



# The Association of Traditional Chinese Medicine and Acupuncture UK

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## Press Release

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### **ACUPUNCTURE IS NOT A PSEUDOSCIENCE AND ITS SCIENTIFIC NATURE IS UNDENIABLE**

A RESPONSE TO WIKIPEDIA FROM ATCM

Acupuncture, as a fundamental part of traditional Chinese medicine, originated from China approximately 3000 years ago. Since then, acupuncture and Chinese herbal medicine have been used to treat many of conditions and tremendously helped improve the health and well-being of not only Chinese people, but also people worldwide.

Since a report by journalist James Reston in the New York Times, about his experience of acupuncture treatment in China in 1971, acupuncture has been increasingly popular and accepted by the public and health professionals in the Western countries, due to its effectiveness and minor side effects. Subsequently acupuncture research has been extensively conducted in the United States, many European countries and the rest of world and resulted in many positive findings and some negative outcomes.

Recently, an article titled "Acupuncture" appeared on Wikipedia's website (<https://en.wikipedia.org/wiki/Acupuncture#Origins>). It states that "... acupuncture is a pseudoscience". We strongly oppose such a claim.

On Wikipedia website, "pseudoscience" is defined as consisting of claims, beliefs, or practices presented as being plausible scientifically, but which are not justifiable by the scientific method. It is characterized by contradictory, exaggerated or unprovable claims; reliance on confirmation bias rather than rigorous attempts at refutation; lack of openness to evaluation by other experts; and absence of systematic practices when developing theories. We think that none of them applies to acupuncture.

Acupuncture is a therapy through physical stimulation by inserting a sharp, thin needle into the specific point on the body, with mechanical, electrical, or other physical manipulations, which stimulate nerve receptors both directly and indirectly through mechanical coupling via the connective tissue surrounding the needle (1-2). In general, the acupuncture stimulation, through the local reflex and central nervous system, induces endocrine, autonomic, and systemic behavioural responses (2). During past 20 years acupuncture studies have been extensively conducted worldwide, with a mean annual growth rate of 10.7% (3). It could be said that no other alternative medicines have been through such strict and detailed and securitized studies. Even though, the action mechanisms of acupuncture's analgesic effect have been elucidated and the findings have been published on some top scientific journals (4-6).

There is a debate whether acupuncture clinical studies should be subjected to the standard drug therapy clinical trial, because acupuncture is not a medication. We know that efficacy of drug/medication can be assessed under ideal conditions of traditional randomized controlled, double-blinded, sham controlled trials. However, acupuncture is not a kind of medication therapy and is applied in routine circumstance. So the measurement of effectiveness such as comparative effectiveness research (CER), rather than efficacy used in standard drug therapy clinical trial, should be applied to acupuncture clinical studies. CER compares the benefits and harms of the best care options and produces evidence to support decision maker, which is a better option for public health (7). The real world evidence, more generalizable than the evidence produced by traditional randomized controlled trials, is better suited to inform real-world care decisions. With gradually understanding the nature of acupuncture, recently it was questioned whether it was necessary that sham control should be used in acupuncture clinical studies, because sham control actually complicated result evidence base in some circumstance (8).

Many studies showed that acupuncture alone or as an adjunct significantly improved various conditions with or without sham/placebo controls. For example, significant effectiveness of acupuncture on pain-related conditions (9), depression (10), infertility (11), irritable bowel syndrome (12), server chronic constipation (13) and osteoarthritis (14) were clearly demonstrated. Although many non-significant differences were found between real acupuncture group and sham/placebo groups, when standard drug clinical trial design was used. However, all studies evidently showed the scientific nature of acupuncture therapy.

Wikipedia has been generally recognized as an unbiased information provider. However, in this case, we are very disappointed that the information provided about acupuncture is biased and is misleading public about acupuncture. Its statement of acupuncture as pseudoscience is ignorant of nature of acupuncture. We strongly request the authors of article "Acupuncture" published on Wikipedia (<https://en.wikipedia.org/wiki/Acupuncture#Origins>) to make changes about this.

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