

Is peer leadership engagement associated with awareness of the HIV prevention benefits of ART? A cross-sectional analysis of women living with HIV in Canada in the UequalsU era

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BACKGROUND

Peers play an essential role in improving the health and well-being of people living with HIV and pioneering activism, such as the Undetectable=Untransmittable (U=U) movement, to advance the rights of people living with HIV.

Although many women living with HIV benefit from peer-led programs, few studies focus on the experiences of peer leaders: women in leadership positions that recognize their knowledge and expertise as women living with HIV.

In this **Undetectable=Untransmittable (UequalsU) era**, we assessed:

1. The prevalence of peer leadership engagement among women living with HIV;
2. Whether engagement in peer leadership is associated with knowledge of the HIV prevention benefits of an undetectable viral load with sustained use of antiretroviral therapy (ART).

METHODS

We used cross-sectional, baseline questionnaire data from the **Canadian HIV Women's Sexual and Reproductive Health Cohort Study** (CHIWOS; www.chiwos.ca). We hired and trained 40 women living with HIV as Peer Research Associates across BC, ON, and QC, and together we recruited and surveyed a diverse cohort of 1,422 women (cisgender and transgender inclusive) living with HIV aged 16 years or older.

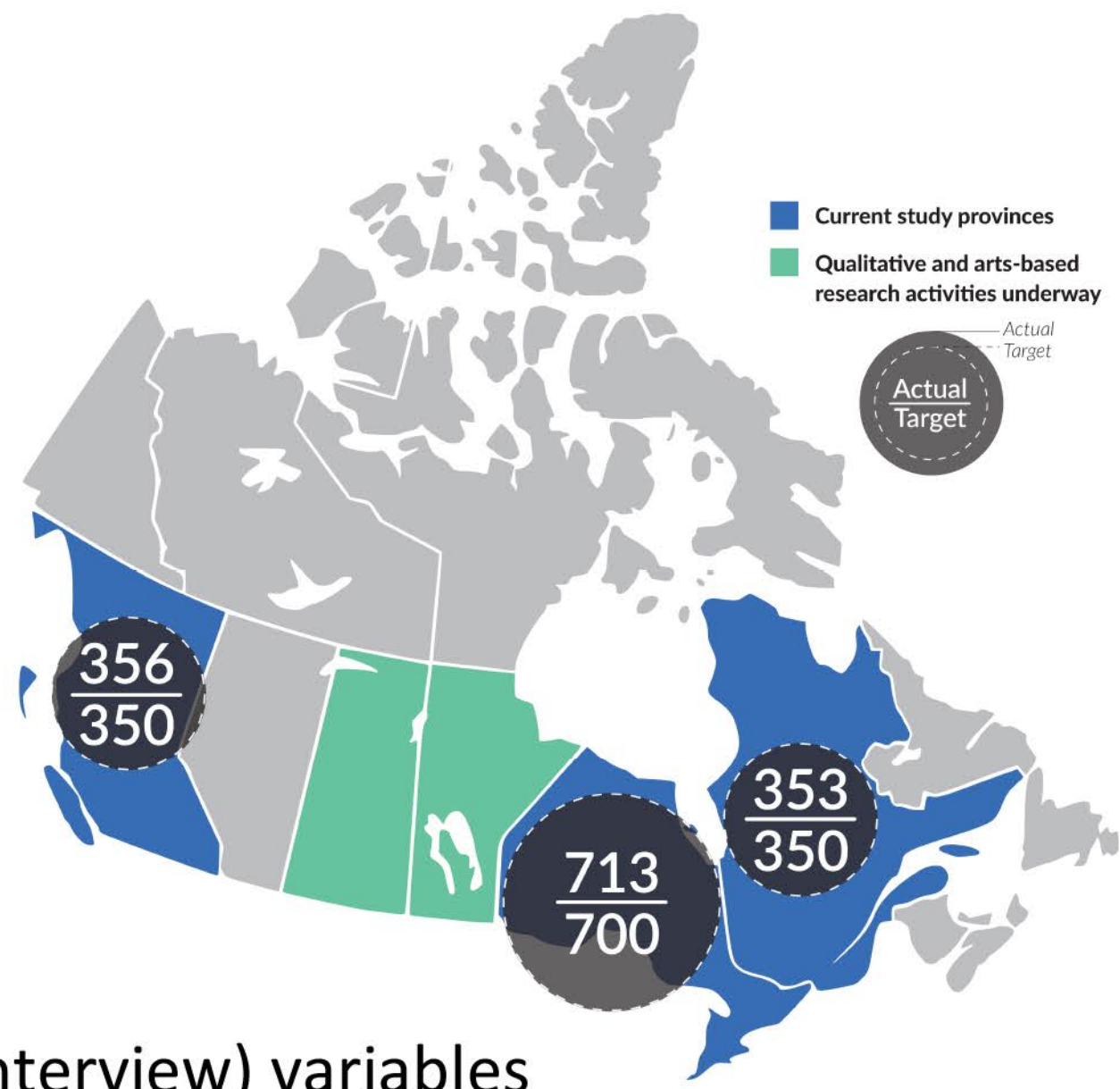
❖ **Data collection:** August 2013 to May 2015

❖ **Primary explanatory variable: Awareness of the HIV prevention benefits of ART**, measured by the question, “How do you think taking ART changes your risk of transmitting HIV?”, defined as “makes the risk a lot lower.”

