ACUPUNCTURE AND DEPRESSION



About depression

Depression is a common mental health problem that affects people of all genders, ages, and backgrounds. About two thirds of adults will at some time experience depression severe enough to interfere with their normal activities (Mintel/YouGov, 2006, Stewart et al, 2004). Women are twice as likely as men to become depressed (Stewart et al, 2004) partly due to hormone changes occurring pre-menstrually, at menopause, during pregnancy or after childbirth. Depression is estimated to cost the UK £7.5 billion a year in medication, benefits and lost working days (McCrone et al, 2008). The World Health Organization predicts that by 2020 depression will be second only to chronic heart disease as an international health burden (WHO, 2008).

Although everyone occasionally experiences low mood, these feelings usually pass after a couple of days. When a person has clinical depression, these problems can become chronic or recurrent, interfering with daily life. Depression causes symptoms such as low mood, loss of interest in enjoyable activities, anxiety, irritability low self-esteem, disturbed sleep or appetite, weight change, tiredness, lack of motivation, concentration or libido, physical pain, and suicidal thoughts.

Depression is likely to result from a combination of genetic, biochemical, environmental, and psychological factors. It may be triggered by stressful events, such as bereavement, illness, relationship problems or financial difficulties.

How acupuncture can help

Research has shown that acupuncture treatment can help ameliorate the symptoms of depression. In general, acupuncture is believed to stimulate the nervous system and cause the release of neurochemical messenger molecules. The resulting biochemical changes influence the body's homeostatic mechanisms, thus promoting physical and emotional wellbeing.

Studies indicate that acupuncture can have a specific positive effect on depression by altering the brain's mood chemistry, increasing production of serotonin (Sprott et al, 1998) and endorphins (Han, 1986). Acupuncture may also benefit depression by acting through other neurochemical pathways, including those involving dopamine (Scott et al, 1997), noradrenaline (Han, 1986), cortisol (Han et al, 2004) and neuropeptide Y (Pohl & Nordin, 2002).

Stimulation of certain acupuncture points has been shown to affect areas of the brain that are known to reduce sensitivity to pain and stress, as well as promoting relaxation and deactivating the 'analytical' brain which is responsible for anxiety and worry (Wu et al, 1999).

Some of the most recent research suggests that depression is associated with dysfunction in the way that parts of the resting brain interact with each other (Broyd et al 2008). Acupuncture has been shown to be capable of changing this 'default mode network' (Dhond et al, 2007), thus providing another possible mechanism for its beneficial effect on depression.

Acupuncture can be safely combined with conventional medical treatments such as anti-depressants, helping to reduce their side effects and enhance their beneficial effects (Zhang et al, 2007).

Acupuncture treatment can also help resolve physical ailments such as chronic pain (Zhao, 2008), which may be a contributing cause of depression. In addition to offering acupuncture and related therapies, acupuncturists will often make suggestions as to dietary and other lifestyle changes that may be helpful in overcoming depression. Finally, people struggling to cope with depression usually find that coming to see a supportive therapist on a regular basis is helpful in itself.

Full details of research studies into traditional acupuncture treatment for depression can be found overleaf.

