

Acupressure for low back pain

Promising but not proved

Disability associated with low back pain is an important public health problem. Clinical trials carried out in the Western world show conventional treatment to have, at best, modest effects,¹⁻³ and international guidelines agree only on the need to advise patients to remain physically active and prescribe appropriate pain medication.⁴ Other treatments that are evidence based and recommended for chronic low back pain, such as exercise and cognitive behaviour therapy, depend on substantial commitment and lifestyle change. It is therefore not surprising that patients seek alternative and complementary medicine in their search for pain relief, and a paper from Taiwan by Hsieh and colleagues on p 696 reports a randomised controlled trial of one such therapy—acupressure.⁵

In the United Kingdom, osteopathy and chiropractic are the types of complementary medicine most commonly sought by people with back pain,⁶ but therapies derived from the Chinese model of medicine are also popular. This model, which can be traced back at least 2500 years, considers all life to be empowered by an energy force (Qi) that flows around the body in pathways called meridians, providing mental and physical energy, maintaining health, and healing illness and injury. Energy flows are believed to be influenced by lifestyle (diet, exercise, and type of work, in particular) as well as external factors (damp or wind).

Acupuncture (inserting needles into key points on these meridians with the aim of unblocking energy pathways and restoring internal balance) is often accompanied by advice on lifestyle. Selection of points may vary with practitioners' perceptions of the underlying problems and the "school" or "tradition" of acupuncture they practice.⁷ A recent Cochrane review including 35 trials from Eastern and Western backgrounds found that, in patients with chronic back pain, acupuncture improved pain and function more than sham treatment or no treatment but was no more effective than other physical therapies.⁸

Acupressure is based on the same theoretical model as acupuncture but is non-invasive. It comprises gentle but firm pressure applied manually over meridian and acupuncture pressure points. The trial by Hsieh and colleagues compared six sessions of acupressure against a combination of various types of physiotherapy.⁵ It was well conducted in terms of randomisation, blinding, loss to follow-up, and analysis. The differences between the groups in standard outcome measures of disability, pain scores, and functional status are striking. The difference immediately after treatment and at six months was more than twice that reported in trials of conventional back pain interventions¹⁻³ and of acupuncture.⁸ If these results are valid, acupressure would seem to represent an efficacious treatment for low back pain and we might need to ask why Chinese medicine clinicians use acupuncture for back pain, rather than acupressure.

Are the results of this trial believable? Cultural differences are probably important in the experience and

reporting of back pain, and Hsieh and colleagues do not say how they validated the English language outcome measures they used in their local population. The physiotherapy offered in one arm of the trial included a combination of interventions, some of which (thermotherapy, infrared light therapy, and traction) are not evidence based.⁴ Hence treatment in this group may have been suboptimal. As the authors discuss, patients' expectations and placebo effects are both likely to play a part in determining the outcome of interventions such as acupressure, and the additional benefits of acupressure cannot be established from this pragmatic trial.^{9 10} Perhaps the most important uncertainty about the results of this trial is the lack of clarity about the intervention. Although we know that all treatments were given by a single senior therapist, we do not know how experienced that person was. We are not told the school or tradition of acupressure that guided the practice of this therapist, which points he or she treated, or what lifestyle advice he or she gave patients.

Although the trial by Hsieh and colleagues is interesting, external validity and implications for training need to be considered. We need to know whether other practitioners in Chinese medicine can achieve this level of success and how much the long term results depended on lifestyle changes. Would the effect be the same if Western clinicians were trained in these techniques, and would patients in the West with different cultures and lifestyles respond as well? The impact of patients' expectations and preferences on outcome also needs investigating to determine who is most likely to benefit.

Physical therapy has been shown to be cost effective, despite small treatment effects, but such data do not exist for acupressure.¹¹ The cost effectiveness of acupressure must be investigated before recommending that this treatment is used instead of evidence based physiotherapy for patients in the Western world. Given the public health importance of back pain, this evidence is needed sooner rather than later.

