

Social Determinants of Health and Self-Rated Health Status: A Comparison between Women with HIV and Women without HIV from the General Population in Canada

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BACKGROUND

Women represent approximately one-quarter of the estimated 75,500 PLWH in Canada. Women living with HIV (WLWH) in Canada are disproportionately from communities that experience marginalization. For example, 35.6% and 30.6% of new HIV diagnoses in women in 2014 were identified among Black and Indigenous women, respectively.

Despite advances in HIV interventions, people living with HIV (PLWH) continue to experience challenges to maintaining their health due to the barriers linked with social determinants of health (SDoH). These determinants (e.g., discrimination, HIV-related stigma, income hardship) have been reported to be correlated with poorer HIV care and treatment outcomes.

OBJECTIVES

To investigate socio-structural determinants of health and self-rated health status among WLWH, and then compare them with the assumed HIV-negative general population of women, standardizing for age and ethnoracial group variables.

METHOD

WLWH: the baseline survey of the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS) of WLWH enrolled from 2013 to 2015 in Canada was used. CHIWOS is a community-based research study and applies the Greater Involvement of People Living with HIV/AIDS (GIPA) and Meaningful Involvement of Women Living with HIV/AIDS (MIWA) principles. We analyzed data of 1,422 WLWH aged ≥ 16, residing in British Columbia (BC), Ontario, and Quebec.

General population of women: Data were obtained from the Canadian Community Health Survey (CCHS), a nation-wide population-based survey administered by Statistics Canada. CCHS uses a multistage, stratified cluster sampling design to target Canadians (~98%) aged ≥12 for inclusion in all provinces and territories. For consistency with CHIWOS, we limited the CCHS's analytic sample to women aged ≥16 years old, residing in the three provinces (analytic sample = 46,851).

MEASURES

<p>Yearly personal level (personal income levels : <\$20,000, \$20,000 to \$39,999, ≥ \$40,000, Not Stated)</p>	<p>Racial discrimination (using a modified version of the Everyday Discrimination Scale: never/almost never, infrequent [less than once a year], frequent [more than once a year])</p>
<p>Household Income level (household income levels : <\$20,000, \$20,000 to \$39,999, ≥ \$40,000)</p>	<p>Gender discrimination (using a modified version of the Everyday Discrimination Scale: never/almost never, infrequent [less than once a year], frequent [more than once a year])</p>
<p>Household food sufficiency (always had enough of the kinds of food, had enough but not always, sometimes/often did not have enough to eat)</p>	<p>Perceived social support (measured emotional, tangible, affectionate, and positive social interaction [overall score: 0-12, with scores ≤6 indicating poorer social support availability])</p>
<p>Household food security (measured using worried that food would run out, experienced that food run out, could not afford to eat balanced meals [each categorized as sometimes/often vs. never])</p>	<p>Self-rated health status (In general, would you say that your health is...? Poor/fair vs. good/very good/excellent)</p>

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Findings

TABLE 1: Comparing SDoH of women with HIV (CHIWOS; 2013/15) and the general population of women in Canada (CCHS; 2013/14)

Variables	Categories	CHIWOS	CCHS AER Std. [†]
Yearly personal income	<20,000 CAD	70.3 (67.8, 72.6)	28.1 (26.1, 30.0)
	20,000 to <40,000 CAD	17.2 (15.3, 19.3)	24.5 (22.4, 26.7)
	≥ 40,000 CAD	10.1 (8.7, 11.8)	33.1 (30.4, 35.8)
	Not stated	2.4 (1.7, 3.3)	14.3 (12.3, 16.3)
Yearly household income	<20,000 CAD	65.3 (62.8, 67.8)	10.9 (9.5, 12.3)
	20,000 to <40,000 CAD	20.6 (18.5, 22.8)	18.9 (16.8, 21.1)
	≥ 40,000 CAD	14.1 (12.3, 16.0)	70.2 (67.8, 72.6)
Food sufficiency	Always had enough of the kinds	30.5 (27.8, 33.4)	82.0 (79.2, 84.8)
	Had enough, but not always	53.7 (50.7, 56.7)	15.3 (12.7, 18.0)
	Sometimes/often did not have	15.7 (13.7, 18.1)	2.6 (1.7, 3.6)
Food security items	Sometimes/often worried food run out	65.7 (62.7, 68.5)	17.9 (15.3, 20.5)
	Sometimes/often experienced food run out	62.9 (59.9, 65.7)	14.3 (12.0, 16.7)
	Sometimes/often Could not afford for balanced meal	62.7 (59.7, 65.5)	14.0 (11.6, 16.5)
Overall Food security	Food secure	27.4 (24.8, 30.2)	79.3 (76.7, 82.0)
	Mildly food insecure	8.2 (6.7, 10.0)	5.2 (4.1, 6.4)
	Moderately food insecure	10.3 (8.6, 12.3)	5.3 (3.6, 6.9)
	Severely food insecure	54.1 (51.0, 57.0)	10.2 (8.1, 12.2)
Perceived social support	Poor	30.3 (25.6, 35.5)	2.9 (0.7, 5.1)
	Good	69.7 (64.5, 74.4)	97.1 (94.9, 99.3)
Race discrimination	Never	45.6 (43.0, 48.2)	87.1 (82.2, 92.1)
	Infrequent	8.0 (6.7, 9.6)	3.3 (0.5, 6.1)
Gender discrimination	Frequent	46.4 (43.8, 49.0)	9.6 (5.3, 13.8)
	Never	37.5 (35.0, 40.0)	89.4 (87.0, 91.7)
	Infrequent	8.2 (6.9, 9.7)	2.2 (1.2, 3.2)
	Frequent	54.4 (51.8, 56.9)	8.4 (6.2, 10.6)
Self-rated health	Excellent/v. good/good	75.2 (72.9, 77.4)	87.4 (85.8, 89.0)
	Fair/poor	24.8 (22.6, 27.1)	12.6 (11.0, 14.2)