ACUPUNCTURE AND DEPRESSION

The evidence

British Acupuncture Council

Research	Conclusion
Wang H, Qi H, Wang BS, Cui YY, Zhu L, Rong ZX, Chen HZ. Is acupuncture beneficial in depression: A meta-analysis of 8 randomized controlled trials? J Affect Disord. 2008 Dec;111(2-3):125-34.	Meta-analysis which looked at the most recent clinical studies of acupuncture in the treatment of depression. It analysed the pooled results of eight small randomized controlled trials, comprising a total of 477 subjects and concluded; "acupuncture was an effective treatment that could significantly reduce the severity of disease in the patients with depression".
Broyd SJ, Demanuele C, Debener S, Helps SK, James CJ, Sonuga-Barke EJ. Default-mode brain dysfunction in mental disorders: A systematic review. Neurosci Biobehav Rev. 2008 Sep 9.	Systematic review of the role of the default mode network in the pathophysiology of mental disorders including anxiety and depression.
Dhond RP, Yeh C, Park K, Kettner N, Napadow V. Acupuncture modulates resting state connectivity in default and sensorimotor brain networks. Pain. 2008 Jun;136(3):407-18.	Experimental fMRI study of brain activity before and after acupuncture. Found that verum acupuncture had a persistent effect on the connectivity of different brain areas during its resting-state. Acupuncture increased the extent of regions of the brain active at rest (the 'default mode network') to include areas involved with pain, emotion and memory.
Zhao ZQ, Neural mechanism underlying acupuncture analgesia. Prog Neurobiol. 2008 Aug;85(4):355-75.	Review of evidence for neural mechanisms underlying acupuncture analgesia and its ability to treat chronic pain.
Fu WB, Fan L, Zhu XP, He Q, Wang L, Zhuang LX, Liu YS, Tang CZ, Li YW, Meng CR, Zhang HL, Yan J. Acupuncture for treatment of depressive neurosis: a multi-center randomized controlled study. Zhongguo Zhen Jiu. 2008 Jan;28(1):3-6.	Multi-centre randomized controlled study of acupuncture for depression, involving 440 cases. Found the therapeutic effect of acupuncture on depression to be similar to or better than that of Prozac, with fewer side effects.
Zhang GJ, Shi ZY, Liu S, Gong SH, Liu JQ, Liu JS. Clinical observation on treatment of depression by electro-acupuncture combined with Paroxetine. Chin J Integr Med. 2007 Sep;13(3):228-30.	Randomized controlled trial involving 42 patients. Found that acupuncture combined with anti-depressant medication was more effective in treating depression than anti-depressants alone. Patients on the combined treatment also improved more quickly and experienced fewer side effects than those who only took medication.
Leo RJ, Ligot JS Jr. A systematic review of randomized controlled trials of acupuncture in the treatment of depression. J Affect Disord. 2007 Jan;97(1-3):13-22.	Systematic review and meta analysis of acupuncture as a treatment of depression, which analysed the pooled results of nine small randomised controlled trials. Found that; "acupuncture modalities were as effective as antidepressants employed for treatment of depression".
Manber R, Schnyer RN, Allen JJ, Rush AJ, Blasey CM. Acupuncture: a promising treatment for depression during pregnancy. J Affect Disord. 2004 Nov 15;83(1):89-95.	Randomized controlled study of acupuncture for depression during pregnancy, involving 61 women. Found that eight weeks of acupuncture at points specifically chosen to treat depression was significantly more effective than either non-specific acupuncture or massage in reducing symptoms of depression.
Han C, Li X, Luo H, Zhao X, Li X. Clinical study on electro-acupuncture treatment for 30 cases of mental depression. J Tradit Chin Med. 2004 Sep;24(3):172-6.	Randomized controlled study of electroacupuncture for depression, involving 61 patients. Found that electroacupuncture produced the same therapeutic effect as tetracyclic drug maprotiline with fewer side effects and better symptomatic improvement.
Gallagher SM, Allen JJ, Hitt SK, Schnyer RN, Manber R. Six-month depression relapse rates among women treated with acupuncture. Complement Ther Med. 2001 Dec;9(4):216-8.	Follow-up study of earlier randomized controlled trial by Allen et al (see below). Found that depression relapse rates following depression-specific acupuncture treatment were comparable to those achieved following conventional drug treatments.
Pohl A, Nordin C. Clinical and biochemical observations during treatment of depression with electroacupuncture: a pilot study. Hum Psychopharmacol. 2002 Oct;17(7):345-8.	Pilot study of electroacupuncture for major depression. Found a decrease of neuropeptide in plasma during treatment.

