

BC CARMA CHIWOS COLLABORATION

Chronic Pain Prevalence and Characteristics Among Women Living with HIV and HIV-negative Women Participating in the British Columbia CARMA-CHIWOS Collaboration (BCC3) Study: Preliminary Data

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I respectfully acknowledge that the land I work, learn, and live on is the traditional, ancestral, unceded territories of the Coast Salish Peoples, including the xʷməθkʷəy̅əm (Musqueam), Sḵwx̱wú7mesh (Squamish) and səłl̓wətaʔ (Tseil-Waututh).

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Background and Methods

Chronic pain is a **major under-recognized** problem for people living with HIV



How common is it?

- prevalence: 20-90%¹
- women are more affected
- majority of studies do not focus on women

How does it affect healthy aging?

- often under-treated
- pain-related stigma
- affects ART adherence



= BC CARMA CHIWOS Collaboration

Currently enrolling women living with HIV (**WLWH**) and HIV-negative women in BC

Holistic analysis of aging and health:

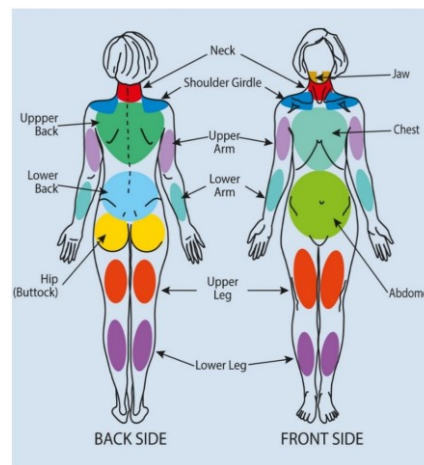
- Cellular markers of aging
- Hormonal health
- Comorbidities, mental health
- Structural, psycho-social, socio-behavioral parameters
- **Chronic pain**



BCC3 chronic pain survey dimensions:

Part of **BCC3** community survey administered by Peer Research Associates (**PRAs**)

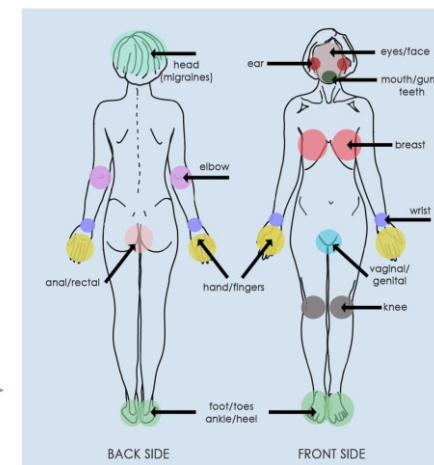
1. Prevalence - **Brief Chronic Pain Questionnaire (BCPQ)**²
2. Intensity and interference – **Pain, Enjoyment of Life, and General Activity (PEG) Scale**
3. Coping - **Pain Self-Efficacy Questionnaire (PSEQ)**
4. Localization - **Bony manikin (validated) + body manikin (created based on PRA input)**
5. Medication/substance use, sleep interference, experience of pain-related stigma (additional “screening” questions to inform future research)



Pain location

Validated body manikin

Additional pain locations based on PRA input



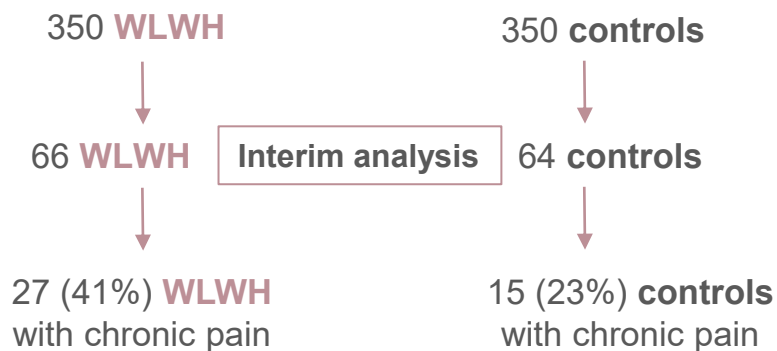
Comprehensive look at chronic pain in **WLWH**

¹Addis, Dylan R et al. “Chronic Pain in HIV.” Molecular pain vol. 16 (2020)