Helen Frost *research fellow*

(h.frost.1@warwick.ac.uk)

Sarah Stewart-Brown *professor of public health*

(sarah.stewart-brown@warwick.ac.uk)

Division of Health in the Community, University of Warwick, Coventry CV4 7AL

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Improving the management of dementia

Simple educational initiatives for primary care teams are not enough

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The prevalence of dementia in the United Kingdom will have risen from the current 600 000 to 1.2 million by 2050, increasing the already considerable financial and social burdens of this disorder.¹ In many countries, including in the United Kingdom, primary care is the first point of contact for many people with dementia, providing longitudinal support to families and coordinating ongoing multi-agency management of dementia.² Patients with early dementia and their families may not always get the early help they need, however.

Early recognition and detection of dementia enables people with dementia and their families to better understand and come to terms with the diagnosis and to discuss future care. It also enables more timely access to treatments and drugs.³ With this in mind, a randomised controlled trial in this week's *BMJ* by Downs and colleagues (p 692) assesses the effectiveness of educational interventions in improving detection and management of dementia in primary care.⁴

Several studies in primary care have reported high levels of unmet need, with widespread underdetection of dementia, poor long term management of patients' problems, and low rates of referrals to specialist care and to other statutory agencies. This situation is not confined only to primary care in the United Kingdom.⁵

There are several reasons for these less than optimal standards of care. Dementia rarely presents with clear, well demarcated symptoms. Its diagnosis can be confusing, with symptoms sometimes mimicking other conditions. Members of primary care teams may feel that they have too little appropriate training in diagnosing dementia and providing treatment. Tools to aid diagnosis are often not culturally sensitive and can be biased by characteristics of both patients and informants such as age, sex, and education.⁶ Inadequate resources and poor cooperation between community services, specialist clinics, and primary care teams may also be barriers to good care.⁷

A thorough search of the literature yields few papers that examine the impact of educational interventions on detecting and managing dementia in primary care. Approaches such as introducing clinical practice guidelines and educational tools were ineffective and too expensive to implement and sustain or have failed to show changes in doctors' behaviour, in terms of detection rates or outcomes.⁸ This week, Downs and colleagues report that they, too, have found little evidence in their study to support any

improvement in the diagnosis of dementia using guidelines alone.⁴

A Canadian study did find a positive effect of an educational and diagnostic toolkit on doctors' knowledge and confidence in dealing with dementia and driving.⁹ Downs and colleagues' study found a significant increase in the number of reported cases of dementia in practices where two educational initiatives—decision support software and practice based workshops—were introduced. These improvements did not extend, however, to increasing doctors' concordance with clinical guidelines on managing dementia. The authors argued that this might have reflected the low number of cases of dementia detected after the intervention and in the control arm, which affected the power of their study, and also incomplete recording in the medical records of any changes in doctors' behaviour.⁴

The wider evidence base on educational initiatives in primary care suggest that multifaceted interventions are the most effective ways to improve doctors' behaviour.¹⁰ More comprehensive initiatives might also improve doctors' knowledge of or attitudes to dementia care, as Downs and colleagues say, but such initiatives have not yet been formally evaluated.¹¹

A more clinically oriented policy that might make a difference to the quality of care in dementia in the United Kingdom is the revised quality and outcomes framework of the NHS contract for general practitioners, which includes a new focus on dementia.¹² Practices in England and Wales will be expected to show improved record keeping and ongoing management of patients with dementia, through the introduction of a dementia register and evidence that patients' care and needs have been reviewed in the preceding 15 months. However, practitioners may find it difficult to reconcile the increased focus on dementia of the new NHS contract, which encourages earlier diagnosis of Alzheimer's disease, with the recently published controversial guidelines from the National Institute for Health and Clinical Excellence (NICE), recommending drugs only in patients with later moderate Alzheimer's disease.

Elizabeth England *clinical research fellow*

(e.j.england@bham.ac.uk)

Department of Primary Care and General Practice, University of Birmingham, Edgbaston B15 2TT

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