

Acupuncture in Physiotherapy™: The Evidence

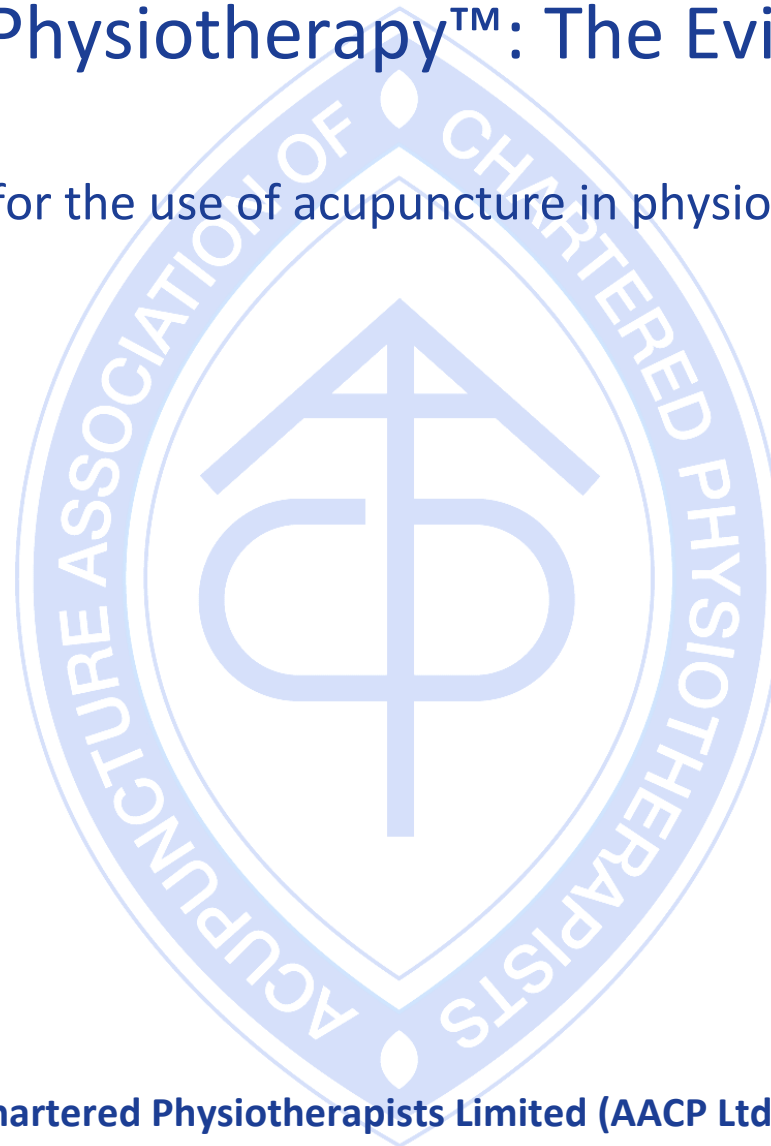
A summary of evidence for the use of acupuncture in physiotherapy for the benefit of the patient

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Acupuncture Association of Chartered Physiotherapists Limited (AACP Ltd)

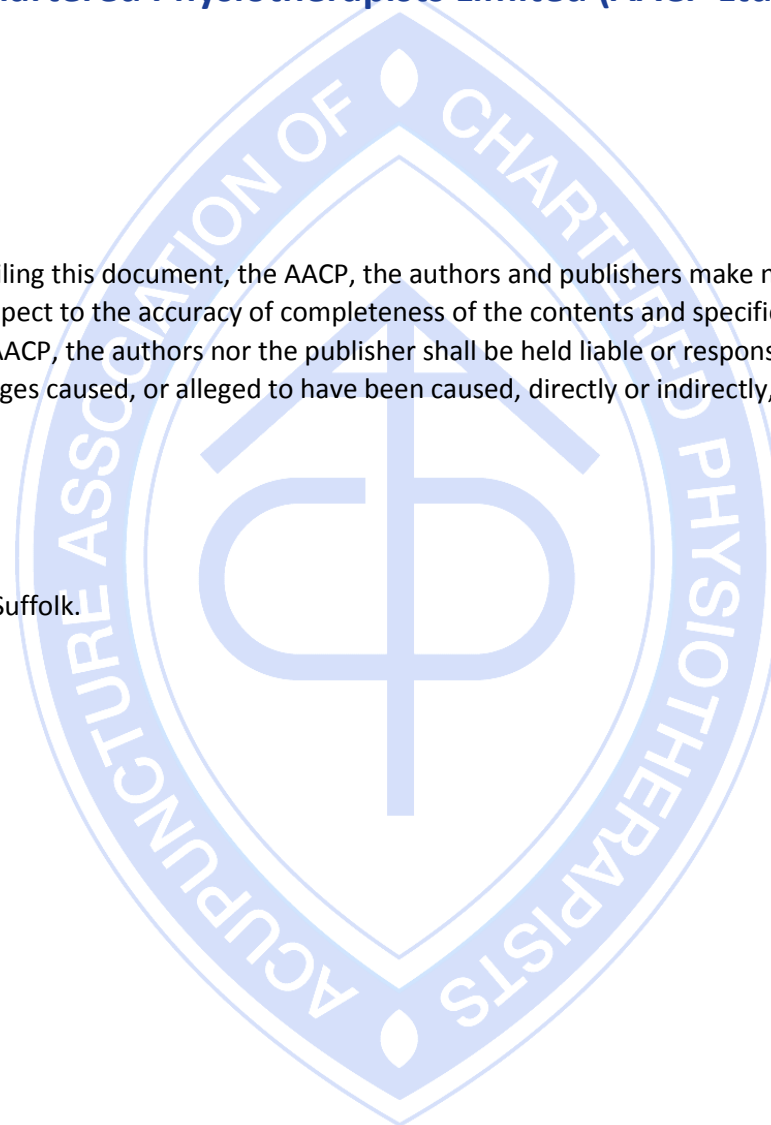
Acupuncture Association of Chartered Physiotherapists Limited (AACP Ltd)

First Published 2015

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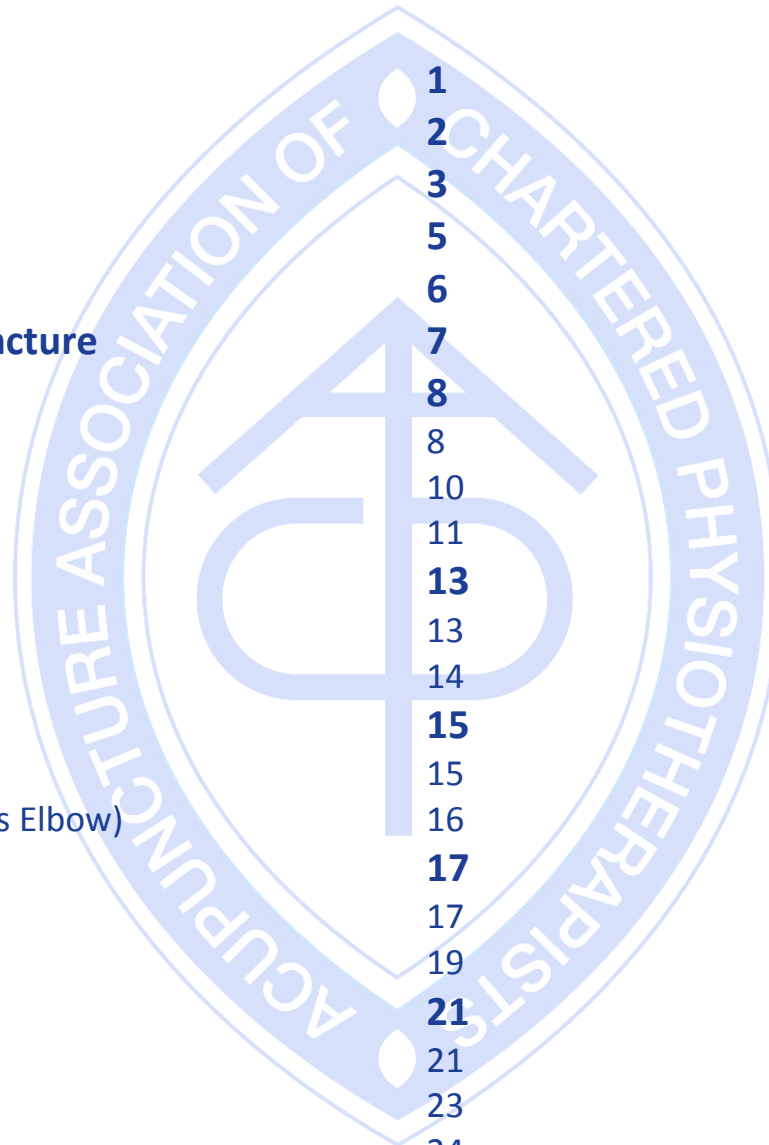
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Printed and bound by Sudbury Print Group, Suffolk.

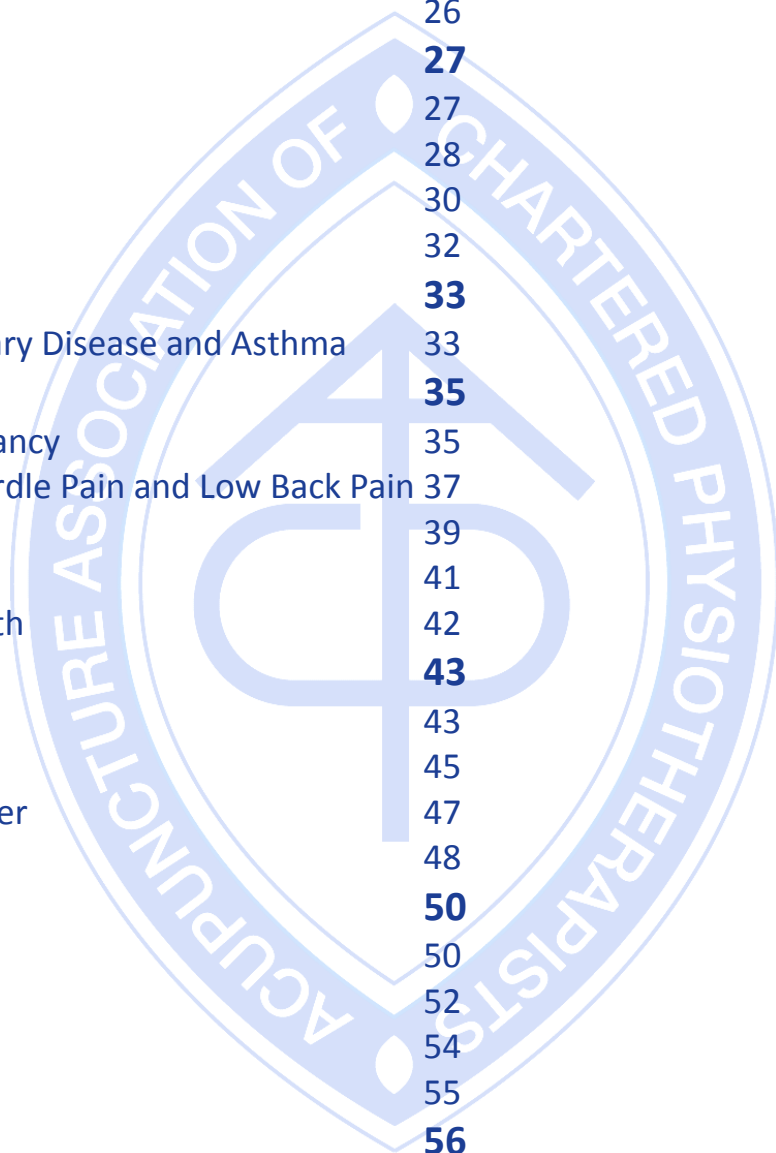


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Authors

The Association wishes to acknowledge the work and expertise of the following people in producing *Acupuncture in Physiotherapy™: Commissioning Guidance* and *Acupuncture in Physiotherapy™: The Evidence*, which together constitute *Acupuncture in Physiotherapy™: Evidence and Commissioning Resource*.

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Acknowledgements

The Association would like to thank AACP Members, AACP Committees and AACP Board for their dedication and support of the AACP.

Introduction

The Acupuncture Association of Chartered Physiotherapists (AACP) has been supporting physiotherapists in their use of acupuncture as a physiotherapy modality since 1984 by promoting the integration of evidence-based acupuncture into physiotherapy for the benefit of the patient.