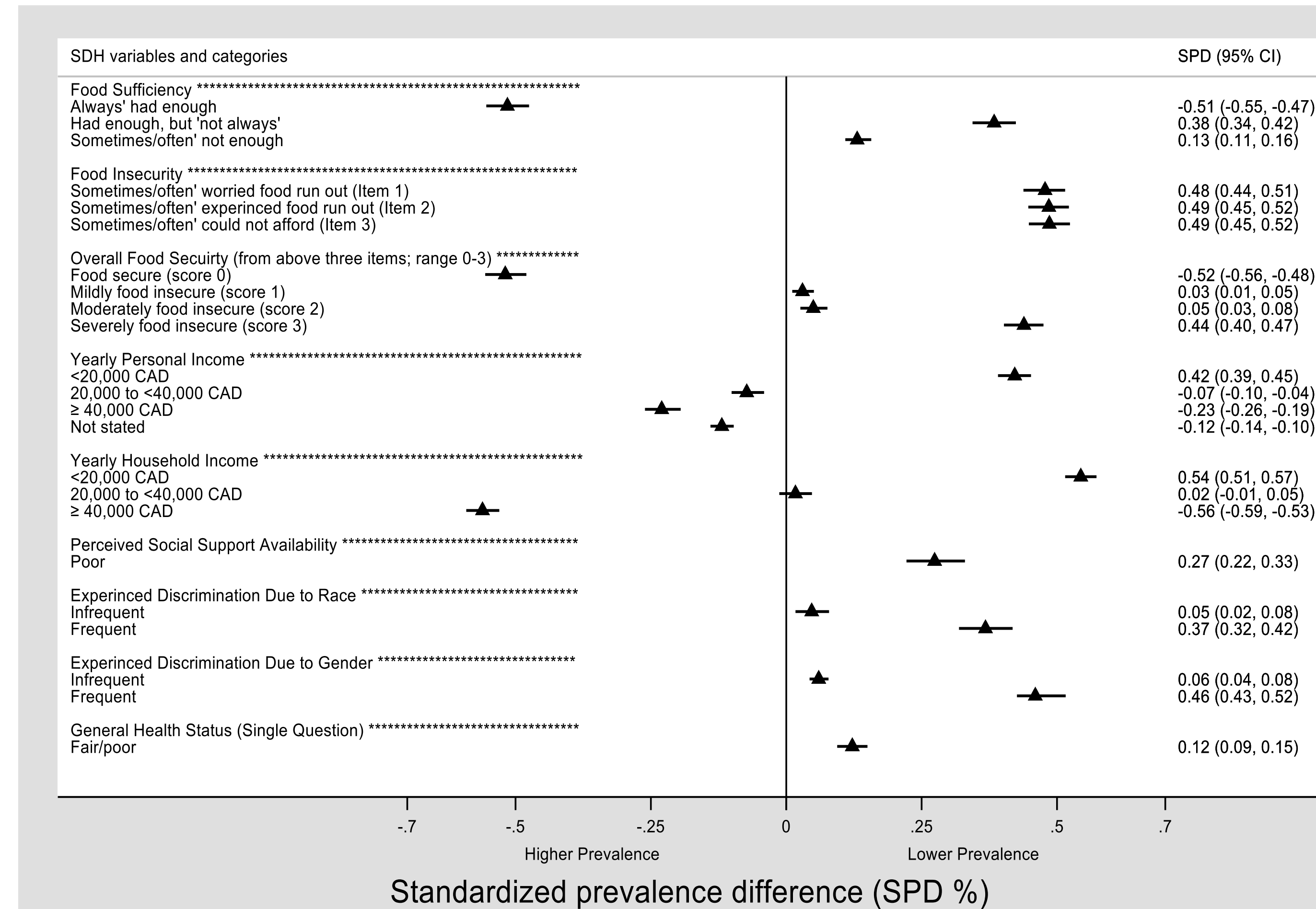


Fig 1. Standardized prevalence differences (SPD%) of SDoH in WLWH vs. CCHS (SPD>0 indicates higher proportion of that indicator in WLWH than general population)

CONCLUSIONS

These findings provide information on the upstream determinants of health their inequalities in WLWH indicating that a high proportion of WLWH in Canada experienced much worse economic hardships, food insecurity, social exclusions as well as poor/fair self-reported health, in excess of what would be expected. These findings support the need for the integration of socio-structural approaches and health equity into practice to address women's unique needs. Addressing these needs when providing individual-tailored HIV care and treatment services will promote the clinical care of women with HIV living in poverty.

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FOR MORE INFORMATION ON CHIWOS

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