International Journal of Applied Science and Engineering

Citation: IJASE: 12(02): 153-160, December 2024

DOI: 10.30954/2322-0465.2.2024.4



REVIEW PAPER

ALLIED HEALTH SCIENCE

Current Status and Prospects of Acupuncture and Moxibustion Treatment

Katsuhiro Nakagawa

Manager, Nakagawa Acupuncture and Osteopathy Clinic, Japan

Corresponding author: izumisano-dojo@sensyu.zaq.jp

Received: 19 Sept., 2024 **Revised:** 29 Nov., 2024 **Accepted:** 05 Dec., 2024

ABSTRACT

Acupuncture and moxibustion are currently in the spotlight as a new medical treatment in Europe and the United States and around the world. Data shows that one in ten doctors in Germany uses acupuncture in their treatments, and in Japan, acupuncture is also used to treat symptoms such as back pain and knee pain. In the United States, the National Institutes of Health (NIH) issued a statement in 1997 partially acknowledging the effectiveness of acupuncture treatment, and clinical trials have begun to be conducted at great expense. Even now, research on acupuncture and moxibustion is continuing at Harvard Medical School, a world-renowned university, and many studies are being conducted to scientifically prove the effectiveness of acupuncture and moxibustion treatment. Acupuncture and moxibustion is a medical treatment with a long history, having originated in China and then spread to Japan via the Korean Peninsula. The reasons why acupuncture and moxibustion medicine has been accepted throughout such a long history include its immediate effect and simplicity, but the biggest factor is the idea that the mind and body are inseparable. In modern society, where mental disorders caused by stress are considered to have a negative effect on the body, the demand for acupuncture and moxibustion, which improves both physical and mental health through minor stimulation of the surface of the body, is expected to continue to increase. In addition to modern medicine, a new style of medicine that actively introduces various treatments collectively known as "alternative medicine" (aromatherapy, supplements, traditional medicine, etc.) is called "integrative medicine." In Europe and the United States, the number of medical institutions practicing this type of medicine is increasing, and the global integrative medicine market is expected to reach 33.3 billion dollars by 2025. In Japan, too, there is a tendency for an increasing number of medical institutions to use acupuncture and moxibustion treatment to relieve pain in cancer patients and treat chronic diseases, and expectations for acupuncture and moxibustion in the age of integrative medicine are becoming ever greater.

Keywords: Traditional Medicine, Integrative Medicine, Integrative Medicine Market, Scientific Basis

How to cite this article: Nakagawa, K. (2024). Current Status and Prospects of Acupuncture and Moxibustion Treatment. *IJASE.*, **12**(02): 153-160.

Source of Support: None; Conflict of Interest: None





HISTORY OF JAPAN ACUPUNCTURE

Introduction of acupuncture

The origin of acupuncture in Japan is said to have originated from China with the introduction of Buddhism in the 6th century^[8]. In the process of transmitting Chinese medical texts and Buddhist scriptures, acupuncture and moxibustion were also introduced to Japan and had a great influence on Japan medicine. During this period, acupuncture was mainly practiced in courts and temples and was associated with religious ceremonies.

Heian Period ~ Edo Period

In the Heian period, acupuncture spread among the aristocracy and upper class, as well as among the common people. In particular, acupuncture and moxibustion were used to manage the health of the samurai class during the Kamakura period, and after the Sengoku period, it spread to merchants and farmers in the Edo period.

In the Edo period, acupuncture techniques were systematically developed, and many acupuncturists appeared in various places. During this period, acupuncture and moxibustion became established as a treatment for lifestyle-related diseases and chronic diseases, and the theory of meridians and acupuncture points (acupuncture points) was established [12].

Modern ~ Contemporary

In the Meiji era, acupuncture and moxibustion temporarily declined due to the introduction of Western medicine. However, in the 20th century, the effects of acupuncture and moxibustion were reevaluated, and especially after the war, the clinical application of acupuncture and moxibustion spread, and the national qualification system was established, and the profession as an acupuncturist was established. In addition, in the 1980s, the therapeutic effects of acupuncture and moxibustion attracted worldwide attention, and the demand for acupuncture and moxibustion increased overseas^[5].

