CHAPTER 8

PHYTOTHERAPEUTIC APPLICATIONS FOR INSOMNIA

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BACKGROUND

Insomnia, a severe sleep problem, is a growing health hazard. It poses a major threat to mental health, heart function and the immune system. Anxiety and depression are the two main problems affected by insomnia. Mechanisms underlying the association between insomnia, anxiety, and depression are being investigated. Poor sleep quality and depression are prevalent during pregnancy and may negatively impact maternal-fetal outcomes. Sleep problems in infants and young children are common and often underdiagnosed. Insomnia complaints in children and adolescents should be taken into account. The American College of Physicians developed a guideline on the management of insomnia in adults. Insomnia is also common in the elderly. Nonpharmacological treatment options have favorable and enduring benefits compared to pharmacological therapy. In the first line, improving sleep-hygiene parameters and considering cognitive-behavioral therapy are the nonpharmacological interventions. Then come pharmacological agents in combination with behavioral modifications. [1-8]

Chronic insomnia impairs the quality of life. It can rob the individuals of their families, jobs and even their sanity. There are prescribed medicines used for the treatment of insomnia. They are effective but, at the same time, exhibit significant adverse effects. Thus, patients are in need for an alternative treatment to cure this problem. So far, some herbs have been studied for their potential sedative and hypnotic activities. They are expected to improve sleep. Most of them exert their actions on the central nervous system with a major influence on the inhibitory gamma-aminobutyric acid (GABA), which promotes relaxation and reduce anxiety or serotonin neurological systems. [9-14]

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efficiency. Its procyanidin content increases tryptophan availability, reduces inflammation and may partially improve insomnia. Milk fermented with a strain of Lactobacillus brevis with GABA-producing capacity may improve sleep. [81-84]

Data on phytotherapeutic applications for insomnia are still not sufficient. Natural remedies are considered much safer than pharmacological agents; however, further studies are needed to evaluate their risk and the safety concerns for many supplements. Potential integrative approaches without serious side effects are being investigated. The need for a good understanding of the safety and the efficiency of medicinal plants for the treatment of insomnia stimulates further investigations to manage this commonly observed health problem.

Studies, which will be performed, should cover safe dosages, as well as doses confined to herbs suggested to be used during insomnia treatment. Standard measures designed for the quality/quantity of sleep should also considered. They are also expected to focus on active constituents in the herbs and their potential adverse effects. The matter concerning their interactions with prescribed drugs, as well as with other herbs is a great problem to be largely investigated.

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