Acupuncture for the treatment of pain is a common treatment offered by chartered physiotherapists. Approximately 12.5% of chartered physiotherapists (i.e. Chartered Society of Physiotherapy members) are AACP-accredited acupuncture-practicing physiotherapists (i.e. one in eight, c. 6500). All AACP-accredited physiotherapists practise evidence-based acupuncture as an integrated part of their treatments, which allows them to use it alongside other modalities offered as part of a physiotherapy treatment plan.

Acupuncture as part of physiotherapy is the most cost-effective way of delivering acupuncture since the only additional cost following training are the needles. Using the AACP discount needles can cost as little as approximately £0.02 each (£2.11 per 100), and little, if any, additional treatment time is needed, meaning that there is either a minimal or no additional cost to the commissioner or service user. Acupuncture as a part of physiotherapy capitalises on the extensive additional clinical benefits that this form of treatment has to offer. These benefits improve clinical effectiveness, and save the NHS, health insurers and other commissioners' money. Acupuncture also provides an effective, cost-effective and evidence-based service for patients and maintains patient choice. Offering patient choice is a key objective of government (DoH 2011); offering acupuncture as part of an existing physiotherapy service provides patient choice without any great cost to the NHS.

We respect the origins of acupuncture, which is a component of traditional Chinese medicine (TCM), an ancient system of medicine that dates back at least as far as 1000 BCE. Acupuncture is used all over the world to treat a wide variety of conditions, and is traditionally based upon TCM concepts. The Association promotes Western evidence-based acupuncture (i.e. Western medical acupuncture) as part of a physiotherapy treatment plan.

Effects of Acupuncture

The Analgesic Effects of Acupuncture

Members of AACCP use acupuncture because, as well as reducing pain, it actively improves rates of healing and recovery, thereby enhancing treatment outcomes for patients. The evidence to support this is continually growing, allowing physiotherapists to base their practice on high-quality research, which currently confirms many of the positive effects of acupuncture.

Natural pain-relieving chemicals, such as endorphins, melatonin and serotonin, are produced when acupuncture needles stimulate various physiological mechanisms within the central nervous system and in the local peripheral tissues (Stein *et al.* 2001). Acupuncture points are chosen with the intention of inducing a strong segmental inhibitory effect. Chemicals produced locally, and by mechanisms at the spinal and supraspinal levels assist in healing and offer pain relief, which is helpful when acupuncture is used in conjunction with other physiotherapy modalities such as manual therapy, exercise and education. Additionally, functional magnetic resonance imaging studies have demonstrated the effect of acupuncture on the pain pathways of the brain.

Physiological and imaging studies are providing insights into the neurophysiological mechanisms of acupuncture analgesia. The data suggest that acupuncture triggers a sequence of events involving the release of endogenous opioid-like substances including enkephalin, β -endorphin and endomorphin. These modulate pain signals processed along the pathway. Imaging studies have demonstrated that the limbic system plays an important role in acupuncture-induced analgesia (Wang *et al.* 2008).

Effects of Acupuncture

The Inflammatory Effects of Acupuncture

Acupuncture has been shown to induce a phenotypic switch of muscle macrophages. This causes a reduction in pro-inflammatory cells (M1 macrophages) and an increase in anti-inflammatory cells (M2 macrophages and IL-10), which reduces pain, swelling and inflammation in local tissue (da Silva *et al.* 2014). Wang *et al.* (2014) showed that acupuncture regulates opioid-containing macrophages and anti-nociceptive mediators in inflammatory pain, further supporting the interaction between acupuncture, pain and inflammation that speeds up healing and the recovery processes. Jeong *et al.* (2003) suggested that acupuncture treatment has an inhibitory effect on cytokine production since the elevated levels recorded in patients suffering from headaches were reduced to those of a healthy control group following acupuncture treatment. Although this research was specifically conducted in patients with chronic headache, it may be possible to apply these results to the general population.

Torress-Rosas *et al.* (2014) stated that sciatic nerve activation with electroacupuncture controls systemic inflammation by inducing vagal activation of aromatic L-amino acid decarboxylase, leading to the production of dopamine in the adrenal medulla. This can provide therapeutic advantages such as controlling inflammation in infectious and inflammatory disorders. This new research also explains the biomechanical process initiated by electroacupuncture that controls sepsis.

Acupuncture can speed up the initial inflammatory response to promote the secondary healing responses in injury, and can help to control systemic inflammation in inflammatory and infectious disorders including sepsis.

Acupuncture Safety

Acupuncture is a safe treatment when administered by a competent AACP-registered chartered physiotherapist.

White *et al.* (2001) reported on 31,822 acupuncture treatments performed by Acupuncture Association of Chartered Physiotherapy and British Medical Acupuncture Society members. Significant minor adverse events were reported in 43 treatments, and these included fainting, exacerbation of symptoms leading to a reduction in daily activities, and lost or forgotten needles. This equates to 0.14% (1.4 per 1000) of treatments resulting in a significant minor adverse event. No serious adverse events were reported.

MacPherson *et al.* (2001) made a survey of 34,407 acupuncture treatments, and reported no serious adverse events (i.e. ones requiring hospital admission). In total, there were 43 significant minor adverse events (including nausea, fainting, dizziness, vomiting, increased symptoms and bruising). This equates to 0.12% (1.2 per 1000), which is an extremely low figure even in comparison to other treatments regarded as very safe, such as medication.

Figures on serious adverse events associated with acupuncture were published by White (2006). This research combined data from the above studies with further reports, and included 4,441,103 treatments in total. White (2006) reported 11 serious adverse events, including seven cases of pneumothorax, two incidents involving broken needles, one asthma attack and one instance of depression with suicidal thoughts. More common were mild adverse events such as tiredness and bruising, which both occurred in 3% of treatments. Exceptionally minor adverse events were also reported by White *et al.* (2001), who stated that bleeding or bruising occurred in 3%, pain at needle site in 1% and aggravation of symptoms in 1% of treatments (70% showed a subsequent improvement in symptoms of those who had been aggravated).

Further evidence of the safety of acupuncture has been provided by Xu S. *et al.* (2013), who stated that four recent surveys of acupuncture safety among regulated, qualified practitioners confirmed that serious adverse events after acupuncture are uncommon. These surveys covered more than 3 million acupuncture treatments in total; there were no deaths or permanent disabilities, and all patients who suffered an adverse event fully recovered.

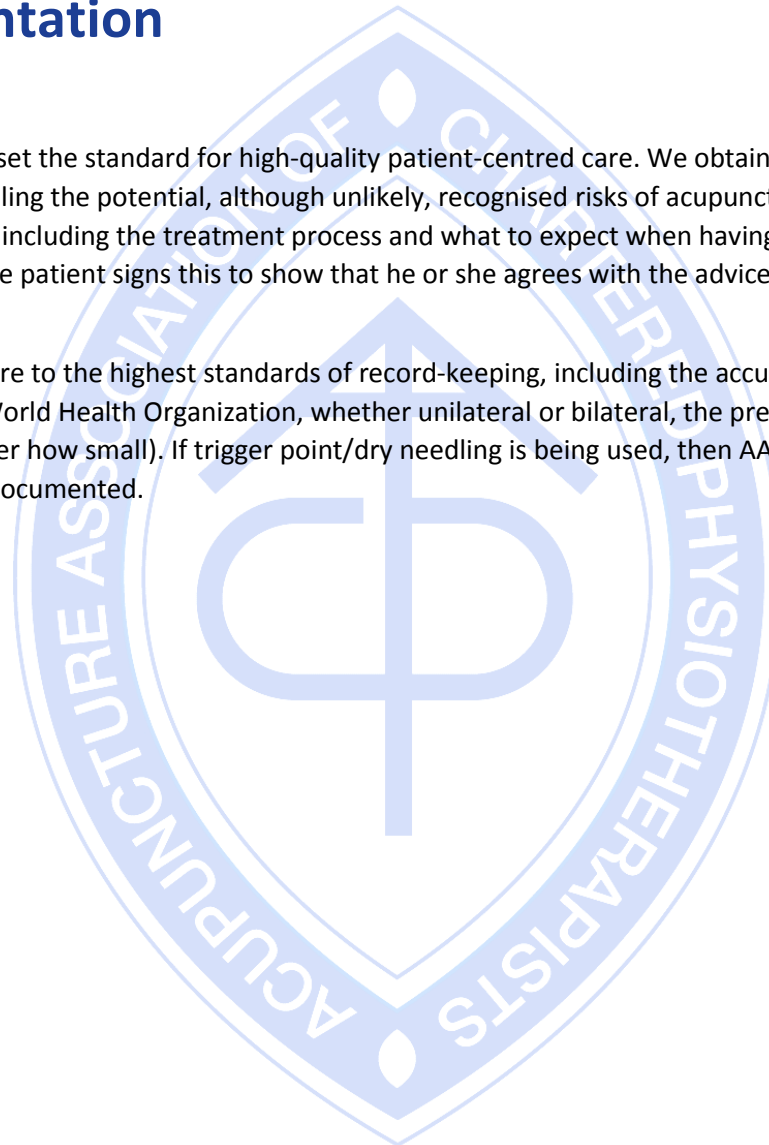
The more common adverse events are exceptionally minor in nature and pose very little risk to the patient. More significant adverse events are extremely rare.

The Association endorses acupuncture as an exceptionally safe treatment, when practised by an AACP member.

Consent and Documentation

All AACP-accredited physiotherapists aim to set the standard for high-quality patient-centred care. We obtain clear informed written consent prior to acupuncture treatment, which involves detailing the potential, although unlikely, recognised risks of acupuncture, and the potential benefits of the treatment. An explanation of the treatment, including the treatment process and what to expect when having acupuncture as a treatment will be given. This information is then documented, and the patient signs this to show that he or she agrees with the advice. A copy of this material is be filed in the patient notes.

The Association advises its members to adhere to the highest standards of record-keeping, including the accurate documentation of needle placement, citing the nomenclature recognised by the World Health Organization, whether unilateral or bilateral, the presence or absence of De Qi, treatment response, and all adverse reactions (no matter how small). If trigger point/dry needling is being used, then AACP recommends that the name of the muscle and the depth of the needle should also be documented.



Patients' Experience of Acupuncture

Summary:

The current evidence is very positive, and suggests that patients are very happy with acupuncture treatment. They report improvements in their health and well-being as a result of acupuncture, and describe acupuncture treatment as a positive experience. Evidence also suggests that acupuncture facilitates the empowerment of patients, allowing them to become more actively involved in their care and treatment. This is especially useful in physiotherapy, where active involvement is key to successful treatment outcomes. Alongside this, it has also been highlighted that some patients believe that conventional Western medicine may not always entirely meet their health needs, and that complementary and alternative medicine (CAM), such as acupuncture, may be a substitute.

Patient Experience of Acupuncture				
Evidence				
Reference	Condition	Research type	Results	Conclusion
Cheshire <i>et al.</i> 2013	NHS patient experiences of acupuncture and self-care for chronic low back pain.	Questionnaire	+	Many patients found an acupuncture and self-care service for people with chronic low back pain to be effective and valuable. Patients experienced improvements in their pain, quality of life (QoL), understanding of pain, physical activity levels and relaxation, all of which continued to be evident 3 months after treatment.
Rugg <i>et al.</i> 2011	Patient experiences of acupuncture for medically unexplained symptoms	Longitudinal qualitative study	+	Many patients who were treated with acupuncture reported a range of positive effects, and appeared to take on a more active role in consultations and self-care.
Sharples <i>et al.</i> 2003	NHS patient perspectives on CAM	Survey	+	The results suggest that orthodox medicine is not meeting the needs of some patients, and that acupuncture and CAM may wholly or partly substitute for conventional medicines. Most patients indicated that their problem had improved after acupuncture and CAM.

Spinal

Headache

Summary:

Approximately 4% of adults experience headaches nearly every day. Non-pharmacological interventions for frequent headaches may be appropriate because medical management alone is often ineffective (Coeytaux *et al.* 2005). The evidence, which includes randomised controlled trials (RCTs), supports the use of acupuncture for the treatment of various types of headache, and the potential cost-effectiveness of this form of treatment. Physiotherapists with adequate training are able to treat headaches with acupuncture, and therefore, referral is recommended by AACP.

The current National Institute for Health and Care Excellence (NICE) guidelines (NICE 2012) also support the use of acupuncture as a treatment for headaches. Cervical spine disorders often cause or contribute to headaches, and in such instances, acupuncture as a part of a physiotherapy treatment plan is a valuable referral option. The opinion of AACP is that physiotherapists practising acupuncture may provide a valuable service in the prophylactic management of musculoskeletal and non-musculoskeletal headaches.