² <https://www.idsociety.org/practice-guideline/hiv-chronic-pain-management/>

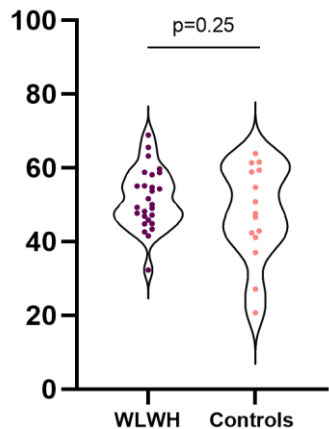
Results: participant age, chronic pain location, interference, coping

Recruitment goal



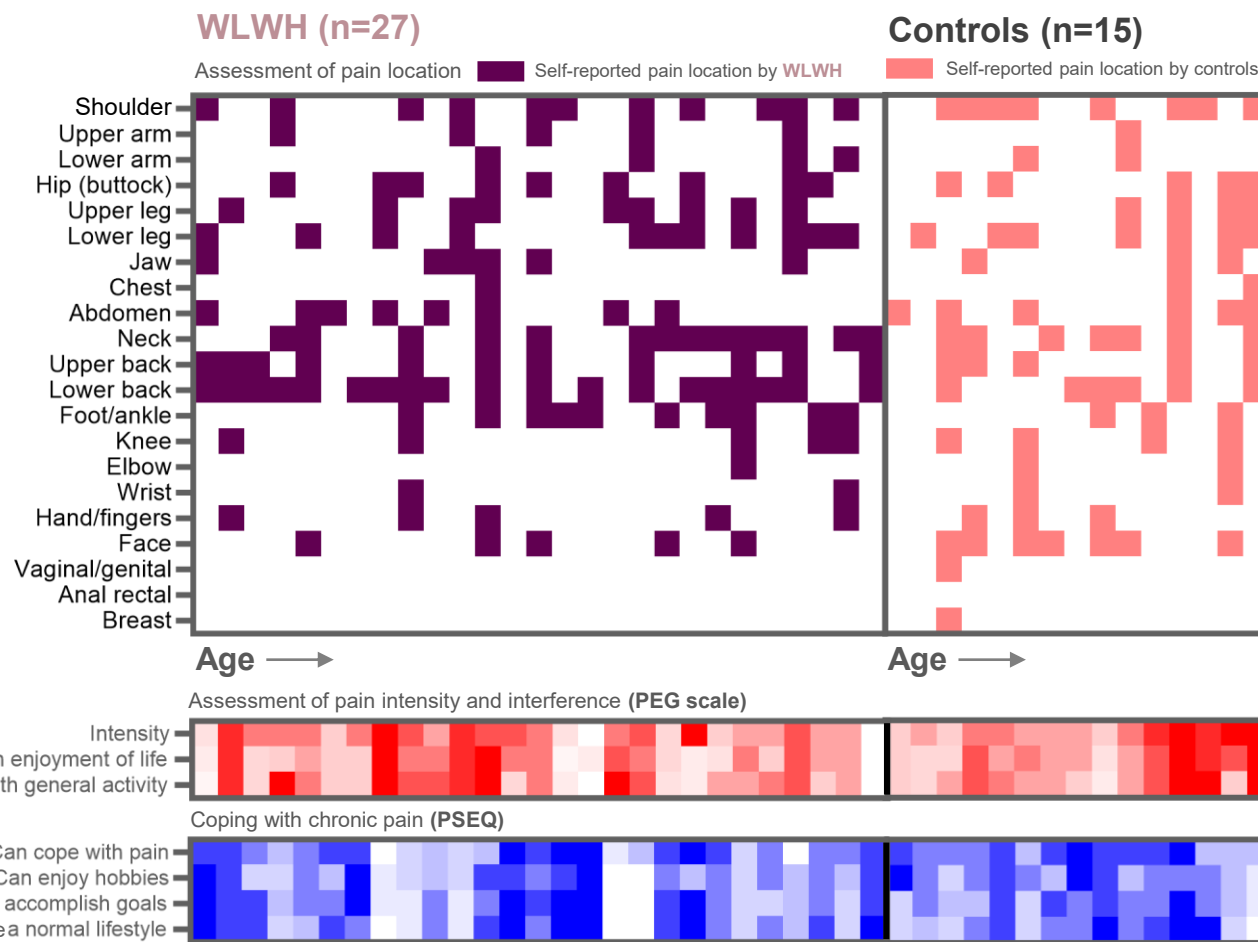
WLWH (n=66) were **not significantly older** than controls (n=64), (median age 51.2 (42.5-58.4) vs. 46.7 (27.7-56.6), p=0.1), but were **more likely** to have chronic pain (p=0.04)