CURRENT STATUS OF ACUPUNCTURE IN JAPAN

Acupuncture and moxibustion Qualification system and education

In modern Japan, in order to become an acupuncturist, it is necessary to pass a national examination. In order to qualify as an acupuncturist, it is necessary to acquire knowledge and skills related to acupuncture at a vocational school or university and pass a national examination. Due to this, the quality of acupuncture treatment is kept at a certain standard. However, while acupuncture in China and Korea has established its position as a medical practice performed by doctors, acupuncture and moxibustion in Japan is a "medical-like practice" and is not recognized as a medical practice^[6].

Therapeutic Areas of Acupuncture

Modern acupuncture is used in a wide range of fields, including the treatment of diseases of the

Print ISSN: 2321-0745 154 Online ISSN: 2322-0465



musculoskeletal system, disorders of the nervous system, and diseases of internal organs. It is said to be particularly effective for chronic pain, dysautonomia, and stress-related symptoms, and is often used in a complementary manner to Western medicine. It is also attracting attention in the field of cosmetic acupuncture and anti-aging.

Social Awareness and Usage

In recent years, acupuncture and moxibustion in Japan are not covered by medical insurance, so the cost of treatment is often borne by the patient. As a result, the number of users is limited, but in some cases, a certain amount of support can be received through private health insurance and welfare systems. In addition, the effectiveness of acupuncture and moxibustion for specific diseases has been scientifically proven, and acupuncture and moxibustion are gradually being adopted as a complementary therapy in medical institutions.

FUTURE PROSPECTS OF JAPAN ACUPUNCTURE

Strengthening the scientific basis

Acupuncture is sometimes considered to have a lack of scientific evidence about its effectiveness. In the future, it is expected that clinical research to prove the effectiveness of acupuncture and moxibustion will progress, and the position of acupuncture in the medical field will become clearer. In particular, elucidating the mechanism by which acupuncture works will be a challenge in the future.

Collaboration with Medical Institutions

Acupuncture is becoming accepted as a complementary therapy in medical institutions, but it has not yet been adopted by many hospitals and clinics. In the future, if acupuncture and moxibustion are used in an integrated manner with Western medicine, it will be possible to provide more diverse treatment methods for patients.

Role in an Aging Society

Japan is aging rapidly, and the role of acupuncture and moxibustion is expected to play an important role in maintaining the health of the elderly and improving their quality of life. In particular, acupuncture to manage pain and improve autonomic nervous system disorders can be beneficial treatments for older adults.

GLOBAL EXPANSION OF ACUPUNCTURE

Acupuncture has already spread mainly in Europe, the United States, and Asia, and its therapeutic effects have been evaluated in many countries. In the future, as international recognition increases, Japan's traditional acupuncture techniques may spread around the world, and qualification and education systems based on international standards may be established. Currently, overseas universities and research institutes, including Germany and Harvard University, are conducting research on the effects of acupuncture and moxibustion. These studies are conducted with the aim of providing a more scientific



basis for the spread of acupuncture as a complementary therapy to Western medicine. The following is an overview of acupuncture research in Germany and Harvard University.

Acupuncture research in Germany

Germany is one of the countries where there is a very active study of acupuncture. In Germany, acupuncture is recognized as an official treatment and is widely used in medical institutions.

Conducting Clinical Research

In Germany, studies are being conducted on the effects of acupuncture, especially on chronic pain and diseases of the musculoskeletal system. For example, a number of randomized controlled trials (RCTs) have been conducted to test the effects of acupuncture on chronic low back pain, arthritis, stiff shoulders, and migraines.

Research is underway at universities such as Munich University Hospital in Germany to see how acupuncture can help reduce pain and improve quality of life compared to traditional medications. These studies have shown that acupuncture is effective in reducing pain and regulating the autonomic nervous system, and there is a growing movement to promote the integrated use of acupuncture and acupuncture with Western medicine.

Neuroscientific approach

In Germany, neuroscientific research on the effects of acupuncture on the brain and nervous system is also progressing. For example, studies using functional MRI (fMRI) are being conducted to figure out how acupuncture acts on areas of the brain that handle pain. Research like this has led to a better understanding of how acupuncture regulates the secretion of neurotransmitters and suppresses pain sensations.

