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A Systematic Review of the Clinical Use of Withania Somnifera (Ashwagandha) to Ameliorate Cognitive Dysfunction

Qin Xiang Ng [1 2], Wayren Loke [1], Nadine Xinhui Foo [1], Weng Jun Tan [1 2], Hwei Wuen Chan [3 4], Donovan Yutong Lim [2 4], Wee Song Yeo [3 4]
Affiliations

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Abstract

Many developed countries are experiencing a rapidly "greying" population, and cognitive decline is common in the elderly. There is no cure for dementia, and pharmacotherapy options to treat cognitive dysfunction provide limited symptomatic improvements. Withania somnifera (Ashwagandha), a popular herb highly valued in Ayurvedic medicine, has often been used to aid memory and cognition. This systematic review thus aimed to evaluate the clinical evidence base and investigate the potential role of W. somnifera in managing cognitive dysfunction. Using the following keywords [withania somnifera OR indian ginseng OR Ashwagandha OR winter cherry] AND [brain OR cognit* OR mental OR dementia OR memory], a comprehensive search of PubMed, EMBASE, Medline, PsycINFO and Clinicaltrials.gov databases found five clinical studies that met the study's eligibility criteria. Overall, there is some early clinical evidence, in the form of randomized, placebo-controlled, double-blind trials, to support the cognitive benefits of W. somnifera supplementation. However, a rather heterogeneous study population was sampled, including older adults with mild cognitive impairment and adults with schizophrenia, schizoaffective disorder, or bipolar disorder. In most instances, W. somnifera extract improved performance on cognitive tasks, executive function, attention, and reaction time. It also appears to be well tolerated, with good adherence and minimal side effects.

Keywords: Aryuveda; Ashwagandha; Indian ginseng; Withania somnifera; ageing; cognitive decline; dementia.

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