An Analysis of the Development of Auricular Acupuncture in China in the Past 10 Years

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ABSTRACT

Objective: The aim of this research was to analyze recent developments of auricular acupuncture in China during the past 10 years, from 2007 to 2016.

Methods: The articles evaluated related to auricular acupuncture studies published in the last 10 years, from 2007 to 2016. The articles were retrieved from the China National Knowledge Infrastructure (CNKI) full-text journal database and from Tsinghua *Tongfang*, the Chinese Knowledge net. The history of auricular acupuncture, the overall status of the research, and the current use of standardization were analyzed and summarized.

Results: The literature research of auricular acupuncture in China revealed that there was a high frequency of publications over the last 10 years.

Conclusions: Development of more auricular acupuncture research teams, improvement of the level and quality of the research, and basic and clinical research investigations on auricular acupuncture in China have demonstrated continuous improvement in the past 10 years. It is hoped that this research will continue into the future, offering greater contributions to the development of auricular acupuncture for the health care of human beings.

Keywords: auricular points, auricular acupuncture, Chinese research overview

INTRODUCTION

SINCE THE END OF THE 1950s, theoretical research and clinical applications of auricular acupuncture have aroused much attention of a large number of scholars in China and abroad, and has stimulated enthusiasm greatly in acupuncture and moxibustion societies in China. On the basis of data-mining ancient documents, Chinese scholars have also included foreign research achievements, and carried out large-scale clinical research and explorations. In order to analyze the last 10 years of research progress in the field of Chinese auricular acupuncture diagnosis and treatment, the CKNI journal full-text database was consulted to retrieve published articles about research, from 2007 to 2016, on auricular applications. In addition, the main re-

search results in the last 10 years funded by different levels of research projects were summarized in order to provide a database for relevant scholars, both in China and abroad, to gain a better understanding of the development of auricular acupuncture in China.

The History of Auricular Acupuncture in China

Auricular acupuncture therapy is an important part of Traditional Chinese Medicine (TCM), which is ascribed to a kind of micro-needle system. It has been considered to be a valuable asset in the treasure house of Chinese medicine.

The application of auricular acupuncture for diagnosis and treatment of diseases in China has a long history. The auricular channel had already been recorded in the book

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The Yin–Yang Eleven Channel-Moxibustion.^{*} This work described the connection of the external ear to the upper limbs, eyes, cheek, and throat. The *Huangdi Neijing (The Yellow Emperor's Inner Classic)*,[†] a well-known text, provided more-detailed records of the relationship between the ear and channels or viscera, disease diagnosis through auricular inspection, and treatment of twitching by bleeding the back of ears. In the Tang Dynasty, the books entitled *Beiji Qianjin Yaofang (Prepared Thousands of Golden Formula for Emergency)* and *Qian Jin Yi Fang (A Supplement to Recipes Worth a Thousand Gold)*[‡] recorded the contents and locations of auricular points, and the *Yangwei Vessel* on the back of the ears.

In the Ming Dynasty, Yang Jizhou had recorded information on the content of the point of the apex of the ear in his book *Zhenjiu Dacheng (Compendium of Acupuncture and Moxibustion)*.[§] The book *Corrections of Massage*, written by Zhang Xiaoshan in the Ming Dynasty, consisted of 4 volumes. The book contained the chart of five Zang-organ locations on the backs of the ears in the third volume, which is the earliest auricular-point chart¹ in the world. Although the names and locations of the auricular points during that period were only scattered references, the valuable and rich experience accumulated in the framework and development process of auricular acupuncture formed gradually, which provided a solid foundation for the formation of the modern auricular diagnosis and treatment system.

The modern rise of auricular acupuncture for clinical diagnosis and treatment began during the late 1950s and early 1960s in China. In December 1958, Paul Nogier, MD, a French medical doctor, reported the regularity of the distribution of the auricular points,² and established the first chart of the inverted fetus for auricular-point location. Guided by modern medical theory, the enthusiasm of Chinese medical doctors inspired a further study of auricular acupuncture.³ However, because the mechanism and essence of auricular points had not been clarified clearly, naming and locating of the auricular points in China and abroad had not reached a consensus, which also seriously affected the spreading, communicating, and in-depth studying of auricular acupuncture.

^{*}This book, author unknown, is the monograph of channels written in the seventh to second century BC. This silk book was unearthed from the Han tomb in Mawangdui, Changsha, Hunan, China, in 1973.

[†]This book, author unknown, written around the spring and autumn and Warring States period, is one of the earliest classics of TCM in China. Many classical theories of TCM originate from this book.

[‡]These two books, both written by *Sun Simiao*, in the Tang Dynasty, are considered to be two of the classics of TCM and are known as the earliest “encyclopedia” of TCM.

