shown to be associated with a very high probability of morbidity and mortality. The proportion of women living with HIV has been increasing in Canada and globally. Further, women differ from men in several aspects of HIV clinical care. However, it remains unclear if gender differences also exist in this newly validated QOC metric and if there are gender-specific reasons for differential receipt of recommended care.

Therefore, the primary objective of this investigation was to measure gender differences in QOC and to investigate patient- and system-level factors associated with poorer QOC among women within a cohort of HIV-positive individuals initiating HAART in British Columbia, Canada.

Methods

Study Population:

We used data from a population-based registry of all patients (≥19 years) who initiated HAART between 2000-2010 in British Columbia, Canada.

Primary Outcome:

The primary outcome was QOC, estimated using the PCS metric, which includes six indicators of non-compliance with IAS-USA guidelines during the first year on HAART: (1) No resistance testing before treatment initiation; (2) Starting on a non-recommended regimen (according to contemporary guidelines); (3) Initiating ART at CD4 < 200 cells/mm3; (4) Receiving < 3 CD4 tests; (5) Receiving < 3 viral loads (VL); and (6) Not achieving viral suppression within six months. Summary scores range from 0-6. Higher scores indicate poorer QOC, and poorer QOC is predictive of worse health outcomes, as shown below.

Statistical Analysis:

Multivariable ordinal logistic regression was used to measure: (1) If female gender was an independent predictor of poorer QOC (higher PCS scores); and (2) Factors associated with poorer QOC (higher PCS scores) among women.

In the adjusted model (Table 3), female gender (AOR=1.25 [95% CI:1.06-1.46]; p=0.006) was significantly associated with poorer QOC (higher PSC scores), even after controlling for age, history of IDU, Aboriginal ancestry, and place of residence.