Headache				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Kim <i>et al.</i> 2012	Cost-effectiveness	9 cost–utility analyses 8 cost–benefit analyses	+	This systematic review of currently available economic analyses and RCTs showed the potential cost-effectiveness of acupuncture in the management of pain such as low back pain, headache and osteoarthritis (OA).
Zhao <i>et al.</i> 2011	Neurovascular headache	16 RCTs	+	There was a significant difference between acupuncture and Western medicine therapy, indicating acupuncture treatment had an obviously superior effect.
Liu <i>et al.</i> 2010	Trigeminal neuralgia	9 RCTs	+	The evidence reviewed previously suggested that acupuncture has a similar efficacy to carbamazepine, but has fewer adverse effects in the treatment of trigeminal neuralgia.

Cont...

Linde <i>et al.</i> 2009a	Migraine	22 RCTs	+	Acupuncture should be considered as a treatment option for patients with migraine who need prophylactic treatment because of frequent or insufficiently controlled migraine attacks, particularly those refusing prophylactic drug treatment or experiencing adverse effects from such treatment. Available studies suggest that acupuncture is at least as or possibly more effective than prophylactic drug treatment, and has fewer adverse effects. Acupuncture seems to be a cost-effective treatment.
Linde <i>et al.</i> 2009b	Tension-type headache	11 RCTs	+	In the previous version of this review, evidence in support of acupuncture for tension-type headache was considered insufficient. Now, with the inclusion of six additional trials, the authors conclude that acupuncture could be a valuable non-pharmacological tool in patients with frequent episodic or chronic tension-type headaches.
Sun <i>et al.</i> 2008	Headache	31 RCTs	+	Needling acupuncture is superior to sham acupuncture and medication therapy in improving headache intensity, frequency and response rate.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Plank <i>et al.</i> 2013	Migraine	Prospective international study	+	Migraine frequency and pain intensity showed a significant decrease after acupuncture intervention. Results had not returned to the pre-intervention baseline even 12 weeks after the last acupuncture session. Acupuncture significantly influenced migraine frequency and intensity in the study's participants when pre-intervention measurements were compared to post-intervention findings. These results indicate that, not only did acupuncture decrease both the frequency and intensity of migraines, but also the benefit had not subsided 12 weeks after the final acupuncture session.
Li <i>et al.</i> 2012	Migraine	RCT	+?	It was found that there was a significant, but not clinically relevant, benefit for almost all secondary outcomes in the three acupuncture groups compared with the control group. The authors found no relevant differences between the three acupuncture groups.
SIGN 2008	Headache	National clinical guideline	+	Acupuncture should be considered for preventive management in patients with migraine.
Coeytaux <i>et al.</i> 2005	Headache	RCT	+	Patients who received acupuncture were 3.7 times more likely (CI = 1.7 to 8.1) to report less suffering from headaches at 6 weeks. However, supplementing medical management with acupuncture resulted in improvements in health-related QoL, and the perception by patients that they suffered less from headaches

Spinal

Cervical Spine

Summary:

There evidence from systematic reviews and RCTs that confirms the effectiveness of acupuncture in the treatment neck pain. Acupuncture has also been shown to be a cost-effective treatment for patients with chronic neck pain. The Association recommends that acupuncture is considered for patients with neck pain as a part of a physiotherapy treatment plan. Physiotherapy aims to promote long-term improvements, and acupuncture may result in pain relief and increased range of movement (ROM). This may allow a patient who would otherwise not be able to fully partake in treatment to engage fully since their pain is less likely to limit them, increasing the likelihood of improved results.

Cervical Spine				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Fu <i>et al.</i> 2009	Neck Pain	14 RCTs	+	The quantitative meta-analysis conducted in this review confirmed the short-term effectiveness and efficacy of acupuncture in the treatment of neck pain.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Witt <i>et al.</i> 2006	Chronic neck pain	RCT	+	In patients with chronic neck pain, acupuncture treatment in addition to routine care was associated with improvements in neck pain and disability compared to routine care alone.
Willich <i>et al.</i> 2006	Chronic neck pain cost-effectiveness	RCT	+	According to international cost-effectiveness threshold values, acupuncture is a cost-effective treatment strategy in patients with chronic neck pain. Beyond the 3-month study duration, acupuncture might be associated with further health economic effects.
Irnich <i>et al.</i> 2002	Chronic neck pain	RCT	+	Acupuncture is superior to sham in improving motion-related pain and ROM following a single session of treatment in patients with chronic neck pain.

Spinal

Lumbar Spine

Summary:

Based on the evidence, AACP recommends that general practitioners should consider acupuncture as a treatment option for patients with low back pain (LBP), especially when it is used as part of a physiotherapy treatment regime. There is high-quality evidence supporting the use of acupuncture for acute LBP and chronic non-specific LBP, which is also supported by Scottish Intercollegiate Guidelines Network (SIGN) guidelines (SIGN 2013). There is also evidence to support the cost-effectiveness of acupuncture in the treatment of LBP. The evidence concludes that acupuncture for LBP will reduce pain, and in turn, this will allow an earlier return to normal activities and enable engagement in physiotherapeutic exercise more rapidly. Alongside this, it may also mean that less analgesic medication is needed to manage the LBP. Acupuncture for the treatment of LBP is also supported by NICE (NICE 2009). Acupuncture treatment is especially cost-effective when it is delivered by a physiotherapist as part of a physiotherapy management plan. Physiotherapy is considered to be a cost-effective treatment for LBP, and is currently available across the UK. Therefore, acupuncture as part of physiotherapy treatment will improve patient outcomes while remaining cost-effective.

Lumbar Spine				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Lee J. H. <i>et al.</i> 2013	Acute LBP	11 RCTs	+	The current evidence is encouraging in that acupuncture may be more effective than medication for symptom improvement in acute LBP, and it may also relieve pain more effectively than sham acupuncture.
Xu M. <i>et al.</i> 2013	Chronic LBP	13 RCTs	+	Compared with no treatment, acupuncture achieved better outcomes in terms of pain relief, disability recovery and better QoL. Acupuncture is an effective treatment for chronic LBP.
Kim K. H. <i>et al.</i> 2013	Lumbar spinal stenosis	6 RCTs	+	Acupuncture may be recommended if patients have a preference for or willingness to receive acupuncture. Pain intensity, overall symptoms and functional outcomes related to spinal stenosis and QoL all showed significant improvements in the treatment group compared with the controls, which lasted for up to 6 months post-treatment.

Cont...

Kim <i>et al.</i> 2012	Cost effectiveness	9 cost-utility and 8 cost-benefit analysis	+	This systematic review of currently available economic analyses alongside RCTs showed the potential cost-effectiveness of acupuncture for the management of pain conditions such as LBP, headache and OA.
Yuan <i>et al.</i> 2008	LBP	23 RCTs	+?	There is moderate evidence that acupuncture is more effective than no treatment for short-term pain relief, and strong evidence of no significant difference between acupuncture and sham acupuncture.
Furlan <i>et al.</i> 2005	LBP	35 RCTs	+?	For chronic LBP, acupuncture needling is more effective for pain relief and functional improvement than no treatment or sham acupuncture immediately after treatment, but only in the short term. Acupuncture is not more effective than other conventional and "alternative" treatments.
Manheimer <i>et al.</i> 2005	LBP	33 RCTs	+	Acupuncture needling is more effective in relieving chronic pain than sham acupuncture or no additional treatment, but not other active therapies.
Yuan <i>et al.</i> 2004	LBP	10 RCTs	+	Acupuncture is a useful supplement to other treatments.

Other Evidence

Reference	Condition	Research type	Results	Conclusion
SIGN 2013	Chronic LBP	Guideline	+	Acupuncture should be considered for short-term relief of pain in patients with chronic LBP.
Cho <i>et al.</i> 2013	Chronic LBP	RCT	+	This randomised sham-controlled trial suggests that acupuncture treatment has a better effect on the reduction of the troublesomeness of pain and its intensity than a sham control in participants with chronic LBP.
Yun <i>et al.</i> 2012	Chronic LBP	RCT	+	Both acupuncture modes have beneficial and persistent effectiveness against chronic LBP compared with the usual care group. Hegu acupuncture is significantly more effective than standardised acupuncture, especially in the long term.
Vas <i>et al.</i> 2012	Acute LBP	RCT	+?	All three modalities of acupuncture were better than conventional treatment alone, but there was no difference between the three acupuncture modalities, which implies that true acupuncture is not better than sham or placebo acupuncture.
Sherman <i>et al.</i> 2009	Chronic LBP	Critical review of evidence	+	The evidence suggests that acupuncture is a reasonable therapeutic option. Acupuncture may be especially valuable for patients who prefer it to other options, or are concerned about using analgesic medications. The authors of both studies of chronic LBP that were included concluded that acupuncture is a cost-effective intervention for back pain.
Ratcliffe <i>et al.</i> 2006	Chronic LBP, cost-effectiveness	RCT	+	A short course of traditional acupuncture for persistent non-specific LBP confers a modest health benefit for a minor extra cost to the NHS. Acupuncture care for LBP seems to be cost-effective in the longer term.

Facial

Temporomandibular Joint

Summary:

Acupuncture is an effective treatment for temporomandibular joint (TMJ) disorders, and appears to be an acceptable alternative to conventional therapy. Acupuncture may offer the short-term pain relief that is needed in order for patients to engage with physiotherapy treatment at an enhanced level. Based on this evidence, AACP recommends the use of acupuncture as part of a physiotherapy programme for patients suffering from TMJ disorders.

Temporomandibular Joint				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
La Touche <i>et al.</i> 2010	TMJ disorders	8 RCTs	+	The results of this meta-analysis suggest that acupuncture is a reasonable adjunctive treatment for producing a short-term analgesic effect in patients with painful TMJ symptoms.
Cho <i>et al.</i> 2010	TMJ disorders	9 RCTs	+	This systematic review noted moderate evidence that acupuncture is an effective intervention to reduce the symptoms associated with TMJ disorders.
Fink <i>et al.</i> 2006	TMJ disorders	6 RCTs	+	Acupuncture is a suitable complementary treatment method in the management of craniomandibular dysfunction. However, its significance has to be further evaluated in future studies.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Vicente-Barrere <i>et al.</i> 2012	TMJ pain dysfunction syndrome	RCT	+	Acupuncture is an effective complement and/or acceptable alternative to decompression splints in the treatment of myofascial pain and TMJ pain-dysfunction syndrome. The results of this study indicate that acupuncture has analgesic effects in the short-term, and therefore, is comparably effective to occlusal splints in the treatment of TMJ pain-dysfunction syndrome.
Shen <i>et al.</i> 2009	Myofascial pain of the jaw muscles	RCT	+	A single acupuncture session using one acupoint at Hegu [Large Intestine (LI) 4] significantly reduced most myofascial pain endpoints when compared to sham acupuncture.

Facial

Bell's Palsy

Summary:

Although limited, the evidence suggests that acupuncture treatment has potentially positive effects of on facial muscle recovery, disability and quality of life in people with Bell's palsy. The evidence also confirms no harmful side effects were reported. Because of the known low risk of acupuncture and the potential for a positive outcome, AACP recommends the consideration of acupuncture as an adjunctive treatment for a person with Bell's palsy.

Bell's Palsy				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
He <i>et al.</i> 2009	Bell's palsy	6 RCTs	?	Harmful side effects were not reported in any of the trials. Flaws in study design or reporting (particularly uncertain allocation concealment and substantial loss to follow-up), and clinical differences between trials prevented conclusions being drawn about the efficacy of acupuncture.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Xu S. B. <i>et al.</i> 2013	Bell's palsy	RCT	+	The authors found evidence that acupuncture with De Qi improved facial muscle recovery, disability and QoL among patients with Bell's palsy. A stronger intensity of De Qi was associated with better therapeutic effects. De Qi and its related techniques should be properly appreciated in acupuncture practice and research, and should be considered for inclusion in clinical guidelines for acupuncture.
Nguyen <i>et al.</i> 2013	Bell's palsy	Case Study	+	The patient's symptoms were greatly improved following an integrated approach that included acupuncture, manual therapy to the C0-1 level, myofascial release and facial exercises.

Upper Limb

Shoulder

Summary:

The evidence highlights the positive effects that acupuncture can have on patients with shoulder pain, including an increase in ROM, a reduction in the intake of analgesic medication, a reduction in pain and an increase in function. Based on this evidence, AACP recommends the use of acupuncture as part of a physiotherapy regime in order to aid further pain reduction and improved movement. The evidence also suggests that the use of analgesic medication is reduced when acupuncture is used, promoting further cost savings.

