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Lavender and the Nervous System

Peir Hossein Koulivand,¹ Maryam Khaleghi Ghadiri,² and Ali Gorji^{3, 4, 5, 6,*}

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Abstract

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Lavender is traditionally alleged to have a variety of therapeutic and curative properties, ranging from inducing relaxation to treating parasitic infections, burns, insect bites, and spasm. There is growing evidence suggesting that lavender oil may be an effective medicament in treatment of several neurological disorders. Several animal and human investigations suggest anxiolytic, mood stabilizer, sedative, analgesic, and anticonvulsive and neuroprotective properties for lavender. These studies raised the possibility of revival of lavender therapeutic efficacy in neurological disorders. In this paper, a survey on current experimental and clinical state of knowledge about the effect of lavender on the nervous system is given.

1. Introduction

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The genus *Lavandula* is native to the lands surrounding the Mediterranean Sea and southern Europe through northern and eastern Africa and Middle Eastern countries to southwest Asia and southeast India. It includes more than 30 species, dozens of subspecies, and hundreds of hybrids and selected cultivars.

The different varieties of this plant range in height from 9 inches to 3 feet, although some may grow taller with age. Lavender are divided into four main categories: *L. angustifolia*, commonly known as English Lavender, is a frost hardy species that has many pretty cultivars, habit, and blossom color (formerly known as *L. vera* or *L. officinalis*); *L. stoechas* is a large plant with greenish-grey foliage and late blooming with a very strong odor (sometimes known as French lavender); *L. latifolia*, a Mediterranean grass-like lavender; and *L. intermedia*, which is a sterile cross between *L. latifolia* and *L. angustifolia*. The various lavenders have similar ethnobotanical properties and major chemical constituents [1].

The main constituents of lavender are linalool, linalyl acetate, 1,8-cineole *B*-ocimene, terpinen-4-ol, and camphor. However, the relative level of each of these constituents varies in different species [1, 2]. Lavender oil, obtained from the flowers of *Lavandula angustifolia* (Family: Lamiaceae) by steam distillation, is chiefly composed of linalyl acetate (3,7-dimethyl-1,6-octadien-3-yl acetate), linalool (3,7-

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