

A review of medicinal plants for prevention and treatment of cognitive decline in traditional Persian medicine

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Abstract:

Background and purpose: Decreased cognitive ability is a pathological condition in which memory, thinking and judgment decline occur. This condition can be considered as one of the main signs of dementia. Given the weakness of existing therapies to control cognitive decline, further studies are needed to find more effective treatment approaches. In Traditional Persian Medicine (TPM), various medicinal plants have been suggested for treatment of cognitive decline. The aim of this study was to investigate the effectiveness of these plants from traditional medicine and modern medical sources and to find pharmacological mechanisms involved in inducing the therapeutic effects of traditional medicinal plants in symptoms of cognitive decline.

Materials and Methods: In the present study, the nature, symptoms and also causes of cognitive decline in traditional medicine and modern medicine were investigated. Medicinal plants with therapeutic effects were collected from the books of traditional medicine including “*Al-Qanun fi al-Tibb*”, “*Makhzan al-Adwiyah*”, “*Qarabadin-i kabir*” and “*Zakhireye Khwarazmshahi*”. The scientific name and mechanism of action of each were examined by referring to modern sources and authoritative scientific databases such as Cochrane, PubMed, and Scopus.

Results: According to traditional medicine literature, memory loss and mental disability occur due to the dominance of cold and moisture in the brain; Therefore, medicinal plants with warm and dry nature can be effective in this disease. In this study, several traditional medicinal plants with protective or therapeutic effect on cognitive impairments such as *Lavandula stoechas L*, *Phyllanthus emblica*, *Terminalia chebula* anacardium and etc. have been mentioned.

Conclusion: Natural medicines used in TPM along with phytochemical compounds extracted from these drugs can be considered as a model for designing new drugs or complementary therapies alongside conventional drugs. Additional clinical studies are necessary to confirm the efficacy and safety of these medicinal plants.

Keywords: Cognitive decline, Alzheimer disease, Medicinal plants, Traditional Persian Medicine

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