Shoulder				
Evidence				
Reference	Condition	Research type	Results	Conclusion
Molsberger <i>et al.</i> 2010	Chronic shoulder pain	RCT	+	Descriptive statistics showed a greater improvement in shoulder mobility (abduction and arm above head test) for the treatment group in comparison to the control subjects immediately after treatment and after 3 months. The trial indicated that acupuncture is an effective alternative to conventional orthopaedic treatment for chronic shoulder pain.
Vas <i>et al.</i> 2008	Painful shoulder	RCT	+	Acupuncture in association with physiotherapy achieved a greater improvement in shoulder function and alleviated pain more than physiotherapy alone. These improvements were accompanied by a reduction in the consumption of analgesic medication.
Cheing <i>et al.</i> 2008	Frozen shoulder	RCT	+	Both acupuncture and interferential electrotherapy in combination with shoulder exercises are effective in treating patients with frozen shoulder. However, no significant difference was found between these types of treatment.

Upper Limb

Lateral Epicondylalgia (Tennis Elbow)

Summary:

There is good-quality evidence suggesting that acupuncture is effective in the short-term relief of lateral epicondyle pain, and the positive effects of treatment may last for up to 6 months. As well as a reduction in pain, acupuncture may result in increased function and increased maximal strength. The Association recommends that acupuncture is considered as a treatment option as part of a physiotherapy treatment programme, which is likely to already be available to the patient since physiotherapy is considered by many authorities to be the standard treatment option for lateral epicondylalgia.

Lateral Epicondylalgia				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Gadua <i>et al.</i> 2014	Tennis elbow	10 RCTs	+	Current evidence identified in this review suggests that acupuncture may be effective in the relief of lateral elbow pain for a period of up to 6 months. Findings from moderate-quality studies with subject-blinded and sham-controlled acupuncture intervention groups showed that acupuncture was more effective than sham acupuncture in the treatment of lateral elbow pain.
Farren 2012	Tennis elbow	3 RCTs	+?	Currently, there appears to be some evidence to support the use of acupuncture over placebo as a treatment for lateral epicondylitis. The findings of possible short-term improvements in pain, function and maximal strength associated with no adverse effects may encourage physiotherapists to consider needle acupuncture as one component of the management of lateral epicondylitis.
Trinh <i>et al.</i> 2004	Lateral epicondyle pain	6 RCTs	+	There is strong evidence suggesting that acupuncture is effective in the short-term relief of lateral epicondyle pain.

Lower Limb

Knee

Summary:

High-quality evidence supports the use of acupuncture to reduce osteoarthritic knee pain, and this is also backed by NHS evidence summaries and SIGN (2013) guidelines. The pain-relieving effects of acupuncture as a part of a physiotherapy treatment regime are what AACP recommends for people suffering from osteoarthritic knee pain. The evidence also concludes that acupuncture in conjunction with advice and exercise administered by a physiotherapist is cost-effective. This will especially be the case when it is delivered as part of an already proven, cost-effective physiotherapy treatment plan.

Knee				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Kim <i>et al.</i> 2012	Cost-effectiveness	9 cost–utility analyses, 8 cost–benefit analyses	+	This systematic review of currently available economic analyses and RCTs showed the potential cost-effectiveness of acupuncture for the management of pain (e.g. LBP, headache and OA).
Manheimer <i>et al.</i> 2007	OA knee	11 RCTs	+	Acupuncture had clinically relevant benefits in comparison to usual care and waiting-list controls.
Bjordal <i>et al.</i> 2007	OA knee		+	Acupuncture with optimal doses in an intensive 2–4 week treatment regime seemed to offer clinically relevant short-term pain relief for OA of the knee.
Kwon <i>et al.</i> 2006	Peripheral OA, including OA of the knee	18 RCTs	+	Sham controlled RCTs suggest that acupuncture may reduce pain in patients with peripheral OA, and that it could be considered for patients with OA of the knee.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
SIGN (2013)	Chronic pain	Guideline	+	At 6–12-month follow-ups, patients with knee pain were still reporting significant improvements in pain reduction. Patients with OA of the knee or hip reported a significant difference between acupuncture and routine care at 3 months. Acupuncture should be considered for short-term relief of pain in patients with OA.
Mavrommatis <i>et al.</i> 2012	OA of the knee	RCT	+	The authors conclude that acupuncture with etoricoxib is more effective than sham acupuncture with etoricoxib or etoricoxib alone for the treatment of OA of the knee .

NHS Evidence Summaries

Reference	Condition	Research type	Results	Centre for Reviews and Dissemination Summary
Whitehurst <i>et al.</i> 2011 (NHS Economic Database)	Cost–utility analysis for OA of the knee	Meta-analysis	+	The objective was to assess the cost-effectiveness of adding acupuncture to an intervention consisting of advice and exercise for people with OA of the knee. The authors concluded that a package of advice and exercise with the addition of acupuncture was cost-effective. The methods were good, and these and the results were presented in full. Considering the scope of the study and the limitations presented by the authors, their conclusions appear to be valid. Please see http://www.crd.york.ac.uk/CRDWeb/ShowRecord.asp?ID=22011001386#.VAA0aHkg-Uk for full information.
Corbett <i>et al.</i> 2013 (NHS Economic Database)	OA of the knee	Meta-analysis	+	This is a high-quality systematic review involving the Centre for Reviews and Dissemination (CRD) that meets the criteria for inclusion on the Database of Abstracts of Reviews of Effects (DARE). This structured abstract presents a brief summary of the review methods, results and conclusions. This review and network meta-analysis compared many different treatments within a coherent framework. It found evidence to suggest that acupuncture could be considered to be one of the more effective physical treatments for alleviating osteoarthritic knee pain in the short term. Much of the evidence was of poor quality, meaning that there is uncertainty about the efficacy of many physical treatments. Please see http://www.crd.york.ac.uk/crdweb/ShowRecord.asp?ID=12013051050#.VAA1ZXkg-Uk for full information.

Lower Limb

Foot and Ankle

Summary:

There is evidence for the effectiveness of acupuncture in the treatment of plantar fasciitis, Achilles tendinopathy and ankle sprains. This is comparable to the evidence available for conventionally used interventions, such as stretching, night splints or medication. The Association suggests that acupuncture as part of a physiotherapy treatment regime should be considered in the management of patients suffering from these conditions.

Foot and Ankle				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Park <i>et al.</i> 2013	Ankle sprain	17 RCTs	+	Acupuncture was more effective than various controls for relieving pain, facilitating a return to normal activity and promoting QoL.
Clark <i>et al.</i> 2012	Plantar fasciitis	5 RCTs and 3 non-randomised comparative studies	+	High-quality studies report significant benefits. Acupuncture was associated with substantial improvements in pain and function when combined with standard treatment (including non-steroidal anti-inflammatory drugs). The Pericardium (PC) 7 point improved pain and pressure-pain thresholds significantly more than LI4.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Zhang <i>et al.</i> 2011	Plantar fasciitis	RCT	+	Acupuncture can provide pain relief for patients with plantar fasciitis. The PC7 acupuncture point was found to be a relatively specific point for heel pain.

Cont...

Goddard 2011	Lower leg injuries	Practice report	+	The author reports the discovery of a new acupuncture point called "the runners point". This may be useful in the treatment of shin splints, calf strains and plantar fasciitis.
Kubo <i>et al.</i> 2010	Achilles tendinopathy	Small study	+?	A long-lasting increase in blood flow and oxygen was found in patients during and after a 30-minute recovery period after needling. This treatment may have a therapeutic effect on the injured tendon.
Perez-Millan <i>et al.</i> 2001	Plantar fasciitis	Appraisal	+	Post-acupuncture treatment results demonstrated a significant reduction in the mean score for overall pain. On average visual analogue scale scores improved from 5.7/10 to 3/10.



Pain

Chronic Pain

Summary:

The Association recommends the use of acupuncture as part of a physiotherapy treatment programme for patients presenting with chronic pain. There is evidence that acupuncture will reduce chronic pain, and this will, in turn, allow patients to engage more fully with other forms of physiotherapy treatment, such as mobilisation, manipulation and exercise. Pain relief as a result of acupuncture treatment and guidance from a physiotherapist may also facilitate normal movement, which will promote regular function, potentially improving outcomes. Because acupuncture is delivered by a physiotherapist as part of a treatment session that the patient is already likely to be attending, it is very cost-effective. Alongside this, the “Patients’ Experience of Acupuncture” section above describes how acupuncture can improve a person’s engagement with treatment. This is especially useful when treating patients with chronic pain.

Chronic Pain				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Vickers <i>et al.</i> 2012	Chronic pain	29 RCTs	+	Acupuncture is effective for the treatment of chronic pain, and therefore, is a reasonable referral option. Significant differences between true and sham acupuncture indicate that acupuncture is more than a placebo.
Kim <i>et al.</i> 2012	Cost-effectiveness	9 cost-utility and 8 cost-benefit analyses	+	This systematic review of currently available economic analyses and RCTs showed the potential cost-effectiveness of acupuncture for the management of pain (e.g. LBP, headache and OA).
Hopton <i>et al.</i> 2010	Chronic pain	8 systematic reviews	+	The accumulating evidence from recent reviews suggests that acupuncture is more than a placebo for commonly occurring chronic pain conditions.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
SIGN 2013	Chronic pain	National clinical guideline	+	Acupuncture should be considered for short term relief of pain in patients with chronic low back pain or osteoarthritis.
Sherman <i>et al.</i> 2009	Chronic LBP	High-quality evidence review	+	The evidence suggests that acupuncture is a reasonable therapeutic option. Acupuncture may be especially valuable for patients who prefer it to other treatments or are concerned about using analgesic medications.

NHS Evidence Summary

Reference	Condition	Research type	Results	Centre for Reviews and Dissemination Summary
Vickers <i>et al.</i> 2012 (NHS Economic Database)	Chronic pain	Meta-analysis	+	<p>This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions, followed by a detailed critical assessment of the reliability of the review and the conclusions drawn. This meta-analysis concluded that acupuncture added to standard care was more effective than standard care alone or standard care with sham acupuncture for four types of chronic pain. The differences between true and sham acupuncture were relatively modest. The authors' conclusions reflect the high-quality evidence presented and appear to be reliable.</p> <p>The authors state that acupuncture is a reasonable referral option for patients with chronic pain. Please see http://www.crd.york.ac.uk/crdweb/ShowRecord.asp?ID=12012041253#.VAA3AXkg-Uk for full information.</p>

Pain

Fibromyalgia

Summary:

Although the evidence for acupuncture as an effective intervention for fibromyalgia is limited, it is a very safe treatment and positive results have been reported. Acupuncture should be considered as a treatment option alongside regular treatment for patients suffering from fibromyalgia. Acupuncture may also be considered as a treatment option if conventional treatment has failed to manage symptoms adequately and it may lead to improvements.

Fibromyalgia				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Deare <i>et al.</i> 2013	Fibromyalgia	9 RCTs	+	There is a low to moderate level of evidence that, compared with no treatment and standard therapy, acupuncture improves pain and stiffness in people with fibromyalgia. Acupuncture appears to be safe. People with fibromyalgia may consider using acupuncture alone, or in combination with exercise and medication.
Huijuan <i>et al.</i> 2010	Fibromyalgia	25 RCTs	+?	Acupuncture had no significant effect compared with sham; however, acupuncture combined with cupping therapy was better than conventional medications for reducing pain.
Berman <i>et al.</i> 1999	Fibromyalgia	7 (3 RCTs)	+	Positive but limited evidence was reported.