Röschke J, Wolf C, Müller MJ, Wagner P, Mann K, Grözinger M, Bech S. The benefit from whole body acupuncture in major depression. J Affect Disord. 2000 Jan-Mar;57(1-3):73-81.	Randomized controlled study of acupuncture used in conjunction with antidepressants to treat depression, involving 70 patients. Concluded that acupuncture plus antidepressants improved the course of depression more than medication alone.
Eich H, Agelink MW, Lehmann E, Lemmer W, Klieser E. Acupuncture in patients with minor depressive episodes and generalized anxiety. Results of an experimental study. Fortschr Neurol Psychiatr. 2000 Mar;68(3):137-44.	Randomized controlled trial of acupuncture treatment in 43 patients with minor depression. Results indicated that, compared with placebo treatment, acupuncture leads to a significant clinical improvement in depression as well as a marked reduction in anxiety symptoms.
Wu MT, Hsieh JC, Xiong J, Yang CF, Pan HB, Chen YC, Tsai G, Rosen BR, Kwong KK. Central nervous pathway for acupuncture stimulation: localization of processing with functional MR imaging of the brain- preliminary experience. Radiology. 1999 Jul;212(1):133-41.	Experimental study using fMRI to characterize the central nervous system pathway for acupuncture stimulation. Found that acupuncture activates structures of descending antinocioceptive pathway and deactivates areas mediating pain modulation.
Allen JJB, Schnyer RN, Hitt SK. The efficacy of acupuncture in the treatment of major depression in women. Psychological Science 1998:9(5):397-401.	Randomized controlled trial of acupuncture for major depression in 33 women. Eight weeks of depression-specific acupuncture led to a significantly greater reduction in depression than either non-specific acupuncture or being on a waiting list. Following specific acupuncture, 64% of women experienced full remission of depressive symptoms.
Sprott H, Franke S, Kluge H, Hein G. Pain treatment of fibromyalgia by acupuncture. Rheumatol Int 1998;18:35-36.	Experimental study of pain modulation by acupuncture in fibromyalgia patients. Found that acupuncture was associated with decreased subjective pain levels, as well as changes in concentration of pain modulating substances (serotonin and substance P) in serum.
Scott S, Scott WN. A biochemical hypothesis for the effectiveness of acupuncture in the treatment of substance abuse: acupuncture and the reward cascade. Am J Acupunct 1997;25:33–40.	Review exploring physiological basis of acupuncture in the treatment of addiction, in relation to endorphin mechanisms and the reward cascade.
Han JS. Electroacupuncture: An alternative to antidepressants for treating affective diseases? Intl J Neurosci 1986;29:79-92.	Review presenting evidence that acupuncture can accelerate synthesis and release of serotonin and noradrenline in the CNS. As well as linical data indicating that electroacupuncture is effective in treating depressive patients, and at least as effective and with a higher therapeutic index than tricyclic amitriptyline.

About traditional acupuncture

Acupuncture is a tried and tested system of traditional medicine, which has been used in China and other eastern cultures for thousands of years to restore, promote and maintain good health. Its benefits are now widely acknowledged all over the world and in the past decade traditional acupuncture has begun to feature more prominently in mainstream healthcare in the UK.

Traditional acupuncture takes a holistic approach to health and regards illness as a sign that the body is out of balance. The exact pattern and degree of imbalance is unique to each individual. The traditional acupuncturist's skill lies in identifying the precise nature of the underlying disharmony and selecting the most effective treatment.

The World Health Organisation (WHO) recognises that acupuncture can help resolve specific symptoms or conditions. Traditional acupuncture can also be used as a preventive measure to strengthen the constitution and promote general wellbeing.

About the British Acupuncture Council

With over 3000 members, the British Acupuncture Council (BAcC) is the UK's largest professional body for traditional acupuncturists. Membership of the BAcC guarantees excellence in training, safe practice and professional conduct.

To find a qualified traditional acupuncturist, contact the British Acupuncture Council on 020 8735 0400 or visit www.acupuncture.org.uk

For further information

Please contact the British Acupuncture Council on 020 8735 0400 or via info@acupuncture.org.uk

www.acupuncture.org.uk

Additional references

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Stewart DE, Gucciardi E, Grace SL; Depression. BMC Women's Health. 2004 Aug 25;4 Suppl 1:S19.

McCrone P, Dhanasiri S, Patel A, Knapp M, Lawton-Smith S. Paying the Price: The cost of mental health care in England to 2026. The King's Fund, May 2008, ISBN 978 1 85717 571 4.

World Health Organization. 2008. http://www.who.int/mental_health/management/depression/definition/en/