

# Lavender and sleep



A systematic review published by the European Journal of Integrative Medicine shows some positive results for the use of lavender aroma inhalation to improve sleep, but calls for more rigorous research

The authors of a systematic review\* published in the European Journal of Integrative Medicine (2012) cite that poor sleep - in the form of non-clinical insomnia - is estimated to affect around one third of the UK population.

They go on to highlight that conventional drugs used to induce or prolong sleep do not necessarily improve *quality* of sleep, or may produce undesirable side-effects in some individuals. However, anecdotal evidence supports the use of lavender oil inhalation for sleep, with historical and herbal medicine texts making reference to the plant's analgesic and sedative properties. It is also reported that people with sub-clinical insomnia will often consider self-help strategies before seeking medical advice.

'Lavender and sleep: A systematic review of the evidence', by Kate Fismer and Dr Karen Pilkington (who contributed to the July 2013 issue of International Therapist) is the first systematic review to look at the evidence on lavender aroma inhalation as a possible self-care intervention to improve sleep initiation, maintenance and quality.

Of the 118 unique clinical trials (up to April 2012) identified by the authors' search strategy, just eight of these were considered eligible for the review: four randomised controlled studies, one counterbalanced and three non-randomised controlled trials. Studies were only included if the lavender oil was administered by inhalation rather than ingested, or applied topically. Studies excluded were animal studies; studies using mixed interventions; lavender oil added to a bath; lavender used with another oil; uncontrolled studies; and studies lacking detail or not in English.

Three of the eight eligible trials were conducted in laboratory conditions, where the sleep environment was controlled, using objective outcomes to measure sleep quality. One of these trials indicated that lavender increased deep sleep, while a second showed a trend towards reduced wake frequency.

A fourth trial was conducted in partially controlled conditions and the results indicated that lavender helped to improve sleep in the treatment group, but not the control group.

The remaining four trials were conducted in 'natural environments' - three based in a hospital, and one involving a general population sample, who self-administered at home. The latter of these was considered to have the most robust study design of the eight trials, and 'registered results in favour of lavender oil inhalation, suggesting potential as an early intervention strategy for those with poor quality sleep'. However, the study was also a pilot and its authors cautious about the significance of results.

Overall, initial results appear positive towards lavender oil inhalation for improving sleep in six of the eight studies in this systematic review, however Fisser and Pilkington highlight in their conclusion that 'methodological inadequacies, small sample sizes, short duration, and challenges relating to blinding, mean that results should be viewed with caution'.

They also state, 'more scientifically rigorous and adequately powered trials are needed to investigate the true effect of lavender oil aroma inhalation on sleep'.

**The full version of this systematic review is available open access (until 31 December, 2013) at <http://www.sciencedirect.com/science/article/pii/S1876382012010700>**

\*Fisser K L, Pilkington K (2012) Lavender and sleep: A systematic review of the evidence, *European Journal of Integrative Medicine* 4(4): e436-e447.

© 2013 Federation of Holistic Therapists (FHT). No part of this document may be reproduced or disseminated without the express permission of the FHT. Although the FHT has taken all reasonable steps to ensure that the information in this document is accurate, we cannot guarantee that it is free from inaccuracies, errors or omissions. The information in this document should not be used in place of medical diagnosis, care or advice.

PIC: ISTOCKPHOTO.CO.UK