Pain

Cancer

Summary:

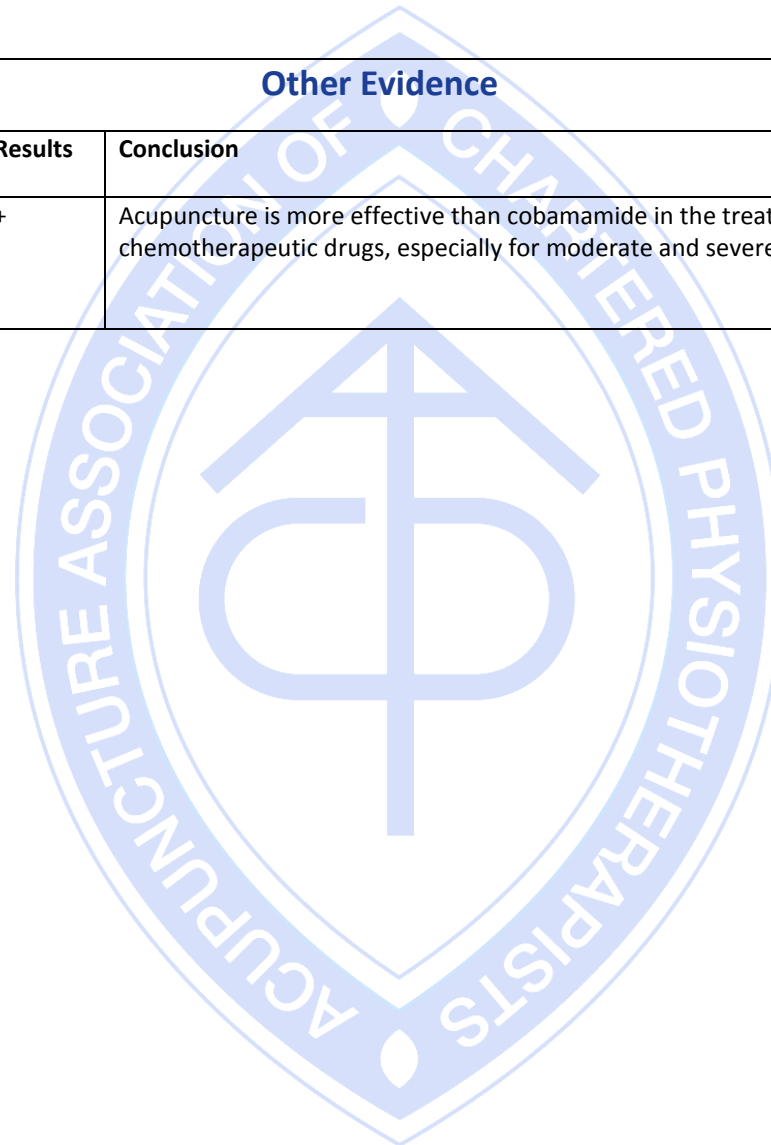
Recent evidence suggests that acupuncture can be used for the management of symptoms such as pain, nausea, vomiting and peripheral neuropathy caused by chemotherapy. Based on the evidence, AACP recommends the consideration of acupuncture for the symptom management of pain, nausea, vomiting and peripheral neuropathy in patients with cancer.

Cancer				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Lian <i>et al.</i> 2014	Palliative care in cancer patients	33 RCTs	+	The results of this systematic review of the effectiveness of acupuncture in palliative care for cancer patients are promising, especially with regard to reducing chemotherapy- or radiotherapy-induced side effects and cancer pain. Acupuncture may be an appropriate adjunctive treatment in palliative care.
Towler <i>et al.</i> 2013	Cancer	17 systematic reviews	+	Using current peer-reviewed guidelines and clinical reasoning, acupuncture should be considered for symptom management when there are limited treatment options. Much of the primary research reported in reviews is innovative and indicates potential benefits for people with cancer-related symptoms.
Garcia <i>et al.</i> 2013	Cancer	41 RCTs	+	Acupuncture is an appropriate adjunctive treatment for chemotherapy-induced nausea/vomiting. For other symptoms, its efficacy remains undetermined owing to the high risk of bias among studies.
Paley <i>et al.</i> 2011	Cancer pain	3 RCTs	?	There is insufficient evidence to judge whether acupuncture is effective in treating cancer pain in adults.
Ernst <i>et al.</i> 2010	Palliative and supportive cancer care	7 systematic reviews	+	These authors report limited results for pain, but positive ones for nausea and vomiting.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Xu <i>et al.</i> 2010	Chemotherapy-induced peripheral neuropathy	RCT	+	Acupuncture is more effective than cobamamide in the treatment of peripheral neuropathy induced by chemotherapeutic drugs, especially for moderate and severe sensory nerve disorders induced by paclitaxel.



Pain

Emergency Care

Summary:

Acupuncture treatment for pain and nausea may be beneficial within the emergency department setting. Further research is required to verify its uses; however, preliminary results show the potential effectiveness of acupuncture for the emergency treatment of acute pain and nausea.

Emergency Care				
Evidence				
Reference	Condition	Research type	Results	Conclusion
Zhang A. L. <i>et al.</i> 2014	Emergency care	Feasibility study	+	Acupuncture in the emergency department appears safe and acceptable for patients with pain and/or nausea. The results suggest that combined care may provide effective pain and nausea relief in emergency patients. Further high-quality, sufficiently powered randomised studies evaluating the cost-effectiveness and efficacy of the add-on effect of acupuncture are recommended.
Zhang <i>et al.</i> 2012	Emergency care	Observational study	+	Acupuncture can be an effective and safe adjunctive intervention for patients with acute pain in settings such as the emergency pain management environment.
Cohen <i>et al.</i> 2011	Emergency care	Study protocol for an RCT	+	The results of this study will determine whether acupuncture, either alone or as an adjunct to pharmacotherapy, provides effective, safe and acceptable pain relief for patients presenting to emergency departments with acute LBP, migraine or ankle sprain. The results will also identify the impact that acupuncture treatment may have upon health resource utilisation in the emergency department setting.

Neurology

Multiple Sclerosis

Summary:

The limited evidence available suggests that acupuncture is beneficial to patients with multiple sclerosis (MS). Symptoms may be alleviated, as can various subjective outcomes that are more in line with improvements in well-being and QoL. Based on this evidence, AACP recommends that acupuncture should be made available to patients with MS as part of their physiotherapy treatment. It is very safe and cost-effective when practised as part of a physiotherapy treatment plan.

Multiple Sclerosis				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Karpatkin <i>et al.</i> 2014	MS	12 peer-reviewed articles	+?	Although many of the papers suggested that acupuncture was successful in improving MS-related symptoms, poor study design makes it difficult to draw any conclusions about the true effectiveness of this intervention in the population with MS. However, there is evidence of extensive use of acupuncture in treating MS, and therefore, practitioners should not assume that it is not effective in this population, but rather, that the literature is insufficient to make claims either for or against its utility.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Grieve <i>et al.</i> 2013	MS	RCT pilot study	+	This study demonstrates that acupuncture treatment for pain in patients with MS has clear benefits. Furthermore, the sustained benefit of acupuncture as a treatment for pain was further confirmed by the fact that most patients managed to reduce their analgesia requirements, with some being able to stop taking painkillers completely. There was some subjective improvement in mood, mobility and energy levels, and more than half of the subjects felt that their sleep patterns improved. Despite a transient increase in pain in some, the overall perceived benefit was favourable, with most patients persisting with treatment.

Neurology

Parkinson's Disease

Summary:

The available evidence suggests there are therapeutic benefits when acupuncture is used to treat patients with Parkinson's disease (PD). The evidence base needs to be developed before solid conclusions can be made, but acupuncture is a very safe and cost-effective treatment when administered by an AACP-registered physiotherapist. Because of this, the AACP recommends that acupuncture should be considered as an adjunctive treatment to usual care as part of the rehabilitation/management process.

Parkinson's Disease				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Lee <i>et al.</i> 2008	PD	11 RCTs	+	Six RCTs compared improvements in the symptoms of PD following treatment with acupuncture and conventional drugs to drugs alone. A meta-analysis of two of these studies suggested that acupuncture had a positive effect. Two further RCTs tested acupuncture versus no treatment. The meta-analysis of these studies also suggested that acupuncture had beneficial effects. However, no conclusions could be drawn because of the poor methodological quality of the studies.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Joh <i>et al.</i> 2010	Animal experiment	Review	+	Animal experiments involving acupuncture treatments have generated valuable mechanistic insights into PD. These have also shown that acupuncture is, in fact, a neuroprotective therapy that increases various neuroprotective agents, such as brain-derived neurotrophic factor, glial-cell-line-derived neurotrophic factor and cyclophilin A. In addition, acupuncture therapy decreases cell death processes and attenuates oxidative stress to substantia nigra dopaminergic neurons. These results suggest that the early application of acupuncture therapy for patients with PD may be helpful, and result in the best efficacy of acupuncture treatment.
Shulman <i>et al.</i> 2002	PD	Pilot	+	On a patient questionnaire, 85% of respondents reported subjective improvements in individual symptoms, including tremor, walking, handwriting, slowness, pain, sleep, depression and anxiety. There were no adverse effects. Acupuncture therapy is safe and well tolerated in patients with PD. A broad battery of tests suggested that acupuncture resulted in improvements in sleep and rest in patients with PD.
Zhuang <i>et al.</i> 2000	PD	Report	+	Acupuncture possesses definite therapeutic effectiveness for PD, which is mainly represented by improvements in the clinical symptoms and signs, delays in the progression of the disease, decreases in the dosages of anti-parkinsonian drugs, and expectant treatment of the complications and symptoms induced by drug side effects.

Neurology

Stroke

Summary:

Acupuncture has been shown to be effective in post-stroke rehabilitation, and it may be beneficial in the rehabilitation of patients with dysphagia caused by stroke. In addition to this, there is evidence supporting the use of acupuncture to manage post-stroke spasticity and depression. Based on the evidence, AACP recommends the use of acupuncture as part of a physiotherapy rehabilitation plan in patients who have suffered from strokes.

Stroke				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Zhang J. H. <i>et al.</i> 2014	Stroke	24 systematic reviews	+	The available evidence suggests that acupuncture may be effective for treating post-stroke neurological impairment and dysfunctions such as dysphagia.
Lee S.-J. <i>et al.</i> 2013	Stroke	21 RCTs	+?	The review showed the positive but limited effectiveness of acupuncture as an adjunctive treatment to conventional care.
Zhou <i>et al.</i> 2013	Stroke	13 RCTs	+	This meta-analysis of the results of 13 RCTs demonstrates that scalp acupuncture has definite efficacy in the treatment of ischaemic stroke.
Long <i>et al.</i> 2012	Dysphagia following stroke	72 RCTs	+?	Acupuncture might be beneficial in the rehabilitation of patients with dysphagia caused by stroke, and the evidence justifies future high-quality studies.
Wu <i>et al.</i> 2010	Stroke	35 RCTs	+	Randomised clinical trials demonstrate that acupuncture may be effective in the treatment of post-stroke rehabilitation.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Youn <i>et al.</i> 2013	Post-stroke depression	Pilot study	+	The findings of this study show that the post-stroke depression can be ameliorated by acupuncture treatment, and that the improvement in post-stroke depression in stroke patients with a good motor grade is greater than that of those with a poor one.
Zhao <i>et al.</i> 2009	Post-stroke spasticity	Study	+	Acupuncture was effective in reducing spastically increased muscle tone and motor neuron excitability in spastic hemiplegia, and could improve the spastic states of stroke patients, thus providing a safe and economical method for treating these patients.
Wu <i>et al.</i> 2008	Post-stroke anxiety	Clinical observation	+	The researchers concluded that acupuncture is a safe, effective and important method for treating post-stroke anxiety neurosis.
Mukherjee <i>et al.</i> 2007	Post-stroke spasticity	Crossover study	+	A combination of acupuncture and muscle strengthening exercise for 6 weeks significantly reduced spasticity. The effect of spasticity reduction was consistent across different joint positions and different velocities of passive stretch.

NHS Evidence Summary

Reference	Condition	Research type	Results	Centre for Reviews and Dissemination Summary
Wong <i>et al.</i> 2012 (NHS Economic Database)	Dysphagia following stroke	Systematic review	+	<p>This review found that use of acupuncture together with conventional stroke rehabilitation appeared to have a beneficial effect on dysphagia, but that concerns over the methodological quality of the trials included meant that no definitive conclusion could be drawn. The results of this review cannot be considered to be reliable, so this cautious conclusion is appropriate.</p> <p>The authors suggest that acupuncture may be used in this area, given its relative safety. Please see http://www.crd.york.ac.uk/crdweb/ShowRecord.asp?ID=12012026827#.VAA52nkg-Uk for full information.</p>

Neurology

Cerebral Palsy in Children

Summary:

The evidence supports the use of acupuncture in children with cerebral palsy alongside conventional rehabilitation. Physiotherapists already provide rehabilitation to children with cerebral palsy, and therefore, it is likely that the addition of acupuncture to an already-present rehabilitation session is cost-effective. Based on the evidence, and the probable cost-effectiveness of acupuncture as an adjunctive treatment to rehabilitation, AACP recommends the use of acupuncture for cerebral palsy in children.