Age of WLWH and controls who had chronic pain



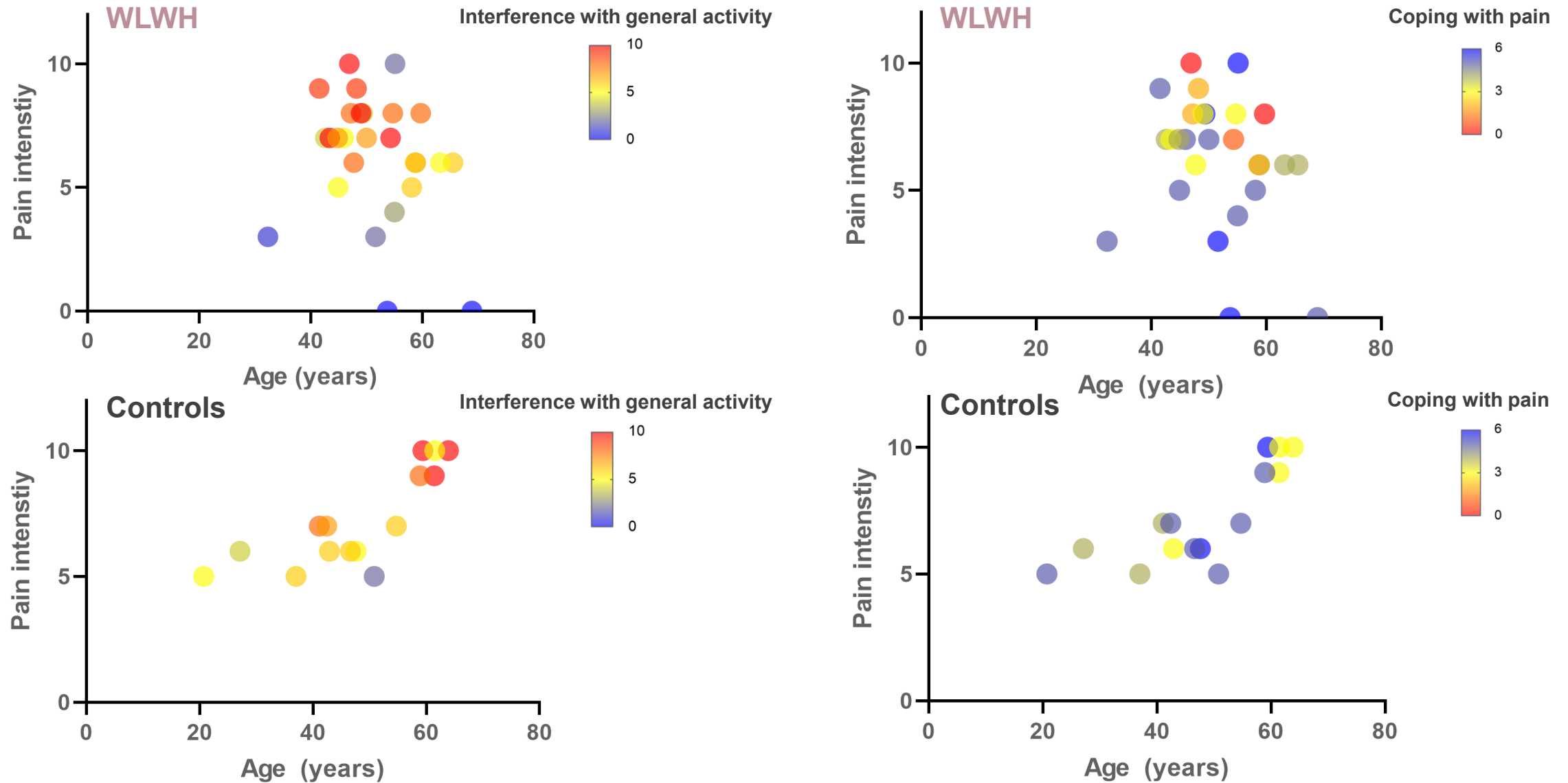
The heatmaps represent experiences of **each woman** individually. One **vertical line** can be drawn through all 3 maps to assess pain location, interference, and coping for each participant. The **age** increases from left to right for both groups.

