

# Acupuncture Reduces Heart Disease Risk

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Researchers conclude that acupuncture reduces the risk of coronary heart disease in patients diagnosed with fibromyalgia. A massive sample size of over 158,420 patients with fibromyalgia were included in the study. A total of 81,843 patients received acupuncture treatments and 76,582 patients never received acupuncture. A total of 12,522 patients developed coronary heart disease during the follow-up period. Only 4,389 patients receiving acupuncture developed coronary heart disease but 8,133 patients that did not receive acupuncture developed coronary heart disease. The researchers conclude that acupuncture “significantly decreased the risk of CHD [coronary heart disease] in patients with fibromyalgia with or without comorbidities.”



The researchers note that acupuncture decreased the risk of coronary heart disease equally for both men and women. The risk of coronary heart disease increased with the age of patients; however, acupuncture decreased risks across all age groups. In addition, acupuncture decreased the risk of coronary heart disease regardless of whether or not patients took steroid medications, NSAIDs (nonsteroidal anti-inflammatory drugs), or statins.

Patients receiving acupuncture averaged a total of 7.45 acupuncture sessions. A total of 85% of patients received manual acupuncture, 3.6% received electroacupuncture, and 10.7% received both manual acupuncture and electroacupuncture treatments. The duration of needle

retention time averaged between 20 – 30 minutes per acupuncture session. The elicitation of deqi was a basic requirement by the TCM (Traditional Chinese Medicine) doctors.

Most TCM doctors applying acupuncture in the study had a baccalaureate degree from a 7 – 8 year medical doctor program of study. A smaller number of TCM doctors had a post-baccalaureate TCM degree from a 5 year medical doctor program. Acupuncture point selection was individualized based upon differential diagnostics. The researchers note that this differs from the majority of research wherein there is a protocolized, fixed set of acupuncture points assigned to all patients.

The researchers note that prior independent investigations demonstrate that acupuncture is effective for the treatment of fibromyalgia. This study did not investigate clinical efficacy towards alleviation of fibromyalgia itself, but rather investigated whether or not acupuncture prevents coronary heart disease in patients diagnosed with fibromyalgia. The researchers conclude that “the incidence of CHD was significantly lower in the acupuncture cohort than in the no-acupuncture cohort.”

The researchers provided several prior investigative findings concerning the effects of acupuncture to provide insight into its possible mechanisms of therapeutic action for the prevention of coronary heart disease in fibromyalgia patients. Prior research demonstrates that acupuncture prevents cardiac injury for patients with acute myocardial infarction. They add, “Acupuncture also decreased myocardial infarct areas and preserved cardiac function through heat shock protein 20 (HSP20) and HSP27 in an animal study.” Both studies indicate that acupuncture is effective in protecting the heart from ischemia.

The researchers cite this interest in acupuncture’s ability to protect the heart from damage because pregabalin was the first FDA approved medication for the treatment of fibromyalgia. Pregabalin has been proven to reduce pain, improve sleep, and reduce fatigue in patients with fibromyalgia. The researchers note that “pregabalin has cardiac adverse effects because it may induce heart failure” and acupuncture attenuates “both ischemic injury of the heart and heart failure.” Based on these findings, the researchers recommend a study to determine if acupuncture ameliorates the adverse effects of pregabalin in an effort to reduce risks associated with drug therapy.

The researchers note that the prevention of coronary heart disease may be due to acupuncture's ability to improve sleep quality. The research team cited prior research demonstrating acupuncture's ability to alleviate insomnia. They add that insomnia is "highly associated with fibromyalgia and CHD."

Common fibromyalgia comorbidities (e.g., hypertension, diabetes, heart disease) are associated with elevated levels of systemic inflammation. The researchers note that the prevention of coronary heart disease may be due to acupuncture's ability to reduce inflammation. The researchers note, "Many previous studies of acupuncture were focused on the analgesic effect of acupuncture, but additional studies in recent years demonstrated that acupuncture attenuated inflammation. Acupuncture attenuated inflammation through the vagus nerve mediated by dopamine."

At the Healthcare Medicine Institute, we have reported the results of many prior studies demonstrating the effectiveness of acupuncture and herbal medicine for benefitting cardiac health. University of Minnesota researchers demonstrate that acupuncture is effective for the treatment of cardiac arrhythmias. The researchers note that acupuncture has an 87% – 100% success rate for converting patients to a "normal sinus rhythm after acupuncture."

Beijing University researchers produced similar findings. They concluded that "CA [conventional acupuncture] may be a useful and safe alternative or additive approach to AADs [anti-arrhythmia drugs] for cardiac arrhythmia, especially in VPB [ventricular premature beat] and Af [atrial fibrillation] patients, which mainly based on a pooled estimate and result from 1 study with higher methodological quality." Zhu et al. demonstrated that acupuncture prevents damage to the heart in laboratory studies. They conclude that acupuncture reduces the severity of "focal interrupted cardiomyocytes, myolysis, interstitial edema and increased extracellular space."

UCLA (University of California, Los Angeles) researchers conclude that acupuncture protects the heart. Electroacupuncture applied to acupuncture points PC6 and PC5 in anesthetized rabbits with coronary artery occlusion resulted in less ventricular arrhythmias. Electroacupuncture also decreased heart infarct size. Additionally, the UCLA researchers demonstrated that electroacupuncture stimulation

causes a decrease in left ventricle dysfunction. Furthermore, a decrease in harmful ST segment elevation was demonstrated.

According to the US Centers for Disease Control and Prevention, approximately 610,000 people die from heart disease in the USA annually. This accounts for 25% of all deaths. It is the leading cause of death for both men and women. Coronary heart disease is the most common form of heart disease and is responsible for 370,000 deaths annually in the USA. Given the results of research demonstrating that acupuncture exerts cardioprotective effects, further research is warranted based on the needs of the population and the existing clinical and laboratory evidence.

## References

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