[§]This book mainly discussed the theory of acupuncture and moxibustion, the procedural techniques, etc. This book is considered to be a summary of achievements in the field of acupuncture and moxibustion before the Ming Dynasty; thus, the book is an important reference work for the study of acupuncture and moxibustion.

In December 1982, in Beijing, China was authorized by the World Health Organization (WHO) West Pacific office to draft standardization of auricular points. In October 1992, the Chinese State Technical Supervision Bureau promulgated the nomenclature and location of the points in *National Standardization of Auricular Point of the People's Republic of China, GB/13734–1992* (also called “the national standard of the auricular point” for short).⁴ This is the second national standard after the national standard of the channel point in the TCM field, which not only formulated a common language for the clinical application, medical teaching, research and academic exchanges of auricular acupuncture in China, but also provided experience of auricular acupuncture for the WHO.

On April 23rd, 2008, the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and the Standardization Administration of the People's Republic of China, jointly issued the *National Standardization of Auricular Point of the People's Republic of China, GB/T13734-2008*,⁵ to replace the former one, *GB/T13734-1992*.⁴ The new standardization was implemented on July 1, 2008. The completion of this revised standardization was an important step toward international standardization of Chinese auricular points. On this basis, the Beijing University of Chinese Medicine completed research on the nomenclature and location of the auricular points in May 2008 and May 2009. This research was based on the new national standard auricular nomenclature and locations, which had promoted an international exchange and the development of international standardization of auricular points to achieve a better clinical effect.^{6–8}

On November 6, 2009, Zhou Liquan, MD, and Baixiao Zhao, MD, PhD, of the Beijing University of Chinese Medicine (this article's first author) applied for establishment of the international standardization issued by the World Federation of Acupuncture–Moxibustion Societies.⁹ On May 18–20, 2010—in Beijing, sponsored by the World Federation of Acupuncture and Moxibustion Societies, and held by the Chinese Acupuncture Society—a symposium on the international standardization and location of the auricular points was held and world experts agreed to discuss international standardization on the basis of China's standard, which accelerated this process.⁸ The standard has been recommended by the Ministry of Science and Technology of the People's Republic of China, the State Administration of TCM of the People's Republic of China, and the China Association of Acupuncture–Moxibustion as the national training program for international standards in the National 12th Five-Year Plan.⁸

In terms of the technical standards for auricular acupuncture—funded by the State Administration of TCM of the People's Republic of China, and led by the Tianjin University of Traditional Chinese Medicine, the China Association of Acupuncture–Moxibustion, and the Specialized Committee of Auricular Acupuncture—Li Guilan, MD, presided over

research and formulation of the third parts of the national standard, the *Auricular Acupuncture Technical Operation Regulation*.¹⁰ The four most commonly applied methods of auricular acupuncture—including (1) auricular needling, (2) auricular point pressing, (3) auricular embedded needling, and (4) auricular point pricking—were regulated. This regulation, launched July 1, 2008, was officially released by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and the Standardization Administration of the People's Republic of China. This document is the first national standard for clinical procedure technology of auricular acupuncture and plays an important role in the standardization of auricular diagnosis and treatment.¹⁰

METHODS

In order to create a more-comprehensive analysis of research progress in the field of diagnosis and treatment of auricular acupuncture in China, published articles about auricular acupuncture's applications were retrieved from 2007 to 2016, based on the CNKI journal full-text database.

RESULTS

From 2007 to 2016, there were 4701 articles published in many kinds of Chinese core journals. Among them, there were 245 articles in 2007, 228 articles in 2008, 67 articles in 2009, 74 articles in 2010, 398 articles in 2011, 507 articles in 2012, 582 in 2013, 859 articles in 2014, 869 articles in 2015, and 872 articles in 2016. Among these articles, clinical research reporting accounted for 65.3%, basic research for 14.7%, literature research for 12.3%, and other topics for 7.7%. From the perspective of research funding sources, ~2897 articles came from different levels of research funding, involving 205 types of financial resources. Among them, the largest funding support was provided by the National Natural Science Fund, the national science and technology support program, the national 973 Plan, the State Administration of TCM, and the rest from local project funding. The percent of these research project-funded articles was 61.6%. Approximately 42% of the articles published in core Chinese journals were published in Chinese mainstream medicine journals; 18% were published in mainstream supplementary alternative medicine journals, 13% were published in clinical journals, 13% were published in the *Journal of Preventive Medicine*, and 13% in other journals.

In the 10-year period, the largest number of articles on auricular acupuncture were published in the 10 journals, which are ranked from highest to lowest in Table 1.