❖ **Primary outcome variable: Engagement in Peer Leadership**, defined by asking women who received HIV medical care in the past year if they were **aware of, and how frequently they engaged in peer leadership** at HIV clinics and/or AIDS Service Organizations: “Frequently” (≥Monthly), “Infrequently” (<Monthly), “Never,” or “Unaware”.

❖ **Covariates:** Social (i.e. food security) and demographic (i.e. age, province of interview) variables

❖ **Statistical analysis:** multivariable ordinal logistic regression assessed associations.



RESULTS

Of 1,330 women who received HIV medical care in the past year, median age was 43 [IQR: 36-51]; 77% had lived with HIV for ≥6 years. We found significant differences in the peer leadership engagement by key socio-demographic characteristics (**Table 1**).

Table 1: Baseline characteristics of participants overall and by frequency of peer leadership engagement, n=1330

Variable	Overall (n=1330)	Frequently (n=111)	Infrequently (n=295)	Never (N=156)	Unaware (n=757)	P-value
Province						<0.001
BC	350 (26)	59 (53)	89 (30)	84 (54)	117 (15)	
ON	641 (48)	28 (25)	130 (44)	45 (29)	429 (57)	
QC	339 (25)	24 (22)	76 (26)	27 (17)	211 (28)	
Racial/Ethnic background						0.024
White	558 (42)	52 (47)	111 (38)	68 (44)	325 (43)	
Indigenous	281 (21)	33 (30)	58 (20)	34 (22)	154 (20)	
African, Caribbean, Black	393 (30)	17 (15)	101 (34)	40 (26)	228 (30)	
Mixed Race / Other	98 (7)	9 (8)	25 (8)	14 (9)	50 (7)	
Education						0.064
Lower than high school	214 (16)	24 (22)	57 (19)	26 (17)	106 (14)	
High school or higher	1110 (84)	87 (78)	236 (81)	129 (83)	648 (86)	
Household gross yearly income						0.001
< \$20 000	837 (65)	84 (78)	203 (70)	87 (57)	457 (63)	
≥ \$20 000	452 (35)	24 (22)	83 (30)	65 (43)	274 (37)	
History of IDU						<0.001
No	892 (68)	42 (38)	191 (65)	105 (68)	545 (74)	
Yes	415 (32)	69 (62)	101 (35)	50 (32)	193 (26)	
ARV use ever						<0.001
No	118 (9)	3 (3)	6 (2)	3 (2)	105 (14)	
Yes	1209 (91)	107 (97)	289 (98)	153 (98)	650 (86)	
Heterosexual	1164 (88)	88 (79)	263 (89)	143 (92)	660 (88)	0.015
LGBTQ	161 (12)	23 (21)	31 (11)	13 (8)	93 (12)	
Age	43 [36-51]	48 [40-54]	45 [38-51]	44 [35-51]	41 [34-50]	<0.001
Years living with HIV	11 [6-17]	13 [9-18]	12 [7-18]	12 [6-17]	11 [6-17]	0.003

RESULTS CONT'D.

❖ Overall, 8% frequently, 22% infrequently, and 12% never engaged in peer leadership, while 57% were unaware of peer leadership opportunities (see Table 1; Figure 1).

❖ Women engaged in peer leadership (frequently or infrequently) were more likely to be aware of the HIV prevention benefits of ART (68% and 71%), compared with women who never engaged in peer leadership, or were unaware of such opportunities (55%, and 66%, respectively; p=0.010).