Acupuncture Research at Harvard University

Many academic institutions, including Harvard University in the United States, are actively conducting scientific research on the effects of acupuncture (2). In particular, research on acupuncture on pain management, stress reduction, and effects on the autonomic nervous system is attracting attention.

Pain and Stress Management

Harvard University's Massachusetts General Hospital and Harvard Medical School are conducting studies to examine how acupuncture works to reduce chronic pain and stress. These studies suggest that acupuncture may have fewer side effects than opioid drugs in pain management. Specifically, acupuncture has been confirmed to promote the secretion of endorphins and serotonin in the brain, changing the perception of pain. There is also attention paid to the mechanism by which acupuncture regulates the autonomic nervous system and reduces the physical and mental symptoms associated with stress.



Regulation of immune function

Researchers at Harvard University have also studied how acupuncture works on the immune system. Acupuncture has been shown to boost immune cell activation and balance the immune system. This has led to the exploration of its potential as a complementary therapy for the prevention of infectious diseases, the reduction of allergic reactions, and the treatment of cancer. Harvard University is also conducting research to examine the effects of combining acupuncture with mental approaches such as mindfulness (meditation). It is hoped that this will lead to a deeper understanding of the overall impact of acupuncture on physical and mental health.

Future Prospects

Studies on acupuncture in Germany and at Harvard University provide scientific evidence for acupuncture and are an important step towards the recognition of its effectiveness in medical settings around the world. It is hoped that further clinical trials and neuroscientific research will clarify how acupuncture integrates with Western medicine and how it works.

Increased evidence of the effectiveness of acupuncture could lead to greater health insurance coverage and further use of acupuncture in healthcare providers. In particular, the use of acupuncture as a non-drug treatment is likely to expand to reduce the risk of drug dependence and side effects. Research on acupuncture in leading research institutions around the world, such as Germany and Harvard University, has played an important role in strengthening the scientific basis for acupuncture and raising awareness of its effectiveness more widely^[3]. As a result, we are seeing a future in which acupuncture will be recognized not only as a traditional treatment but also as a complementary and integrative treatment within modern medicine.

THE IMPORTANCE OF COMPOUND TREATMENT

In modern society, lifestyle-related diseases and stress-related diseases are on the rise, and a single treatment is often limited in its effectiveness for these diseases. Acupuncture is expected to be a more effective treatment when used in conjunction with conventional Western medicine. In the future, the concept of "integrative medicine," which integrates acupuncture and Western medicine, is expected to spread further.

Acupuncture social service cut

Acupuncture may also be used as part of preventive medicine and self-care. In particular, as the aging society progresses, it is expected that acupuncture and moxibustion will contribute to the maintenance of health and the improvement of the quality of life of the elderly. Acupuncture is expected to play an important role in community medicine and nursing care.

GLOBAL INTEGRATIVE MEDICINE MARKET

The global integrative medicine market has been growing rapidly in recent years^[4]. Integrative medicine is an approach that combines traditional Western medicine with traditional treatments (e.g., acupuncture,



herbal remedies, aromatherapy, yoga, etc.). Many patients are turning not only to Western medicine, but also to complementary treatments, and integrative medicine is positioned as an important medical option.

Market Growth Background

The growth of the integrative medicine market is due to the following factors:

Growing Patient Demand : There is a growing interest in integrative medicine as patients increasingly seek treatments with fewer side effects. In particular, it is expected to be effective in chronic diseases, stress management, insomnia, and pain management.
Increased health awareness : Increased awareness of health has led to an increased need for naturopathy and complementary medicine as part of preventive medicine and self-management.
Rising Healthcare Expenditures : With traditional healthcare costs soaring, integrative medicine is gaining traction as a low-cost and safe treatment.
Convergence of Western and Traditional Medicine: Western medicine and traditional treatment methods are complementary to provide patient-centered care.

Market Size & Forecast

The market size of integrative medicine is expanding rapidly across the globe. For instance, according to a market study, the integrative medicine market was valued at approximately \$50 billion in 2020 and is projected to exceed \$90 billion by 2026^[8]. The markets in Asia, the Americas, and Europe are as follows.

