Metacognitive Experience in People With HIV: A Systematic Review

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Background : Advances in antiretroviral therapy have allowed many people with HIV (PWH) to reach older adulthood, increasing interest in the cognitive and functional consequences of aging with HIV. Although objective cognitive performance has been extensively studied, less is known about metacognitive experience—how individuals monitor, evaluate, and perceive their own cognitive functioning. Understanding the relationship between subjective cognitive concerns, objective cognition, and metacognitive awareness may provide insight into everyday functioning and well-being.

Methods : We conducted a systematic review and narrative synthesis of studies examining metacognition and related constructs in PWH. MEDLINE was searched from January 1966 through October 2025 using terms including “HIV,” “metacognition,” “subjective cognition,” “cognitive awareness,” and “well-being.” Studies were included if they assessed self-reported cognition, metacognitive awareness, or their relationship with objective cognitive performance in PWH.

Results : Twenty-eight studies met inclusion criteria. Most (n=21) examined correspondence between subjective cognitive concerns and objective cognitive impairment. Fourteen studies reported evidence of inaccurate self-appraisal, including overestimation of cognitive ability or reduced awareness of impairment. Other studies identified metacognitive awareness as a partial mediator of everyday functioning, including divided attention and medication management. Subjective cognitive concerns were strongly influenced by mood symptoms, stigma, and other social factors, although they remained partially aligned with objective cognitive performance. Only three studies incorporated biological markers, such as indicators of immune activation or neuronal injury.

Conclusions : Existing literature lacks a clear conceptualization and measurement of metacognition as distinct from objective and subjective cognition in PWH. Available evidence suggests that, unlike in Alzheimer’s disease where there is progressive impairment in awareness of cognitive decline, metacognitive experience in PWH may remain relatively aligned with objective cognitive performance despite the influence of emotional, social, and contextual factors. Broadening HIV cognitive research to explicitly examine metacognition may improve understanding of well-being and functional vulnerability in aging with HIV, while offering comparative insights into how objective cognition-metacognition relationships diverge across neurodegenerative and chronic infectious conditions.