Cerebral Palsy in Children				
Evidence				
Reference	Condition	Research type	Results	Conclusion
Liu <i>et al.</i> 2013	Cerebral palsy in children	RCT	+	Acupuncture could accelerate both motor and cognitive development in children with cerebral palsy. The forward curative effect of acupuncture combined with rehabilitation training was significantly better than rehabilitation training alone.
Hao <i>et al.</i> 2012	Cerebral palsy in children	Case report	+	This case report demonstrates that acupuncture can satisfactorily treat a child with cerebral palsy. There is a growing amount of clinical evidence that acupuncture can improve or remove symptoms in patients with cerebral palsy.
Wang <i>et al.</i> 2011	Cerebral palsy in children	RCT	+	Acupuncture combined with modern rehabilitation training is effective in the treatment children with cerebral palsy. The effective rate of the acupuncture group was significantly superior to that of the controls ($P < 0.05$). Scores on the Modified Ashworth Scale and Gross Motor Function Measure 88 were significantly lower for the control group than the acupuncture group after the treatment ($P < 0.05$).
Duncan <i>et al.</i> 2004	Cerebral palsy in children	RCT	+	Acupuncture improved leg and hand use, led to more restful sleep, improved mood, resulted in more-regular bowel movements and decreased muscle stiffness more than either osteopathic treatment or no therapy based on parental perceptions of the outcomes of treatment.
Sun <i>et al.</i> 2004	Cerebral palsy in children	RCT	+	The results indicated a significant increase in motor functioning and sizeable improvements on the mean self-care, mean mobility and mean self-care assistance subscales over the course of true acupuncture treatment.

Respiratory

Chronic Obstructive Pulmonary Disease and Asthma

Summary:

The evidence suggests that acupuncture treatment can improve shortness of breath on exertion in patients with chronic obstructive pulmonary disease (COPD). Findings also suggest that there are potentially positive effects on asthma in terms of reducing the need for medication as well as cost-effectiveness. Based on the evidence, AACP recommends the consideration of acupuncture as adjunctive treatment for patients with COPD and, potentially, asthma. This is because of its exceptional safety, minimal cost if administered by a physiotherapist as part of a treatment plan, and limited but positive evidence.

COPD and Asthma				
Evidence				
Reference	Condition	Research type	Results	Conclusion
Reinhold <i>et al.</i> 2014	Asthma	RCT	+	Although treating patients who have allergic bronchial asthma with acupuncture in addition to routine care resulted in additional costs, there were better effects in terms of the patients' QoL. Therefore, acupuncture seems to be a useful and cost-effective add-on treatment.
Karlson <i>et al.</i> 2013	Asthma in children	RCT	+	Although the effect was not sustained beyond the treatment period, this study demonstrated that acupuncture had an effect on asthma in preschool children for the duration of the treatment course, as assessed by subjective parameters and the use of medication.
Suzuki <i>et al.</i> 2012	COPD	RCT	+	This study clearly demonstrates that acupuncture is a useful adjunctive therapy for reducing dyspnoea on exertion (DOE) in patients with COPD. Participants who received real acupuncture also exhibited improvements in 6-minute walking distance test scores, indicating better exercise tolerance and reduced DOE.
Suzuki <i>et al.</i> 2005	COPD	Case study	+	This research design was used to detect the specific efficacy of acupuncture treatment. After 10 acupuncture treatments over 2 months, the subject's walking distance, Borg scale and respiratory function scores were improved compared with before treatment. These findings suggest that acupuncture treatment may be efficacious for advanced cases of COPD.

Cont...

Biernacki <i>et al.</i> 1998	Stable asthma	RCT	+	The authors concluded that, for some patients, acupuncture could improve QoL and reduce the need for bronchodilators, either by having a placebo effect or because the exact site of needle puncture on the chest is unimportant.
Jobst 1995	Pulmonary disease	Critical analysis	+	Current published evidence reveals no reason to withhold acupuncture as a safe and potentially effective treatment in patients with bronchial asthma and COPD.



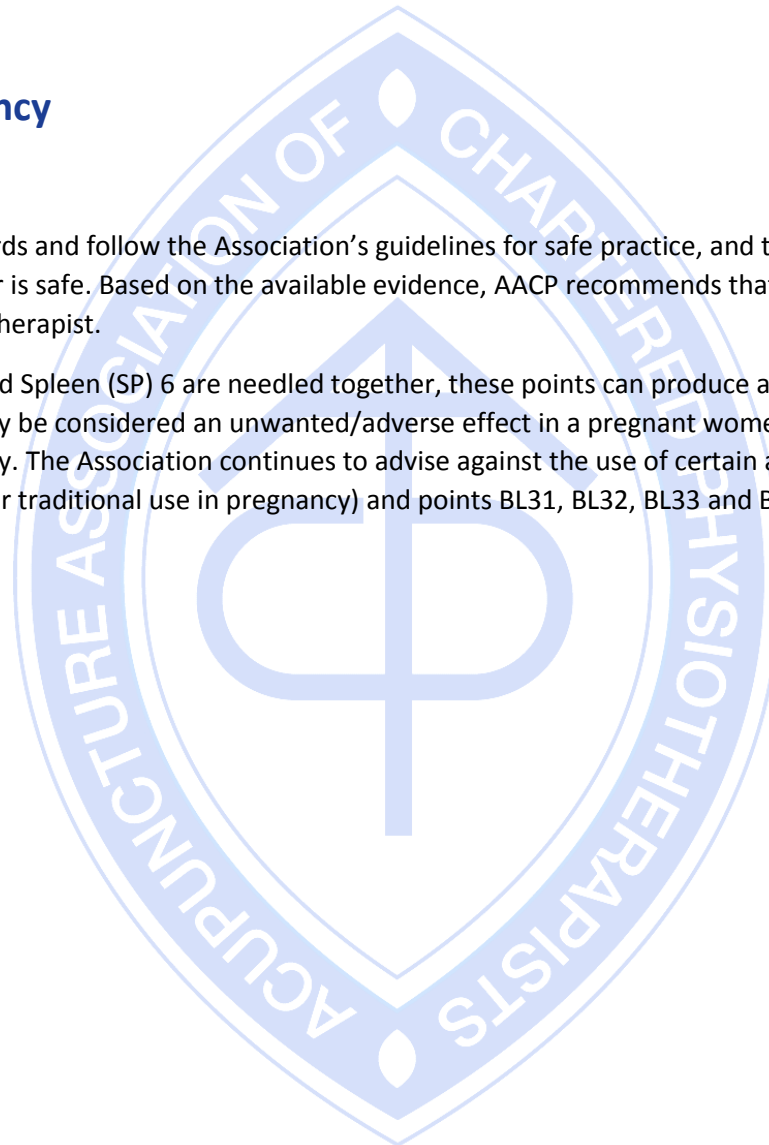
Women's Health

Acupuncture Safety in Pregnancy

Summary:

Members of AACP are taught to high standards and follow the Association's guidelines for safe practice, and therefore, acupuncture administered during pregnancy by an adequately trained member is safe. Based on the available evidence, AACP recommends that acupuncture in pregnancy is safe when administered by an AACP-accredited physiotherapist.

The evidence does suggest that, when LI4 and Spleen (SP) 6 are needled together, these points can produce a cervical ripening effect. This may be beneficial in some circumstances, but it would generally be considered an unwanted/adverse effect in a pregnant women with pelvic girdle pain (PGP) since it may reduce the length of time until actual delivery. The Association continues to advise against the use of certain acupuncture points, i.e. LI4, SP6 (due to the literature), Bladder (BL) 60, BL67 (due to their traditional use in pregnancy) and points BL31, BL32, BL33 and BL3 (due to their proximity to the sacrum).



Acupuncture Safety in Pregnancy

Systematic Reviews

Reference	Condition	Number of studies included	Results	Conclusion
Park <i>et al.</i> 2014	Safety of acupuncture during pregnancy	105 studies	+	This recent literature review failed to find any plausible explanation for the forbidden points repeatedly mentioned in various books or the differences in the points identified in these texts. In this context, the authors found that the adverse events associated with acupuncture during pregnancy are generally mild, and serious adverse effects are rare.

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Elden <i>et al.</i> 2008	Safety of acupuncture in pelvic girdle pain	RCT	+	This study shows that acupuncture administered with what may be considered strong stimulation led to complaints of minor adverse effects from mothers-to-be, but had no observable severe adverse influences on the pregnancy, mother, delivery or the foetus/neonate.
Lund <i>et al.</i> 2006	Pelvic pain	RCT	+	Acupuncture relieves pregnant women's pelvic pain intensity and emotional variables, and could be regarded as a clinically relevant treatment strategy. The unique variations call for individually based interventions in order to achieve optimal results. Large Intestine 4, SP6 and sacral points were used with no reported adverse events.
Rabl <i>et al.</i> 2001	Cervical ripening	RCT	?	Acupuncture at the Hegu (LI4) and Sanyinjiao (SP6) points can induce cervical ripening, shortening the time interval between the woman's expected date of delivery and the actual time.

Women's Health

Pain in Pregnancy - Pelvic Girdle Pain and Low Back Pain

Summary:

The evidence suggests that acupuncture can improve pain and function in pregnant women with PGP and LBP. Improvements in PGP and LBP are most significant when acupuncture is combined with usual care. Acupuncture appears to be safe for the mother and the foetus/ neonate during both pregnancy and delivery. The Association recommends the use of acupuncture in addition to normal care for pregnancy-related PGP and LBP.

Pain in Pregnancy - Pelvic Girdle Pain and Low Back Pain				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Pannick <i>et al.</i> 2007	LBP and GPG	8 RCTs	+	Acupuncture shows better results compared to physiotherapy alone. Adding pregnancy-specific exercises, physiotherapy or acupuncture to usual prenatal care appears to relieve back or pelvic pain more than usual prenatal care alone, although the effects are small. It is not known whether these actually prevent pain from starting in the first place. Water gymnastics appear to help women stay at work. One study had a moderate to high potential for bias, so the results must be viewed cautiously.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Constable 2012	Pelvic Girdle/ back pain	Report	+	There is some evidence to suggest that acupuncture may improve pain and function in women with back pain/PGP. However, because of the low number of studies, this is not conclusive. In most studies, there was significant difference between groups.

Cont...

Langshaw 2011	LBP and PGP	Literature Review	+	The authors concluded that there is limited evidence that acupuncture is safe and more effective than standard treatment alone in the treatment of PGP and LBP during pregnancy.
Elden <i>et al.</i> 2008	Safety in PGP	RCT	+	This study shows that acupuncture administered with what may be considered strong stimulation led to complaints of minor adverse effects from mothers-to-be, but had no observable severe adverse influences on the pregnancy, mother, delivery or the foetus/neonate.
Lund <i>et al.</i> 2006	Pelvic Pain	RCT	+	Acupuncture relieves pregnant women's pelvic pain intensity and emotional variables, and could be regarded as a clinically relevant treatment strategy. The unique variations call for individually based interventions in order to achieve optimal results. Large Intestine 4, SP6 and sacral points were used with no reported adverse events..
Elden <i>et at.</i> 2005	PGP	RCT	+	The authors conclude that acupuncture and stabilising exercises constitute effective complements to standard treatment for pregnant women with PGP. Acupuncture was found to be superior to stabilising exercises in this RCT. The findings are of particular importance because no previous study has shown such marked treatment effects among pregnant women with well-defined PGP.



