

Invited Review

Acupuncture as treatment for depression in primary care: current position and future hopes

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Introduction

In recent years in the UK, there has been a considerable increase in the popularity and use of complementary and alternative medicine (CAM) amongst the general public. It has been reported that 25% of the British population has used some form of CAM and as many as 80% of users of CAM therapies were satisfied with the services compared to 60% with 'orthodox medicine'.¹ Vincent and Furnham cite patients' perception of 'failure' of Western medicine as often being the strongest motive for those seeking CAM, and a positive experience with CAM as encouraging users to continue with it.² Users of alternative medicine are said to prefer CAM's holistic approach to health with its emphasis on well-being, and the full attention and commitment of the practitioner. In addition many CAM users also like the active part they play in choosing an alternative therapy.¹ Interestingly though, the enthusiasm for CAM is gaining in popularity not just with the public but also within the medical community itself. Recent studies report that 65% of British hospital doctors believe that CAM has a place in mainstream medicine. Moreover 93% of British general practitioners (GPs) have suggested a referral to CAM, and two out of three local authorities are purchasing at least one form of CAM.^{3,4} These figures illustrate that CAM is making increasing inroads within mainstream health service provision.

However, there are considerable obstacles that CAM must overcome if it is to become more integrated into traditional medical practice in the UK. Clinicians

within the NHS and central government strongly emphasise the need to develop a sound clinical evidence base for different types of CAM in relation to particular illnesses, disorders and problems and the need to improve professional organisation of CAM therapies and practitioners.^{5,6} While these are longer-term goals they are not insurmountable and should help CAM gain greater acceptance in mainstream medicine. The government is thus encouraging research and development (R&D) within CAM. In June 2002, the National Co-ordinating Centre for Research Capacity Development (NCC RCD) at the Department of Health and Social Care (DHSC) invited expressions of interest from higher education institutions in hosting CAM R&D. In addition, funding has been made available to support post-doctoral and doctoral CAM R&D at successful host sites. Other agencies including the Foundation of Integrated Medicine and Mind and the Mental Health Foundation, for example, have welcomed these developments and support the need to address issues of underfunding, lack of networks, infrastructure and training, and the need to develop rigorous methodologies, to change orthodox attitudes and to investigate CAM philosophies.^{7,8} While there are many different forms of CAM, the main therapies have been cited as acupuncture, homeopathy, herbal medicine and osteopathy.⁹ The DHSC has prioritised acupuncture and herbal medicine in the creation of clinical governance and research infrastructure, as these therapies and attached research are relatively advanced in other Western countries and in China.

While the authors welcome these moves, we also feel that there is a need to support the development

of research into CAM at a more localised level. As researchers and practitioners we feel that building on evidence for CAM in relation to particular therapies must be prioritised on an individual and practical basis. Integration of CAM into mainstream medicine may well increase patient choice and improve patients' satisfaction with the health service provision. Integrating new professionals into primary care may well work towards increasing the capacity of the health service to meet demand. This paper is primarily intended to serve as a point of discussion in relation to the use of a particular type of CAM for a particular disorder, namely the use of acupuncture for the treatment of depression, but we hope that it will also contribute towards the agenda for integration of CAM into our current health services.

Standard treatment for depression in primary care

The treatment of mental health problems is now a national priority and 90% of this treatment takes place in primary care.¹⁰ Depressive disorders are the most common mental health problems and are expected to be the second most burdensome illness after heart disease by 2020.¹¹ The prevalence of depressive disorders in urban UK and urban Ireland are the highest in Europe.¹² One in 15 women and one in 30 men in the UK will be affected in each year.¹³ Depressive disorders are particularly high among ethnic minorities, refugees and asylum seekers; men in these groups are particularly vulnerable.¹⁴ Effective treatment and management with primary care then are essential.

Generally within primary care, depression is most commonly treated with antidepressant medication, 6–12 sessions of a talking therapy, or a combination of the two. There is supporting evidence for the effectiveness of these treatment options. In terms of talking therapies, cognitive-behavioural therapy (CBT), brief psychoanalytic therapy and interpersonal therapy

have been shown to be better than placebo in treating mild to moderate depression and in the short term, non-directive counselling, too, seems more effective than regular GP treatment.^{15,16} All four types of talking therapies are offered by the NHS and are highly popular with GPs and patients.¹⁷ However, waiting lists for these services are usually a minimum of three months and services are not equally accessible to all social and ethnic groups in our society. The typical attendee tends to be female, middle-class, white, affluent and socially stable.^{17–19}

Theoretically, at least, antidepressant medication is generally acceptable to individuals across various cultural and social backgrounds. However, evidence

suggests that only 50–65% of patients respond to antidepressants, that compliance can be low with many patients terminating a course of medication prematurely and that a significant number of patients refuse medication completely.²⁰ It is therefore important to recognise that although standard treatment for depression in primary care has improved significantly over the past decade it does not suit all patients equally well. Anecdotal evidence suggests that particular types of CAM may be useful in treating depression and alleviating symptoms. Therefore, developing the evidence base for CAM in relation to mental health problems is important in terms of improving outcomes, choice and care in line with national guidance.