With respect to applications for auricular acupuncture therapy, multiple types of auricular treatments were reported in the last 10 years, including auricular pressure, auricular acupuncture, embedded needles, catgut embedding, electrical

TABLE 1. JOURNALS THAT PUBLISHED AURICULAR ACUPUNCTURE STUDIES

Rank	Journals	# of articles published
1	<i>Journal of Chinese Acupuncture and Moxibustion</i>	445
2	<i>Shanghai Journal of Acupuncture and Moxibustion</i>	343
3	<i>Journal of Clinical Acupuncture and Moxibustion</i>	226
4	<i>Inner Mongolian Journal of Traditional Chinese Medicine</i>	180
5	<i>Guangming Journal of Chinese Medicine</i>	170
6	<i>Journal of China's Naturopathy</i>	96
7	<i>Sichuan Journal of Traditional Chinese Medicine</i>	84
8	<i>Henan Journal of Traditional Chinese Medicine</i>	79
9	<i>Shanxi Journal of Traditional Chinese Medicine</i>	66
10	<i>Journal of Practical Traditional Chinese Internal Medicine</i>	53

stimulation on auricular points, auricular point injections (such as *Salvia miltiorrhiza* and vitamin B₁₂), auricular point bloodletting, auricular point cutting, auricular plasters (bandages), auricular point massage, and auricular point moxibustion. There were 1894 articles on therapy combined with auricular plasters (bandages), which accounted for 40.3% of the clinical research articles. Another 863 articles with auricular plaster (bandage) therapy alone, accounted for 18.4% of the clinical research articles.

In terms of research contents, the clinical application of auricular acupuncture in the past 10 years involved ~249 kinds of diseases, including the fields of internal medicine, surgery, gynecology, pediatrics, dermatology, ophthalmology, and ear-nose-and-throat specialties. The frequency of articles on these diseases were as follows: 709 articles on insomnia; 668 articles on pain disorders; 348 articles on obesity; 346 articles on constipation; 298 articles on hypertension; 234 articles on diabetes and related symptoms; 223 articles on acne; 198 articles on hiccups; 172 articles on headaches; 165 articles on depression; 137 articles on migraine; 109 articles on myopia; 88 articles on chloasma; 78 articles on cervical spondylosis; 61 articles on rhinitis; and 51 articles on menopause syndrome. Basic research articles published involved neurology, endocrinology, the study of immune function, etc. (Table 2).

DISCUSSION

From this collection of articles, one can see that the research on diagnosis and treatment of auricular acupuncture in China has significantly improved in the areas of theoretical,

TABLE 2. NUMBER OF PUBLISHED ARTICLES ON DIFFERENT DISEASES

<i>Categories of diseases treated</i>	<i># of articles published</i>
Insomnia	709
Pain disorders	668
Obesity	348
Constipation	346
Hypertension	298
Diabetes & related symptoms	234
Acne	223
Hiccups	198
Headaches	172
Depression	165
Migraine	137
Myopia	109
Chloasma	88
Cervical spondylosis	78
Rhinitis	61
Menopause syndrome	51

clinical, and standardized technical applications. This idea is reflected in a number of ways. The number of scientific research articles is increasing and research methods are more rigorous and advanced. Clinical findings are highly reliable for auricular point diagnosis and for treatment with auriculotherapy. There are increased indications in the range of diseases and extensive applications. There are steady indications for auricular acupuncture that are reported with a relatively high frequency. Clinical research methods are gradually becoming standardized. Clinical literature with randomized controlled trials has increased significantly. The number of systematic evaluation articles on the application of auricular acupuncture has increased. Auricular acupuncture is diversified, and auricular pressure is still the main method that is more widely used, compared with other methods. It appears that basic research will develop into a higher level. The research on auricular localization and operation standardization have made further progress.¹¹

Based upon the research literature obtained, great development of auricular acupuncture in clinical and basic experimental research has been made in China. However, some shortcomings have also been detected as follows. The proportion of basic research is relatively low, and the number of high-level research project funding of basic research is low, such as the National Natural Science Fund, the 973 Plan special, and the state Administration of TCM. The application rate of auricular acupuncture is not high, which could be a potential crisis for its efficacy guarantee and clinical development. Auricular diagnosis is one of the traditional advantages of auricular acupuncture, but in recent years, there have been few relevant research articles or new achievements. The mechanism of auricular acupuncture therapy for diagnosis and treatment of disease still needs to be studied carefully, starting with physiologic functions and pathologic

changes of the channels, based on the theory of TCM. The new way of thinking in China—modern science technology—is fully applied in multidisciplinary clinics.¹¹ At present, auricular acupuncture procedures are mainly carried out by acupuncturists, and research teams still need to be strengthened. According to the latest data issued by the State Administration of TCM of the People's Republic of China, the total number of TCM doctors in 2012 is 476,882, accounting for 7.15% of the total number of doctors in China; this decreased to 9.09% in 2002.[¶]

CONCLUSIONS

The development of more auricular acupuncture research teams and the improvement of the level and quality of research, including basic and clinical research investigations of auricular acupuncture, in China has shown continuous improvement in the past 10 years, offering greater contributions to the development of auricular acupuncture for the health care of human beings.

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AUTHOR DISCLOSURE STATEMENT

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