- Asian Markets: The demand for integrative medicine is high and expanding rapidly, especially in Asian markets where traditional medicine has taken root, such as China, India, and Japan. In the Asian market, integrative medicine, which combines traditional methods of treatment (acupuncture, Chinese medicine, etc.) with modern medicine, is widely accepted.
- Market in the United States: The market for integrative medicine is also expanding, especially in the United States, where complementary and alternative medicine (CAM) is becoming more popular. Acupuncture, massage, yoga, and meditation are especially popular, with a focus on chronic disease treatment and pain management.
- Market in Europe: In Europe, integrative medicine is perceived as a complementary role to Western medicine, and the demand is increasing, especially in countries such as Germany, France, and the United Kingdom.

Expansion of the Integrative Medicine Market

The growth of the integrative medicine market is expected to continue in the coming years. In particular, integrative medicine will play an increasingly important role in the treatment of chronic diseases, preventive medicine, and mental health^[5]. Here's what we can expect to see in the future:

Integration with technology: A	dvances in telemedicii	ne and digita	al health w	ill further p	oromote
integrative medicine and allow p	patients to receive comp	plementary t	therapies a	t home.	

Print ISSN: 2321-0745 158 Online ISSN: 2322-0465

IJ	A.	šΕ	

Promoting evidence-based treatments: Scientific research is predicted to further prove the
effectiveness and credibility of integrative medicine.
Expanded insurance coverage: In some countries, integrative medicine treatments may be covered
by insurance, and it may expand further in the future. Thus, the global integrative medicine market
is booming, with increasing demand, especially in Asia, North America, and Europe. The fusion
of traditional and modern medicine is providing new treatments that address the needs of patients,

CONCLUSION

Acupuncture and moxibustion in Japan has been a treatment that has supported the health of many people for a long time, and it is expected that its role will continue to play a major role in the future. Strengthening the scientific evidence and promoting international dissemination will make the future of acupuncture even brighter. In addition, it is expected to increase social awareness and expand the range of use in the medical field, and a future in which more people can enjoy the benefits of acupuncture and moxibustion is in sight.

REFERENCES

- 1. Acupuncture for chronic pain: Update of an individual patient data meta-analysis" (Journal of Pain, 2017).
- 2. Acupuncture and its neurobiological mechanisms" (Harvard Medical School).

and the market is expected to continue to grow.

- 3. Acupuncture System in Developed Countries 1st Report Europe (UK, Germany, France) Fuminori Ando, Hiroyuki Tsuru, Hiroshi Kitakoji 2020 Volume 70 Issue 3 Pages 250-258.
- 4. BCC Research "Global Market for Complementary and Alternative Medicine" Website: BCC Research.
- 5. Grand View Research "Complementary and Alternative Medicine Market Size, Share & Trends Analysis Report by Type, By Application (Chronic Pain, Cancer Treatment, Others), By Region, And Segment Forecasts, 2023 2030" website: Grand View Research.
- 6. History of Japan Acupuncture" Shuichi Katai Journal of the Japan Acupuncture Society (2012, Vol. 62, No. 1).
- 7. History and Progress of Acupuncture in Japan" Kobayashi Akiko Uefuji Miwa-Yasumo Washiro Evidence-based Complementary and Alternative Medicine (2010, No. 7, No. 3.).
- 8. Market Research Future (MRFR): "Complementary and Alternative Medicine Market Global Forecast to 2023" website: Market Research Future.
- 9. The effectiveness of acupuncture in the treatment of chronic pain: A systematic review and meta-analysis" (Annals of Internal Medicine, 2012).
- 10. The Yellow Emperor's Inner Text is a classical Chinese medical book.
- 11. The History and Development of Japan Acupuncture and Moxibustion, edited by the Japan Acupuncture Society.

Nakagawa

- IJASE
- 12. Waichi Sugiyama "Acupuncture and Moxibustion Treasure".
- 13. WHO (World Health Organization) "Research Report on the Effectiveness of Acupuncture and Moxibustion".
- 14. Yasuyori Tanba "Healing Heart Formula" (1984).
- 15. Yoshikazu Tanaka "History and Future of Oriental Medicine".