

P02-335 - A SYSTEMATIC REVIEW OF NEUROBIOLOGICAL AND CLINICAL FEATURES OF MINDFULNESS MEDITATIONS

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Objective: Mindfulness meditations (MM) are an important group of meditative practices which have received growing attention. The aim of the present paper is to systematically review current evidence on the neurobiological changes and on the clinical benefits related to MM practice in psychiatric disorders, physical illnesses and in healthy subjects.

Methods: A literature search was undertaken using MEDLINE, ISI web of knowledge, the Cochrane collaboration database and references of retrieved articles. Controlled and cross-sectional studies with controls published in English up to November 2008 were included.

Results: Electroencephalographic studies found a significant increase in alpha and theta activity during meditation. Neuro-imaging studies showed that MM practice activates the prefrontal cortex, the anterior cingulate cortex and that long term meditation practice is associated to an enhancement of cerebral areas related to attention. From a clinical point of view, Mindfulness based Stress Reduction showed efficacy for many psychiatric and physical conditions as well as for healthy subjects, Mindfulness based Cognitive Therapy was mainly efficacious in reducing relapses of depression in patients with 3 or more episodes, Zen meditation significantly reduced blood pressure and Vipassana meditation showed efficacy in reducing alcohol and substance abuse in prisoners. However, given the low quality designs of current studies it is difficult to establish whether clinical outcomes are due to specific or non specific effects of MM.

Conclusion: Despite encouraging findings, several limitations including small sample size, absence of randomization and inappropriate control groups affect the significance of current evidence and further better designed studies are required.