Fig 1. Frequency of engagement in peer leadership

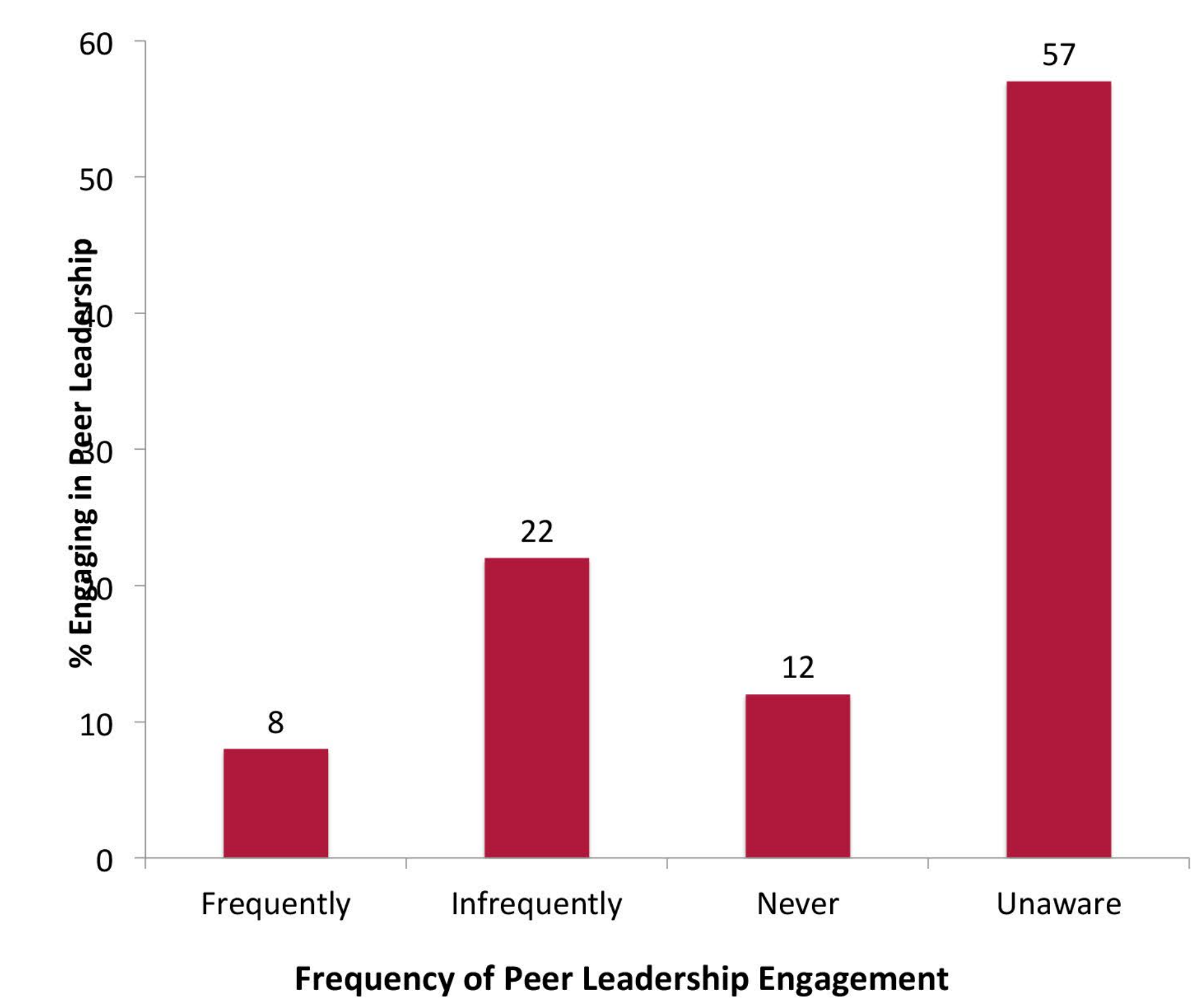
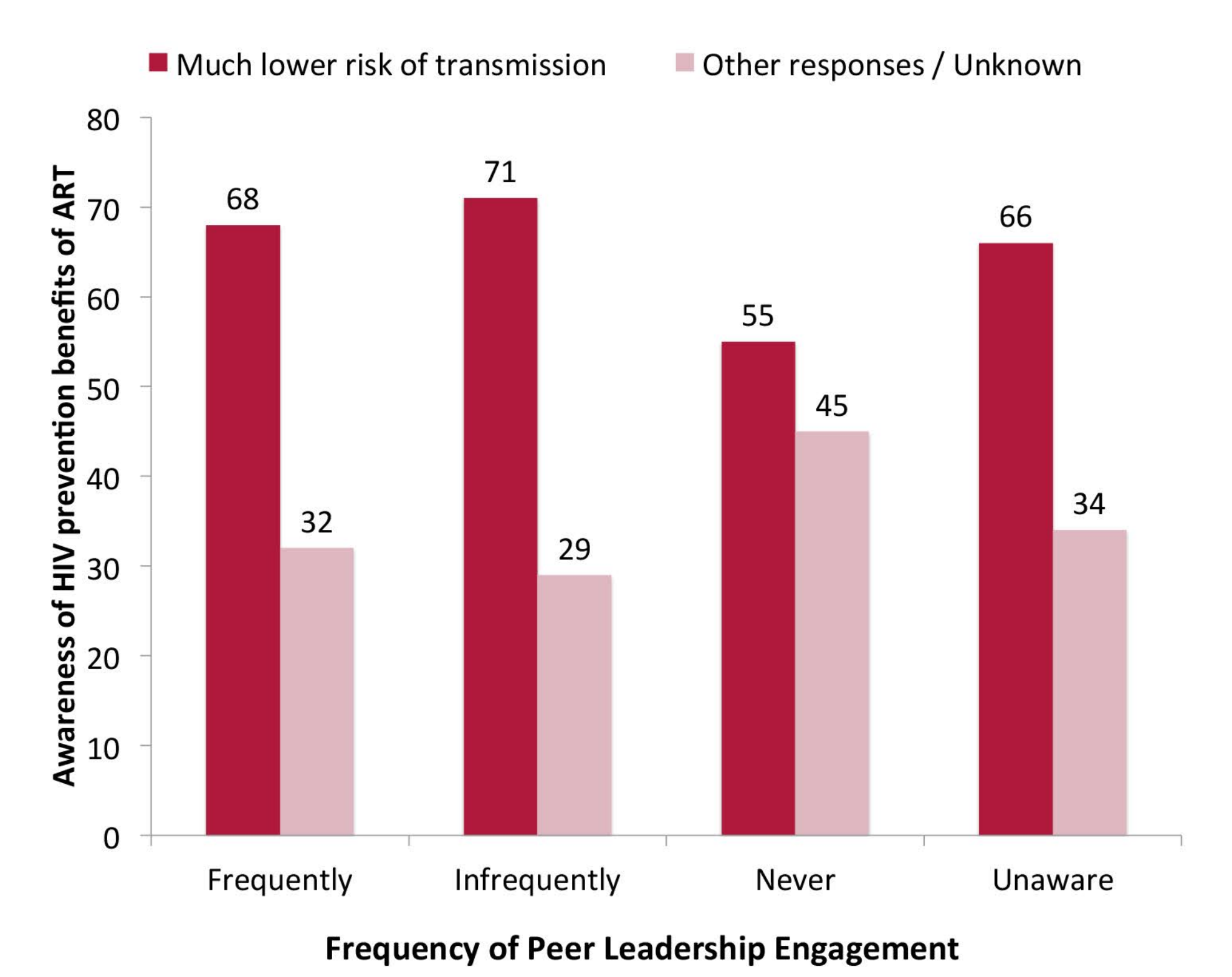