Women's Health

Labour Pain

Summary:

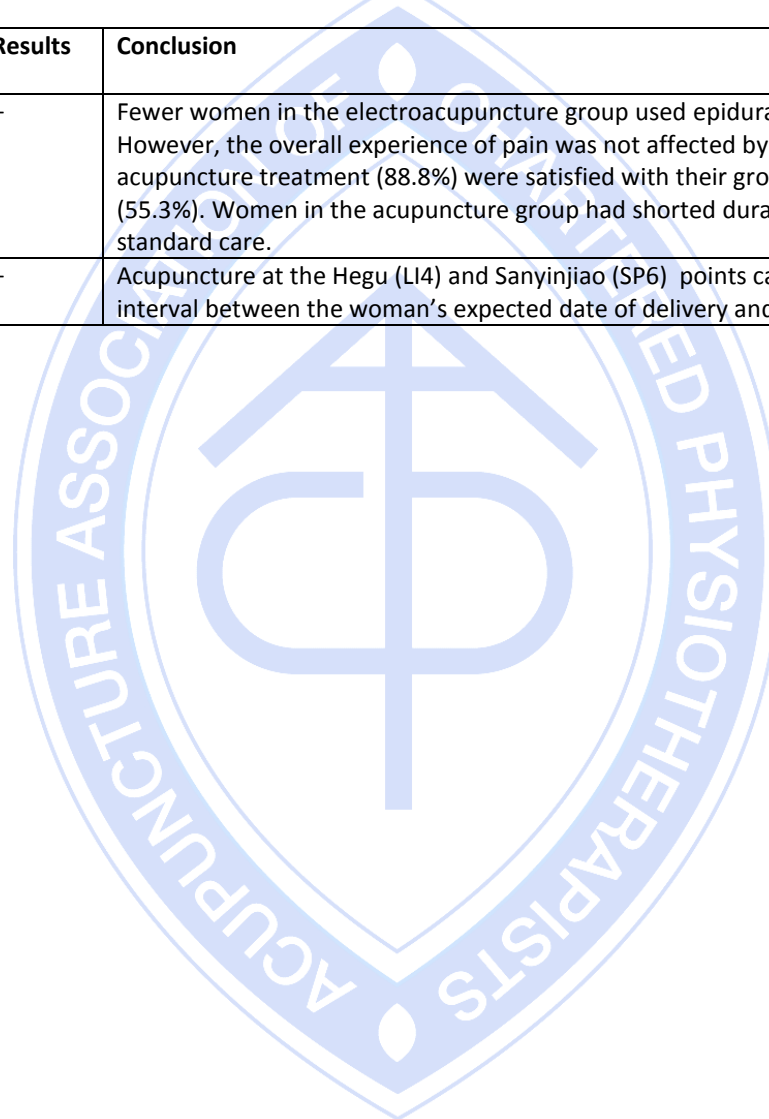
Based on systematic reviews, acupuncture appears to be effective for alleviating pain during labour and reducing the use of pharmacological analgesia while remaining safe. No acupuncture-related adverse effects have been reported. Acupuncture has also been shown to reduce the need of epidural analgesia during pregnancy, and may lead to a shorter duration of labour and less blood loss than standard care. The Association recommends the use of acupuncture as adjunctive pain relief during labour when practised by a well-trained physiotherapist working in this specialist area. There is also evidence that acupuncture can play a part in cervical ripening. The LI4 and SP6 acupuncture points should be avoided during pregnancy; however, these may play a part in inducing labour when necessary. The Association recommends that further high-quality research should be conducted on the role of acupuncture in induction of labour/ cervical ripening.

Labour Pain				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Smith <i>et al.</i> 2011	Labour	13 RCTs	+	Acupuncture led to less-intense pain compared with no intervention. Participants reported increased satisfaction with pain relief compared with placebo control. Reduced use of pharmacological analgesia was found after acupuncture compared with both placebo and standard care. Acupuncture led to fewer instrumental deliveries compared with standard care. It may have a role in reducing pain, increasing satisfaction with pain management and reducing the use of pharmacological management.
Cho <i>et al.</i> 2010	Labour	10 RCTs	+	In trials in which acupuncture was compared with conventional analgesia, women receiving it required less meperidine and other analgesic medications. No acupuncture-related adverse events were reported.
Lee <i>et al.</i> 2004	Labour	3 RCTs	+	Two RCTs compared adjunctive acupuncture with usual care only, and reported a reduction in meperidine and/or epidural analgesia. One placebo-acupuncture-controlled trial showed a statistically significant difference in both subjective and objective outcome measures of pain. No adverse events were reported in any of the trials. It was concluded that the evidence for acupuncture as an adjunct to conventional pain control during labour is promising.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Vixner <i>et al.</i> (2014)	Labour	RCT	+	Fewer women in the electroacupuncture group used epidural analgesia than in the normal care group. However, the overall experience of pain was not affected by acupuncture. More women who received the acupuncture treatment (88.8%) were satisfied with their group allocation than those in standard care (55.3%). Women in the acupuncture group had shorter duration of labour and less blood loss than those in standard care.
Rabl <i>et al.</i> 2001	Cervical ripening	RCT	+	Acupuncture at the Hegu (LI4) and Sanyinjiao (SP6) points can induce cervical ripening, shortening the time interval between the woman's expected date of delivery and the actual time.



Women's Health

Premenstrual Syndrome

Summary:

The current evidence shows that acupuncture can be beneficial in the treatment of premenstrual syndrome/premenstrual dysphoric disorder. It is suggested that acupuncture can reduce symptoms by 50% with no serious side effects. Feelings of anxiety and depression have also shown significant improvements following acupuncture compared to sham acupuncture. Based on the evidence, AACP recommends the use of acupuncture for premenstrual syndrome/premenstrual dysphoric disorder when it is practised by a highly trained physiotherapist working in this specialist area.

Premenstrual Syndrome				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Jang <i>et al.</i> 2014	Premenstrual syndrome/premenstrual dysphoric disorder	19 RCTs	+	Acupuncture treatment for premenstrual syndrome and premenstrual dysphoric disorder showed a 50% or better reduction of symptoms compared to the initial state. No serious adverse events have been reported during or after acupuncture interventions, proving the safety of this form of treatment. Most of the interventions provided over 50% relief of symptoms associated with premenstrual syndrome/premenstrual dysphoric disorder.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Carvalho <i>et al.</i> 2013	Premenstrual dysphoric disorder	RCT	+	Following acupuncture intervention, symptoms of anxiety and depression were reduced in both the acupuncture and sham acupuncture groups. However, the improvement in the acupuncture group was significant compared to that of the sham acupuncture group. The results suggest that acupuncture could be another treatment option for patients with premenstrual dysphoric disorder.

Women's Health

Women's Reproductive Health

Summary:

There is emerging evidence that acupuncture can be beneficial for women's reproductive health, most specifically in the success of *in vitro* fertilisation (IVF) treatment. Acupuncture is safe within this population according to the evidence, and it has the potential to benefit the patient greatly. The Association recommends the consideration of acupuncture treatment alongside conventional treatment within the field of women's reproductive health. It also recommends that treatment of this type should be carried out by physiotherapists with specialist training in this area.

Women's Reproductive Health				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Zheng <i>et al.</i> 2012	IVF success	24 RCTs	+	The live birth rate results tended to be significant when the acupuncture was performed around the time of oocyte aspiration or controlled ovarian hyperstimulation.
Manheimer <i>et al.</i> 2008	IVF success	7 RCTs	+	Current preliminary evidence suggests that acupuncture given with embryo transfer improves rates of pregnancy and live birth among women undergoing IVF.
Cheong <i>et al.</i> 2008	IVF success	13 RCTs	+	Acupuncture improves the ongoing pregnancy rate and the clinical pregnancy rate. Repeated acupuncture did not affect the miscarriage rate.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Cochrane <i>et al.</i> 2014	Women's reproductive health	Narrative literature search	+	There is preliminary data indicating that acupuncture may improve menstrual health and coping for women experiencing delays falling pregnant. There are experimental data showing that acupuncture can influence female reproductive functioning, although the actual mechanisms involved are not yet clarified.

Mental Health

Depression

Summary:

Acupuncture has been shown to be safe and effective in treating major depressive disorder and post-stroke depression. Acupuncture has been shown to have positive effects on depression and anxiety. Many patients suffering from conditions treated by physiotherapists also experience depression. The Association recommends that acupuncture is used to help treat major depressive disorder and post-stroke depression by appropriately trained physiotherapists.

Depression				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Zhang <i>et al.</i> 2010	Depression	35 RCTs	+	Acupuncture was superior to antidepressants for improving both clinical responses to and the symptom severity of post-stroke depression, and participants in the acupuncture group also did better than waiting list controls. The incidence of adverse events in acupuncture interventions was significantly lower than in the group prescribed antidepressants. The efficacy of acupuncture as a monotherapy was comparable to antidepressants alone in improving clinical responses and alleviating the symptom severity of major depressive disorder. Acupuncture therapy is a safe and effective treatment for major depressive disorder and post-stroke depression, and could be considered an alternative treatment option for these conditions. The efficacy of acupuncture in other forms of depression remains to be determined.
Smith <i>et al.</i> 2010	Depression	30 RCTs	+?	Acupuncture may have an additional benefit when combined with medication compared with medication alone

Cont...

Samuels <i>et al.</i> 2008	Depression		+?	Acupuncture can have positive effects on depression and anxiety, although evidence is still lacking with regard to its true efficacy for these conditions. Scientific research has found that acupuncture increases a number of central nervous system hormones [adrenocorticotrophic hormone (ACTH), β -endorphins, serotonin and noradrenaline], and urinary levels of 3-methoxy-4-hydroxyphenylglycol (MHPG) sulphate, an adrenergic metabolite inversely related to the severity of illness in schizophrenics.
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Other Evidence

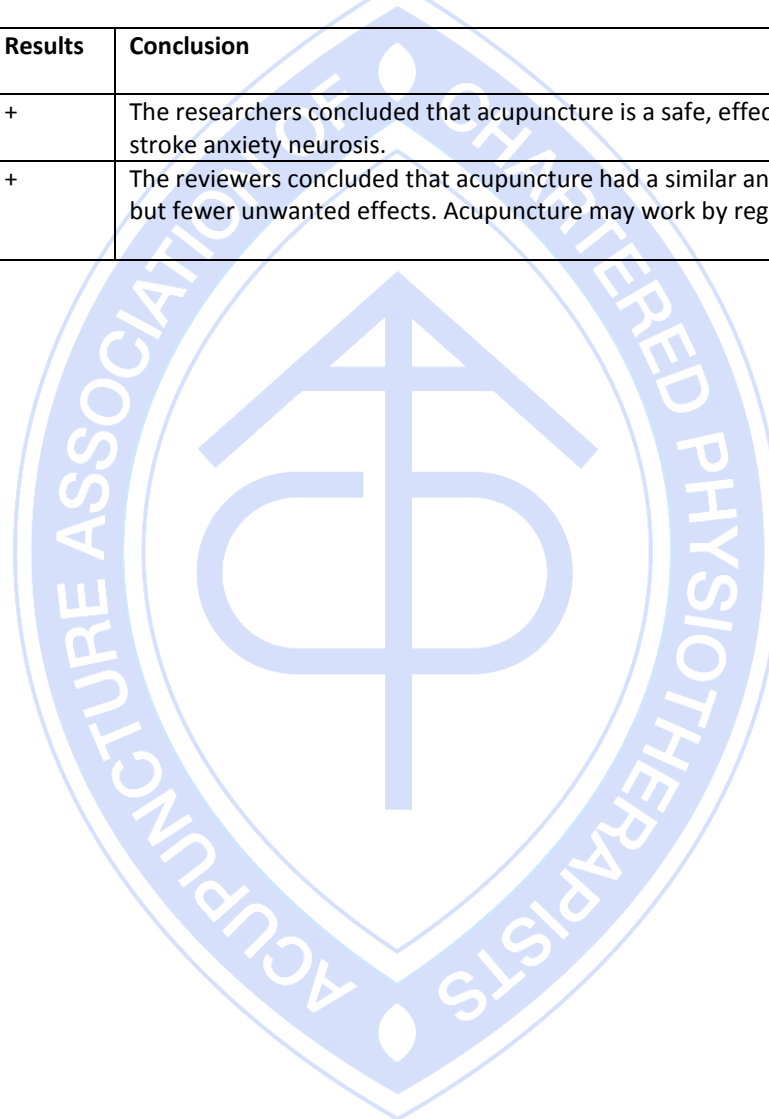
Reference	Condition	Research type	Results	Conclusion
MacPherson <i>et al.</i> 2013	Depression	RCT	+	In this RCT of acupuncture and counselling for patients presenting with depression after having consulted with their general practitioner in primary care, both interventions were associated with significantly reduced depression at 3 months when compared to usual care alone.
Youn <i>et al.</i> 2013	Post-stroke depression	Pilot study	+	In summary, the findings of the present study show that post-stroke depression can be ameliorated by acupuncture treatment and that this improvement is greater in stroke patients with good motor grade than in those with poor motor grade.

NHS Evidence Summary

Reference	Condition	Research type	Results	Centre for Reviews and Dissemination Summary
Zhang <i>et al.</i> 2010 (DARE)	Depression	Systematic review	+	The authors state that acupuncture may be considered as an alternative therapy for patients with major depressive disorder and post-stroke depression, but its use in combination with antidepressants is controversial. This review concludes that acupuncture therapy appears to be a safe and effective treatment for major depressive disorders and post-stroke depression, but evidence for its use for other depressive disorders is lacking. The authors' findings do not reflect the evidence presented, and limitations in study numbers, sample sizes and study pooling, particularly in some subgroup analyses, suggest that the conclusions are not reliable. Please see http://www.crd.york.ac.uk/CRDWeb/ShowRecord.asp?ID=12009108787#.VAmvC3kg-Uk for full information.

