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Self-Management Interventions for Adolescents Living With HIV: A Systematic Review

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Methods: We conducted a systematic review on the effects of self-management interventions for ALHIV on antiretroviral treatment (ART) on patient-reported outcomes (knowledge of HIV, confidence/self-efficacy, social interaction); behavioural outcomes (adherence to ART, retention in care, health behaviours, symptom management); measures of health status (CD4 count, viral suppression, health-related quality of life, mental health) and impact outcomes (hospitalisation, comorbidities, HIV transmission, mortality). We considered randomised controlled trials (RCTs), cluster RCTs, non-RCTs and controlled before-after (CBA) studies that had a clear self-management intervention, targeted ALHIV aged 10-19 or stratified outcomes by age, eligible for inclusion.

We searched electronic databases, clinical trial registries, dissertation databases and relevant conference abstracts until August 2019. Two authors independently screened titles and abstracts of all search outputs, and full texts of potentially relevant studies. Two authors independently extracted data using a pre-specified, piloted data extraction form and assessed risk of bias of included studies using the Cochrane Effective Practice of Care (EPOC) risk of bias tool (EPOC, 2017). We resolved all discrepancies through discussion.

Clinical heterogeneity was explored by clearly reporting the characteristics linked to the included populations, interventions and outcomes. We performed random-effects metaanalysis or narratively synthesised results where heterogeneity was high. We assessed the certainty of evidence using the GRADE and presented our findings in a summary of findings table (Guyatt et al., 2011; Higgins & Green, 2011; Hoffmann et al., 2014). **Results:** Our search yielded 2743 citations. After deduplication, we screened 2302 titles and abstracts. Of these, we identified 42 potentially eligible studies and screened the full texts. We identified 15 eligible studies, including seven completed and eight ongoing studies. We excluded 27 studies. Reasons for exclusion included the wrong patient population, intervention or study design. Most studies were pilot RCT's and conducted in the United States, with only one study conducted in Thailand and one in South Africa. Interventions were diverse, including personalised telephone support, group educational sessions, coaching, motivational interviewing, mindfulness instruction and some more complex and multi-systemic. Data extraction and analysis is ongoing and we will present the completed review at the conference.

Conclusion: The results of this systematic review add to understanding whether selfmanagement interventions are effective to improve the health-related outcomes of ALHIV. The results will inform the development of an adolescent HIV self-management intervention in the context of South-Africa.

Title:

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Keywords:

Adolescents living with HIV, Interventions and Self-management

Abstract Summary:

We will present the findings of a systematic review on the effects of self-management interventions for adolescents living with HIV (ALHIV) on patient-reported outcomes, behavioural outcomes, measures of health status and impact outcomes.

References:

- Aantjes, C. J., Ramerman, L. and Bunders, J. F. G. (2014) 'A systematic review of the literature on self-management interventions and discussion of their potential relevance for people living with HIV in sub-Saharan Africa', Patient education and counseling. Elsevier, pp. 185–200. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0738399114000421?showall=true.
- Bernardin, K. N. et al. (2013) 'Self-management interventions for people living with human immunodeficiency virus: A scoping review '', Canadian Journal of Occupational Therapy, 80(5), pp. 314–327. doi: 10.1177/0008417413512792.
- Cochrane Effective Practice and Organisation of Care (EPOC). (2017) Suggested risk of bias criteria for EPOC reviews. EPOC Resources for review authors, 2017.
- Guyatt, G. et al. (2011) 'GRADE guidelines: 1. Introduction—GRADE evidence profiles and summary of findings tables', Journal of Clinical Epidemiology. Pergamon, 64(4), pp. 383–394. doi: 10.1016/J.JCLINEPI.2010.04.026.
- Higgins, J. and Green, S. (2011) Cochrane handbook for systematic interventions version 5.1.0 (updated March 2011): The Cochrane Collaboration, 2011. Available at: https://training.cochrane.org/handbook.

- Hoffmann, T. C. et al. (2014) 'Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide', The BMJ, 1687(March), pp. 1–12. doi: 10.1136/bmj.g1687.
- Millard, T. et al. (2013) 'Self-Management Education Programs for People Living with HIV/AIDS':, AIDS Patient Care and STDs, 27(2), pp. 103–113. doi: 10.1089/apc.2012.0294.
- Nkhoma, K. et al. (2018) 'Self-management Interventions for Pain and Physical Symptoms Among People Living With HIV: A Systematic Review of the Evidence', Journal of acquired immune deficiency syndromes, 79(2), pp. 206– 225.
- Sattoe, J. N. T. et al. (2015) 'Patient Education and Counseling Selfmanagement interventions for young people with chronic conditions: A systematic overview', Patient education and counseling. Elsevier Ireland Ltd, 98, pp. 704–715.
- Sawin, K. J. (2017) 'Definitions, frameworks, and theoretical', Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary approach., 10, pp. 169–176. doi: 10.3233/PRM-170461.

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