Medicinal Herbs in Iranian Traditional Medicine for Learning and Memory

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Abstract

Background: A few factors such as age, stress, and emotions may lead to impaired learning, memory loss, amnesia, and dementia or threats like schizophrenia and Alzheimer's disease (AD). Iranian traditional medicine (ITM) recommends some herbs and herbal preparations for the treatment or prevention of CNS problems.

Methods: In this study, scientific evidence related to the effectiveness of ITM herbal medicine on memory, learning and AD is reviewed. The scientific evidence of plant efficacy was searched in electronic databases including PubMed, Scopus, SID, Science Direct, and Google Scholar by keywords such as memory, Alzheimer, amnesia, learning and scientific plant names from 1969 to 2014.

Results: The findings of this study confirmed the effectiveness of certain ITM medicinal plants on enhancing memory and learning or in the treatment/prevention of amnesia and AD. Some ITM plants like Melissa officinalis, Crocus sativus and Nigella sativa showed improving effects on memory and the treatment of AD in clinical trials. In some cases, active principles responsible for the efficacy of these plants on memory were also determined.

Discussion: Most of the studies on ITM plants were designed in animal models and a few herbs were evaluated in clinical trials on AD. Furthermore, there are insufficient or no investigations on certain herbal medicines used in ITM to confirm their effectiveness on memory and learning. Therefore, further experimental and clinical studies are necessary to evaluate the effectiveness of these plants on memory and AD as well as determining their active components.

Keywords ● Memory ● Medicine ● Traditional ● Plants ● Medicinal, Learning

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