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Wu <i>et al.</i> 2008	Post-stroke anxiety	Clinical observation	+	The researchers concluded that acupuncture is a safe, effective and important method of treating post-stroke anxiety neurosis.
Yuan <i>et al.</i> 2007	Generalized anxiety disorder	RCT	+	The reviewers concluded that acupuncture had a similar anti-anxiety effect to routine Western medicine, but fewer unwanted effects. Acupuncture may work by regulating levels of serotonin and ACTH.



Mental Health

Post-Traumatic Stress Disorder

Summary:

The evidence supporting acupuncture for post-traumatic stress disorder (PTSD) is promising. It suggests that acupuncture offers greater benefits than cognitive behavioural therapy (CBT) care. Based on the evidence, AACP supports the use of acupuncture to alleviate the symptoms of PTSD.

PTSD				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Wahbah <i>et al.</i> 2014	PTSD	33 RCTs	+	There is good scientific evidence that acupuncture is beneficial for PTSD. Current findings supports the use of acupuncture to alleviate the symptoms of this condition.
Kim Y. D. <i>et al.</i> 2013	PTSD	4 RCTs, 2 uncontrolled trials.	+	One RCT reported that acupuncture and CBT had a favourable effect in comparison to CBT alone. A meta-analysis of acupuncture plus moxibustion versus selective serotonin reuptake inhibitors favoured acupuncture plus moxibustion in three outcomes. This systematic review and meta-analysis suggests that the evidence for the effectiveness of acupuncture for PTSD is encouraging.
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
Hollifield <i>et al.</i> 2007	PTSD	RCT pilot study	+	Acupuncture was found to provide large treatment effects for PTSD that were similar in magnitude to CBT, and reductions in symptoms were maintained at 3-month follow-up for both interventions.

Mental Health

Schizophrenia

Summary:

The evidence for acupuncture use in patients with schizophrenia is promising. All AACP-accredited physiotherapists may consider using acupuncture in this patient group if they are already treating them (e.g. for mobility issues in a mental health ward). However, further continuing professional development may be needed in order to develop competence.

Schizophrenia				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Lee <i>et al.</i> 2009	Schizophrenia	13 RCTs	+?	Seven of the RCTs reported that acupuncture plus antipsychotic drug therapy had significant effects on response rate compared with antipsychotic drug therapy alone. Four RCTs showed that acupuncture had significant effects on response rate compared with antipsychotic drugs. The methodological quality was generally poor, so recommendations could not be made.
Samuels <i>et al.</i> 2008	Schizophrenia		+	Acupuncture can have positive effects on depression and anxiety, although evidence is still lacking with regard to its true efficacy for these conditions. Scientific research has found that acupuncture increases a number of central nervous system hormones (ACTH, beta-endorphins, serotonin, and noradrenaline) and urinary levels of MHPG-sulfate, an adrenergic metabolite inversely related to the severity of illness in schizophrenics.
Rathbone <i>et al.</i> 2005	Schizophrenia	5 RCTs	+	Short-term data significantly favoured the combined acupuncture and antipsychotic group. Treatment-emergent adverse event scores were significantly lower in the acupuncture/antipsychotic group. Extrapyramidal adverse events were significantly lower in the acupuncture group. Despite these results, recommendations were not made because of the quality of the studies.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Bosch <i>et al.</i> 2013	Schizophrenia	Pilot study	+	The acupuncture groups showed significantly lower scores on the sleep inventory, which was not the case for the non-acupuncture group. Moreover, it was found that the effectiveness of the acupuncture treatment was higher in the patients with schizophrenia than in the those with depression. Acupuncture seemed to improve sleep in this sample of patients with long-lasting psychiatric problems, and it may be a suitable and cost-effective add-on treatment for this group, particularly if conducted in group sessions.
Ronan <i>et al.</i> 2011	Schizophrenia	Case study	+	The study indicates that patients diagnosed with schizophrenia would benefit from acupuncture alongside conventional treatment.
Ronan <i>et al.</i> 2010	Schizophrenia	Pilot study	+	There are positive indications for improvements in QoL, the symptoms of schizophrenia and the side effects of antipsychotic medication (although not those measured by the Schizophrenia Quality of Life Scale). Of particular note are motivational and physical health improvements, especially with regard to tiredness, sleep and energy. What was surprising was the sudden increase in interest in being involved with normal activities of life, especially relationships.

Well-being

Insomnia

Summary:

The current evidence shows that acupuncture may improve sleep quality in patients with insomnia. Many people with painful conditions also suffer from sleep problems. The Association recommends that, following adequate training, AACP-accredited physiotherapists consider the use of acupuncture for insomnia so as to improve the health and well-being of the patient.

Insomnia				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Cheuk <i>et al.</i> 2012	Insomnia	33 RCTs	+	Compared with no treatment, acupressure resulted in more people experiencing improvements in sleep quality. Acupuncture as an adjunct to other treatments might marginally increase the proportion of people with improved sleep quality.
Ernst <i>et al.</i> 2011	Insomnia	10 Systematic Reviews	+	Several reviews draw strongly positive conclusions.
Cao <i>et al.</i> 2009	Insomnia	46 RCTs	+	Acupuncture was superior to medication in terms of total sleep duration. Acupuncture plus medication showed a better effect on total sleep duration than medication alone. It appears to be effective in the treatment of insomnia.
Cheuk <i>et al.</i> 2009	Insomnia	7 RCTs	+	Based on the findings of individual trials, this review suggests that acupuncture and acupressure may help to improve sleep quality scores when compared to placebo. Acupuncture also resulted in better sleep quality in one trial.
Kalavapalli <i>et al.</i> 2007	Insomnia		+	Despite the limitations of the studies reviewed, all of these consistently indicate that acupuncture leads to a significant improvement in insomnia.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Guo <i>et al.</i> 2013	Insomnia	RCT	+	Acupuncture appears to be more effective for increasing sleep quality and daytime functioning than sham acupuncture and estazolam.



Well-being

Obesity

Summary:

Acupuncture has been shown to be effective in reducing body weight by potentially depressing appetite. One large systematic review showed that acupuncture is as effective as Western anti-obesity drugs and has fewer side effects, while another study demonstrated that it leads to more improved outcomes than medication. Obesity plays a part in conditions such as knee OA, and current best-practice advice includes weight loss. The Association recommends acupuncture treatment for obese patients whose excess weight is contributing to the problem for which they have been referred to the physiotherapist.

Obesity				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Sui <i>et al.</i> 2012	Obesity	96 RCTs (44 acupuncture)	+	Acupuncture was more effective than placebo or lifestyle modification in reducing body weight. It had a similar efficacy to Western anti-obesity drugs, but fewer adverse effects were reported.
Cho <i>et al.</i> 2009	Obesity	31 RCTs	+	Acupuncture significantly reduced average body weight compared to lifestyle controls, and combined with diet, significantly improved weight loss compared to diet alone. Compared to placebo or sham treatments, acupuncture significantly reduced average body weight. Acupuncture showed more improved outcomes for body weight and weight loss than conventional medication. Compared to other treatments, acupuncture was significantly beneficial compared to herbal tea, herbal supplements and transcutaneous electrical nerve stimulation.

Cont...

Other Evidence

Reference	Condition	Research type	Results	Conclusion
Yeo <i>et al.</i> 2014	Obesity	RCT	+	For the 58 participants who provided data at 8 weeks, significant differences in body mass index (BMI), weight and body fat mass were found between the treatment and control groups. Treatment groups I and II showed 6.1% and 5.7% reductions in BMI, respectively ($P < 0.004$). This finding suggests that the five auricular acupuncture points that are generally used in Korean clinics and the Hunger point treatment alone are both effective for treating overweight people.
Cabýoglu <i>et al.</i> 2006	Obesity	Investigation of the results of studies	+	It has been observed that acupuncture application depresses the appetite by activating the satiety centre in the hypothalamus. This increases sympathetic activity by enhancing the concentration of serotonin in the central nervous systems of obese people. Acupuncture stimulates the auricular branch of the vagal nerve, which has been shown to increase tone in the smooth muscle of the stomach, thus suppressing appetite. It also controls stress and depression via endorphin and dopamine production. In addition to these effects, it is thought that the increases of plasma levels of β -endorphin naturally occurring after acupuncture application can contribute to body weight loss in obese people. This is accomplished by mobilising the body's energy depots using lipolitic effects. Through these mechanisms, acupuncture application can be seen as an effective therapy in the treatment of obesity.

NHS Evidence Summary

Reference	Condition	Research type	Results	Centre for Reviews and Dissemination Summary
Cho <i>et al.</i> 2009 (NHS Economic Database)	Obesity	Systematic review	+	Acupuncture for obesity had some beneficial effects compared to placebo or lifestyle control. This review addressed a clear question supported by appropriate inclusion criteria. The search was very comprehensive and did not place restrictions on language. However, there appeared to be limited efforts to retrieve unpublished data. Suitable methods were used throughout the review process to minimise the risks of reviewer error and bias. Detailed evidence tables were reported. The quality of the trials included was very poor; the authors noted this and reported the likely overestimated efficacy. Results were pooled using meta-analysis. Heterogeneity was assessed using appropriate methods. Subgroup analyses were attempted, but as the authors reported, the number of trials was so small that any conclusions from these additional analyses were limited. In terms of methodology, this review was carried out robustly. The authors' conclusions are appropriately cautious given the poor quality of the trials included, the small number of studies examined and limited evidence available. Please see http://www.crd.york.ac.uk/CRDWeb/ShowRecord.asp?ID=12009103114#.VAWuInkg-Uk for full information.

Well-being

Irritable Bowel Syndrome

Summary:

Acupuncture has been shown to be effective in controlling the symptoms of irritable bowel syndrome (IBS). People suffering from IBS are not currently commonly referred to a physiotherapist. The evidence supports the use of acupuncture for IBS. All AACP members with adequate training may be able to provide the adjunctive acupuncture treatment that the evidence supports.

Irritable Bowel Syndrome				
Systematic Reviews				
Reference	Condition	Number of studies included	Results	Conclusion
Chao <i>et al.</i> 2014	IBS	6 RCTs	+	The symptoms of IBS are clinically and statistically significant controlled by acupuncture. The results suggest that acupuncture can improve the symptoms of IBS, including abdominal pain and distension, the sensation of incomplete defecation, the times of defecation per day, and the state of the stool. The pooled relative risk for clinical improvement with acupuncture was 1.75, showing the significant effectiveness of acupuncture in the treatment of IBS.
Manheimer <i>et al.</i> 2012	IBS	17 RCTs	+?	In Chinese trials, patients reported that they derived greater benefits from acupuncture than from two antispasmodic drugs (pinaverium bromide and trimebutine maleate), both of which have been shown to provide modest benefits in the treatment of IBS. Sham-controlled RCTs have found that acupuncture provides no benefits compared to a credible sham acupuncture control for IBS symptom severity or IBS-related QoL
Other Evidence				
Reference	Condition	Research type	Results	Conclusion
MacPherson <i>et al.</i> 2012	IBS	RCT	+	Acupuncture for IBS provided an additional benefit over usual care alone. The magnitude of the effect was sustained over the longer term. Acupuncture should be considered as a treatment option that can be offered in primary care alongside other evidenced-based treatments.
Stamuli <i>et al.</i> 2012	IBS	Economic evaluation	+	Acupuncture may be cost-effective as an adjunctive treatment for patients with more severe IBS (i.e. a Symptom Severity Score over 300).

Well-being

Intensive Care

Summary:

Evidence is emerging that supports the use of acupuncture in the intensive care environment. Ultimately, further research is needed in order to fully support its use; however, the preliminary evidence appears to be promising. The potential uses of acupuncture in the intensive care environment include adjunctive therapy in sedation and analgesics, and the prevention and treatment of malnutrition by improving gastric emptying.

Intensive Care				
Evidence				
Reference	Condition	Research type	Results	Conclusion
Yeh <i>et al.</i> 2012	Intensive care	Preliminary investigation	+	This preliminary study demonstrates that acupuncture therapy in the intensive care unit is a feasible treatment modality. Further clinical trials are warranted to determine the efficacy of acupuncture therapy as an adjunct to sedative and analgesics in critically ill patients.
Pfab <i>et al.</i> 2011	Intensive care	RCT	+	The authors demonstrated that this protocol was more effective than standard promotility medication in the treatment of delayed gastric emptying in critically ill patients. Acupuncture stimulation at Neiguan (PC6) may be a convenient and inexpensive option (with few side effects) for the prevention and treatment of malnutrition in critically ill patients.
Nayak <i>et al.</i> 2008	Intensive care	Pilot study	+	This pilot study showed a significant reduction in the dose of propofol required for sedation in critically ill patients following surface electrostimulation of acupuncture points. There were no adverse effects. An RCT is warranted.

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