Evidence-Informed Recommendations in Rehabilitation for Older Adults Aging with HIV: A Knowledge Synthesis

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(Alternate title)

What we know and don’t know about rehabilitation for older adults living with HIV

Background

- As adults age with HIV, many live with physical, social and psychological challenges of HIV, consequences of treatment, and comorbidities associated with aging.

- Rehabilitation can assist in managing the health challenges (or disability) associated with HIV, and complex comorbidities.

- Evidence-informed guidelines can be used by clinicians, educators, and adults living with HIV to enhance HIV rehabilitation care, treatment and support.

Presentation Outline

- Overview of the study and methods
- Key findings
- What's next?

Research Objective

To develop evidence-informed recommendations to enhance rehabilitation for older adults living with HIV

Methods-Knowledge Synthesis

Combined research evidence from:

- Stream A: specific to HIV, rehabilitation and aging
- Stream B: rehabilitation interventions for common comorbidities experienced by older adults with HIV

Comorbidities commonly experienced by older adults aging with HIV

- ✓ bone and joint disorders
- ✓ cancer
- ✓ stroke
- ✓ cardiovascular disease
- ✓ mental health
- ✓ neurocognitive decline
- ✓ cardiopulmonary disease
- ✓ diabetes

Step 1 Search Strategy and Inclusion

- Stream A: any published evidence on HIV, rehabilitation and aging
- Stream B: high-quality evidence (systematic reviews and meta-analyses) on the effectiveness of rehabilitation interventions for comorbidities commonly experienced by older adults aging with HIV

Step 2 Data Extraction and Synthesis.

Step 3 GRADE Rating

Draft recommendations circulated to an inter-professional team for GRADE rating and suggestions for refinement.

Step 4 External Endorsement

Recommendations reviewed by 19 PHAs and clinicians who work in HIV care for external endorsement and final refinement using an online survey.

Results-Recommendations

Stream A (n=16)

Derived from 41 low or very low level evidence articles

Stream B (n=36)

Derived from 108 high level evidence articles
(meta-analyses or systematic reviews)

Stream A – HIV specific

- Professional preparedness (1)
- Approaches to assessment/treatment (7)
- Extrinsic factors (e.g. social support) (3)
- Intrinsic factors (e.g. self-management) (2)
- Approaches (e.g. interprofessional,CAM) (2)
- Interventions (exercise) (1)

- Total # of recommendations = 16

Neurocognitive Screening

Rehabilitation professionals should conduct regular **neurocognitive screening** with older adults living with HIV, and where indicated, conduct complete assessments to identify early signs of HIV-associated executive functioning deficits (e.g. ability to keep appointments, adhere to medication regimens, and follow-up on recommendations) and interventions to effectively prevent, reduce or compensate for cognitive impairments.

Stream B - Comorbidities

- Bone & joint disorders (e.g. exercise) (4)
- Cancer (e.g. exercise) (5)
- Stroke (8)
- Cardiovascular disease (rehab & exercise)(6)
- Mental health challenges (e.g. housing models) (4)
- Cognition (e.g. cognitive rehab, exercise) (3)
- COPD (e.g. inspiratory muscle training) (3)
- Diabetes (exercise) (1)
- Older adults (exercise) (3)
- HIV (exercise) (1)

- Total # of recommendations = 36

Exercise (older adults)

Regular forms of exercise including (strength/resistance training, aerobic/cardiovascular endurance training, and balance/stability training) may be strongly recommended for older adults with HIV who are medically stable to reduce fall rates, improve functional and physical performance, improve cardiopulmonary fitness, reduce depressive symptoms, and improve mood and quality of life.

Endorsement Rates

Ranged from
47% - 100%
for each detailed
Recommendation

Overarching Recommendations

Rehabilitation for Older Adults with HIV (n=8)

1

Rehabilitation professionals should be prepared to provide care to older adults with HIV who present with **complex comorbidities** affecting neurological, cardiorespiratory and musculoskeletal systems that may result in physical, mental and social health challenges.

2

Rehabilitation professionals should adopt an **individualized and interprofessional approach to practice** that is sensitive to the **unique values, preferences and needs of older adults with HIV.** This approach should include comprehensive assessment and treatment of **physical, neurocognitive and mental health impairments, …..**

2 completion

uncertainty (or worrying about the future), functional activity limitations, and social exclusion while considering the intersections between **personal and social attributes** and the **broader determinants of health**.

3

Multidisciplinary rehabilitation including physical therapy, occupational therapy and speech-language pathology is strongly recommended across the **continuum of care** (acute, rehabilitation and community-based care) for older adults with HIV to address the multi-dimensional and episodic nature of disability attributed to HIV and its comorbidities such as bone and joint disorders, cancer, stroke, cardiovascular disease, mental health, cognitive impairment, chronic obstructive pulmonary disease (COPD) and diabetes.

4

Rehabilitation professionals should consider the role of **extrinsic contextual factors** such as stigma and ageism, HIV disclosure, and emotional and practical social supports on the health and well-being of older adults living with HIV.

5

Rehabilitation professionals should consider the role of **intrinsic contextual factors** such as self-management and spirituality on the health and well-being of older adults living with HIV.

6

A **combination of aerobic and resistive exercise** may be recommended for older adults living with HIV who are medically stable and living with comorbidities including bone and joint disorders, cancer, stroke, cardiovascular disease, stroke, mental health, cognitive impairment, chronic obstructive pulmonary disease (COPD), and diabetes. The frequency, intensity, time and type of exercise should be individually tailored to the specific goals and capacity of the individual and the specific co-morbidity.

7

Cognitive rehabilitation interventions (e.g. cognitive training, cognitive stimulation, cognitive rehabilitation) may be recommended for older adults living with HIV with mild cognitive impairment, and stroke. Inconclusive or insufficient evidence exists to support the use of **cognitive behavioural therapy** with older adults with HIV with **depression**. …..

7 continued

…. While cognitive rehabilitation does not appear harmful, weak evidence exists to support the use of cognitive-specific interventions to improve spatial neglect, disability, memory, and functional status for older adults who experience stroke. …..

7 completion

…… Rehabilitation professionals are encouraged to refer to specific clinical practice guidelines for each health condition to determine the effects of different cognitive interventions for older adults with HIV living with comorbidity.

8

In the absence of high level evidence on rehabilitation interventions for older adults living with HIV and comorbidities, rehabilitation professionals should refer to **existing clinical practice guidelines, systematic reviews, meta-analyses, and other forms of high level evidence for recommendations on interventions for a specific comorbidity**....

8 (completion)

….These recommendations should be applied using an individualized approach incorporating the unique values, preferences, goals and needs of the individual.

Option A for use

Overarching recommendations may be used by any rehabilitation professional and other health providers who may potentially work with older adults living with HIV in their practice.

Option B for use

Specific (or detailed) recommendations may be used by rehabilitation professionals and other health providers working with older adults living with HIV who would like more specific guidance on evidence-informed recommendations for interventions across specific comorbidities.

CONCLUSIONS (1)

To our knowledge, these are the first evidence-informed recommendations on rehabilitation developed specifically for older adults with HIV.

CONCLUSIONS (2)

Our approach was novel, involving a multi-staged, complex synthesis of two distinct areas of evidence, while incorporating PHA and clinician values and preferences throughout.

CONCLUSIONS (3)

Recommendations provide a guide for rehabilitation with older adults living with HIV and comorbidities

What's next

Dissemination and Knowledge Translation

- CWGHR website
- Conferences
- Publications

Lots of areas for follow-up HIV research

Any questions or for more information?

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