Acupuncture as treatment for depression

Acupuncture is one such CAM therapy that is used to treat depression. It involves the insertion of very fine needles, on the body's surface, in order to influence physiological functioning of the body. According to Traditional Chinese Medicine (TCM) the treatment works by restoring the balance of the body's energy Qi, a force that runs along 'meridians' or special pathways. The acupuncture points are specific locations

Table 1 Frequency of use of the professional health insurance card

Frequency of use	Primary care		Secondary care		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Never	58	25.4	59	64.8	117	36.7
Occasionally	70	30.7	25	27.5	95	29.8
Regularly	100	43.9	7	7.7	107	33.5
Total	228	100.0	91	100.0	319	100.0

where the 'meridians' come to the surface of the skin, and are easily accessible by 'needling', i.e. acupuncture. In TCM treatment for depression, acupuncture focuses on revitalising the liver Qi, which is assumed to stagnate as a result of unresolved emotional problems, and stress that impact on the functioning of the liver. Western acupuncturists, however, attribute the apparent benefits of the treatment to neuropsychological effects, specifically to an increase in the level of endorphins through needling. Some studies have therefore looked at endorphin levels as outcome measures in addition to depressive symptomatology.

The most commonly used acupuncture procedure in the treatment of depression is manual acupuncture augmented, where appropriate, by a variant such as moxibustion where heat is applied to the acupuncture points. In research, manual acupuncture is often compared to electro-acupuncture where very small electrical impulses are given through the needles with the latter either controlled by a person or a computer. All procedures are considered safe medical practice as long as they are conducted by professionals.²¹ Acupuncture is a particularly interesting alternative to the standard treatment for depression because it counterbalances the disadvantages of counselling and medication, namely the lack of motivation to self-reflect, language, oral administration, side effects and potential dependency.

Clinical evidence

There is a paucity of evidence regarding the effectiveness of acupuncture as treatment for depression. Ernst *et al.* published an overview of complementary therapies for depression and their clinical evidence base.²² Their literature search was based on Medline, Embase, Ciscorn and the Cochrane Library, compiling evidence up to January 1997. The review indicated that acupuncture was a potentially beneficial treatment. The evidence reviewed was, however, small, consisting of case studies, several uncontrolled and controlled trials and two randomised controlled trials

(RCTs).²³⁻²⁹ The two RCTs compared electro-acupuncture to tricyclic antidepressant amitriptyline hydrochloride treatment and found statistically significant improvements for patients on the Hamilton Rating Scale of Depression (HAMD) for both types of treatment. There were no significant differences between treatments at the end of the treatment periods, or on recurrence rates at two and four year follow-up. However, patients in the acupuncture arms reported fewer side effects. Additionally, Yang found that acupuncture was associated with relief of anxiety symptoms while medication was not.²⁷ Luo *et al.* published preliminary findings from a study comparing the efficacy of acupuncture, electro-acupuncture, and computer-controlled electro-acupuncture, which suggested that electro-acupuncture has greater efficacy than traditional acupuncture, and that computer-controlled electro-acupuncture may lead to greater clinical improvement than electro-acupuncture *per se*.³⁰ Ernst *et al.* conclude that more rigorously designed RCTs are needed to make the evidence compelling.²² Crucial are clear diagnostic selection criteria, statistically suitable sample sizes, adequate duration, validated outcome measures, appropriate randomisation processes and control for investigator bias as well as other confounding variables.

Since the work of Ernst and colleagues, a number of other original research studies and overviews have been published. Researchers from the Institute of Mental Health in Beijing published an overview of their work and concluded similarly to Ernst and colleagues that there is a promising evidence base for acupuncture to be as effective as antidepressant drug treatment for mild and moderate depression. They also cited new evidence stating that acupuncture reduced anxiety somatisation and cognitive disturbances and had fewer adverse side effects than drug treatment.³¹ These reviewers also discussed trials suggesting that computer-controlled electro-acupuncture might be the most effective form of acupuncture because it is the type most compatible to Western scientific rigour. Luo *et al.* concluded that additional double-blind, placebo-controlled studies with Chinese and Western patients are needed to build on this.³¹

Table 2 Responses to the statement: 'the patient health insurance card made my job easier'

Card made job easier	Primary care		Secondary care		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
No	52	22.7	15	16.9	67	21.1
Yes	117	51.1	28	31.5	145	45.6
Same	60	26.2	46	51.7	106	33.3
Total	229	100.0	89	100.0	318	100.0

Table 3 Patient data confidentiality after the introduction of the smart card

Patient data confidentiality is worth	Primary care		Secondary care		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	14	6.3	15	17.0	29	9.3
No	73	32.7	36	40.9	109	35.0
Same	136	61.0	37	42.0	173	55.6
Total	223	100.0	88	100.0	311	100.0