Fig 2. Awareness of ART benefits by engagement



❖ In adjusted analyses, women who frequently engaged in peer leadership had significantly higher odds of being aware of the HIV prevention benefits of ART (aOR: 1.36 [95% CI: 1.06, 1.75]) (Table 2).

Table 2: Ordinal logistic regression modelling probabilities cumulated over the higher frequency levels of peer leadership engagement (n=1,117)

Variable	Univariable Analysis Higher vs Lower OR (95% CI)	Multivariable Analysis Higher vs Lower aOR (95% CI)
Awareness of HIV prevention benefits (vs. Other responses/Unknown)	1.11 (0.88, 1.42)	1.36 (1.06, 1.75)
Province (vs. British Columbia)		
Ontario	0.31 (0.23, 0.40)	0.30 (0.23, 0.40)
Quebec	0.41 (0.30, 0.55)	0.36 (0.26, 0.49)
Racial/Ethnic background (vs. White)		
Indigenous	1.15 (0.85, 1.56)	Not selected
African, Caribbean, Black	0.97 (0.74, 1.28)	
Mixed Race / Other	1.40 (0.90, 2.16)	
Household gross yearly income ≥ \$20 000	0.80 (0.63, 1.01)	Not selected
History of IDU (vs. No)	2.00 (1.57, 2.54)	Not selected
ARV use ever (vs. No)	8.36 (4.21, 16.63)	Not selected
LGBTQ (vs. Heterosexual)	1.07 (0.77, 1.50)	Not selected
Viral load suppression (vs. No/Unknown)	1.64 (1.21, 2.23)	Not selected
Large city size (vs. Small/Medium)	0.91 (0.68, 1.21)	Not selected
Food Secure (vs. Food Insecure)	0.85 (0.67, 1.08)	0.75 (0.59, 0.97)
Violence as an adult (vs. No)	2.07 (1.50, 2.86)	Not selected
Age	1.03 (1.02, 1.04)	1.03 (1.02, 1.05)
Years living with HIV	1.02 (1.01, 1.04)	Not selected

DISCUSSION

❖ Women living with HIV who engaged in peer leadership had **significantly higher odds** of being aware of the HIV prevention benefits of ART, UequalsU's cornerstone message

❖ **Less than one-third** of women engaged in peer leadership, signaling an important direction for HIV research and programming



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For more information about CHIWOS please contact a provincial coordinator;
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Conflict of Interest Disclosure: presenters have no conflict of interest. **Consent was received for all photos appearing in this poster.**

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