The age of WLWH (n=27) and controls (n=15) who experienced chronic pain **did not differ** (51.5±8.1 vs 47.7±12.9, p=0.25).



- On average, **WLWH** experienced pain in **7(3-11)** regions; controls experienced pain in **8 (2-13)** regions
- Pain **interference** appears to be **inversely** related to abilities to **cope** with pain.
- Pain intensity and interference appear to **increase with age** for controls, but not for **WLWH**.
- Both **WLWH** and **controls** appear to show substantial **coping** abilities despite high pain intensity and interference.
- 5 (19%) **WLWH** and 4 (27%) controls fulfilled criteria for **widespread pain**

Results: participant age, chronic pain intensity, interference/coping



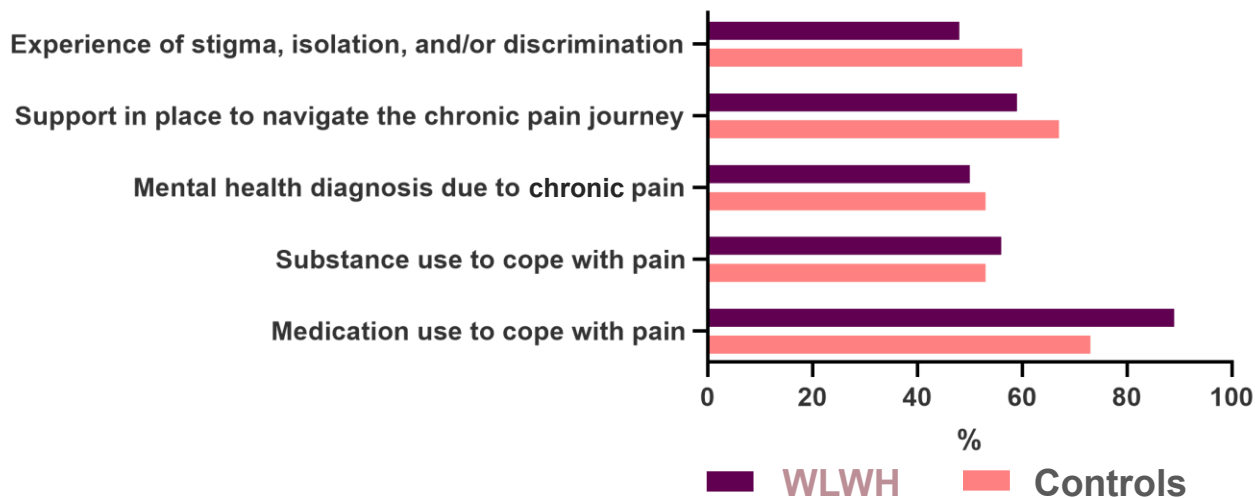
WLWH in their 40s appear to have intense chronic pain that greatly interferes with general activity.

These women appear to face challenges to cope with pain.

Experience of chronic pain among WLWH in their 40s may be similar to the experience of chronic pain among controls in their 60s.

Results: participant age, chronic pain location, interference, coping

Additional “screening” questions about chronic pain



These **preliminary data** within the BCC3 study suggest:

1. **WLWH** are more likely to have chronic pain
2. Both groups appear to show substantial coping abilities despite high pain intensity and interference.
3. Compared to controls, **WLWH** appear to have similar substance use to cope with chronic pain
4. **WLWH** experience pain in multiple locations concurrently.
5. **WLWH** in their 40s might experience chronic pain in a similar way as controls in their 60s.

Further analysis following BCC3 enrollment completion will help inform action(s) to improve quality of life for **WLWH**.

Acknowledgements



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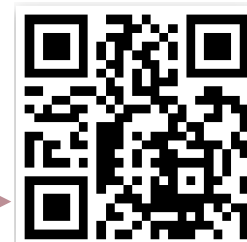


CIHR IRSC



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Watch BCC3 videos and
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