More recent work from Germany has looked at the effectiveness of whole-body acupuncture applied as an addition to treatment with medication for severe depression. Roeschke and colleagues conducted a single-blind placebo controlled study on 70 inpatients who were administered either Mianserin (an antidepressant) plus verum acupuncture, Mianserin plus sham acupuncture, or Mianserin plus standard clinical management.³² The selection criterion for patients was a major depressive episode as rated by blind judges before and after the trial. Results showed that patients who experienced either type of acupuncture improved more than the control group (Mianserin plus standard clinical care). However, there was no difference found between verum acupuncture and sham acupuncture, and the authors therefore conclude that acupuncture might either not rely on specific but rather on general needling, or that the non-effect is due to bias of the practitioner who knew that he/she was giving sham acupuncture and might therefore have compensated this through extra attention. In either case, this research did not provide evidence for the efficacy of specific whole-body acupuncture in the treatment of major depression for inpatients. However, due to the special patient group (severe depression, inpatient population) the results do not contradict the evidence discussed above and in fact add to the knowledge base surrounding acupuncture as treatment.

Eich and colleagues report on an RCT of acupuncture as treatment for patients with minor depression and generalised anxiety disorder (GAD).³³ They recruited 43 depression/13 GAD patients, and 21 depression/7 GAD patients completed ten sessions of body needle acupuncture. Outcome measures were the National Global Impression Scale, the HAMD, and the Hamilton Anxiety Scale (HAMA). Results indicated that there were more responders in the treatment versus the placebo group (60.7% versus 21.4%). Therefore the authors concluded that body needle acupuncture produced significant clinical improvements with reduction in anxiety symptoms in patients with minor depression or generalised anxiety disorders. These results compare to those from the Institute of Mental Health in Beijing.³¹ However, once again, the sample

size was small and this illustrates the need for larger-scale projects.

Additionally there are two relevant dissertation abstracts, one reporting on work where adequate acupuncture treatment reduced the level of symptom severity significantly in a quasi-experimental pre-test-post-test design for three groups of depressed patients identified through Beck's Depression Inventory (BDI). This study found support for the Yin deficient, spleen deficient and liver Qi stagnation in depressives. However, the study did not include randomisation or control.³⁴ Additionally, Bennett tested therapeutic acupuncture as an intervention for affective dissonance in a RCT of 40 women.³⁵ Results indicated that acupuncture led to significantly greater improvements than sham acupuncture on BDI, the Spielberger Anxiety Scale, and several items of the BADI: upset, restless, stressed, peaceful, relaxed. These studies, while promising, illustrate again the need for stronger methodological design and the ability to disseminate findings effectively to add to the peer-reviewed evidence base.

Table 4 The physicians' opinions as to the parties that will benefit from the health insurance card

Who will benefit most?	<i>n</i>	%
NHII employees	170	90.4
Employees of other health insurance companies	137	86.2
Pharmacists	157	74.4
Nurses	217	70.2
Employers	144	64.3
Patients	144	53.7
Physicians	132	42.0

* There was a significant difference between the opinion of primary and secondary care physicians about the benefits for the physicians, primary care physicians being more reluctant in praising the benefits for the physicians ($\chi^2 = 6.219$; $P = 0.02$).

Users' reports

Besides clinical evidence there are users' reports about the efficacy of CAM for various disorders. Although there is argument as to what extent personal accounts and user satisfaction can and should count as indicators for the effectiveness of a particular treatment it is perhaps important to consider these in a time where more and more emphasis is being placed on patient 'choice'. The voluntary sector in mental health strongly advocates for user voices to be heard in policy debates. User accounts also often add qualitative meanings to quantitative findings.

Healing Minds, a report on the use of CAM by the Mental Health Foundation, has reviewed professionals' and patients' personal experiences and opinions on acupuncture as treatment for depression.³⁶ In these accounts, acupuncture is valued for bypassing some of the inherent difficulties of psychotherapy, working well with especially young people and patients with a short-term depressive illness. Acupuncture appears particularly beneficial in combination with psychological work in that it is cost-effective and less intrusive than medication. It is also appreciated by older persons. Patients also valued acupuncture in that it was perceived as calming and relaxing. Users also considered acupuncture as enhancing self-esteem in that it provoked a new and positive bodily feeling and that it represented a holistic approach to health-care involving better attention and input from practitioners. Furthermore, this report points to the need for multidisciplinary research involving partnerships with CAM practitioners, social researchers and medics and for outcome measures to take account of service users' views.

Conclusion

In sum, evidence presented here suggests that acupuncture may be a valuable and promising form of CAM in the treatment of depression. It appears to have both clinical and administrative advantages over standard treatment of depression in primary care. However, there are several issues that now need to be addressed. Firstly, R&D into CAM needs to be supported effectively by central government, research institutions, practitioners and users. Secondly, issues of statutory regulation of CAM therapies need to be addressed. Thirdly, CAM and particular therapies such as acupuncture need promotion amongst traditional health professions in the UK. Working strategically towards these three goals will hopefully encourage the

integration of CAM into mainstream health services. Au and Hiew have previously reported on pilot schemes that show that integration of CAM into primary and community care is possible for the provision of general medical and disorder-specific services.³⁷ This integration may hold many benefits for patients and health professionals. Integration and R&D are inextricably linked and only with increased support and collaborative working across these areas can we move the CAM agenda forward.

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