中国大陆地区针灸国际发文概况分析

王耀博　齐淑兰　陈殷殷
（中国中医科学院针灸研究所，北京，100700）

摘要　目的：研究近 10 年中国大陆针灸学者在国际上的发文现状，国外刊发针灸文章的期刊发展情况，并了解针灸研究热点以及在国际上的发展概况，为相关研究及政策制定提供数据参考。方法：通过 Pubmed 和 Embase 数据库检索 2007—2017 年以“acupuncture”“acupuncture therapy”“electro-acupuncture”“auricular acupuncture”等为主题词的文章，从中选取作者为中国大陆针灸学者的文章，并对其进行归纳分析。结果：本次研究共检索出文献 1967 篇，国外刊登针灸文献的期刊 440 种。其文献分为 8 种类型，187 个病种。结论：中国大陆针灸学者在国外期刊上发文逐渐增多，国外刊登针灸文献的期刊逐年增多，说明针灸在国际上的交流热潮逐渐高涨，针灸真正走向了国际，这是针灸被国际认可形势发展的需要，反映了世界对针灸学术交流的重视。

关键词　针灸，聚类；期刊，共现；研究趋势；国际发文；中国大陆；检索

Study on Acupuncture Articles Published in Foreign Journals Written by Authors from Mainland China

Wang Yaobo，Qi Shulan，Chen Yinyin
（*Institute of Acupuncture and Moxibustion*，*China Academy of Chinese Medical Sciences*，*Beijing* 100700，*China*）

Abstract　**Objective**：To study the current situation of articles published in foreign journals of acupuncture and moxibustion scholars in mainland China in the past 10 years，the development of foreign journals that publish acupuncture and moxibustion articles，and to understand the hotspots of acupuncture and moxibustion and its development in the world，so as to provide data reference for related research and policy-making. **Methods**：The keywords of “acupuncture”，“acupuncture therapy”，“electro-acupuncture”，and “auricular acupuncture” in PubMed and Embase database from 2007 to 2017 were searched. Acupuncture articles written by scholars from mainland China were selected，summarized and analyzed. **Results**：A total of 1967 acupuncture literatures and 440 kinds of periodicals which can publish acupuncture articles were retrieved in this study，which were divided into 8 types and 187 kinds of diseases. **Conclusion**：That acupuncture and moxibustion articles written by Chinese scholars published in foreign journals articles are increasing gradually，and that journals which can publish acupuncture articles are increasing year by year，shows that acupuncture and moxibustion on the international communication boom are rising gradually. Acupuncture steps into international stage，which reveals the need of the development of acupuncture and moxibustion recognized by the international experts，as well as reflects the world pay much attention on acupuncture academic exchanges.

Key Words　Acupuncture；Cluster；Journals；Co-occurrence；Research trend

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针灸作为中医学的重要组成部分，具有适应证广、疗效显著、不良反应少等优点。正是由于针灸的种种优点，使得针灸疗法逐渐走出国门，传播到全世界。根据新世纪第 4 版《针灸学》记载[1]，早在公元 6 世纪，针灸就已传到朝鲜、日本；17 世纪中叶，针灸以法国为中心，向欧洲扩散传播。“中医针灸”在 2010 年被联合国教科文组织列入《人类非物质文化遗产代表作名录》，据世界卫生组织的资料显示，全世界有 183 个国家广泛使用针灸，是现今应用最广泛的传统医疗手段[2]。

19 世纪初，关于针灸的文章就已经开始在专业医学杂志中出现。据文献研究记载[3]，1823 年，英国医学杂志《柳叶刀》在第一卷中发表了一篇关于针灸的文章；1828 年，P. A. 查鲁科夫斯基博士在俄罗斯军事杂志上发表了第一篇关于针灸的文章；1858 年，医学博士 T. Ogier Ward 在《英国医学杂志》上报道，针灸治愈了一位坐骨神经痛的患者；在这些报道之后，针灸类的文章便开始在欧洲的医学杂志中发表。随着针灸疗法的传播和发展，针灸文章的相继发表，与针灸有关的杂志也应运而生，1973 年《美国中医杂志》与《美国针灸杂志》这 2 本专业的中医药杂志在美国横空出世[4]。

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作者简介：王耀博（1992. 08—），女，硕士研究生在读，研究方向：针灸现代文献整理与评析，E-mail：qnnngjhg@163. com
通信作者：齐淑兰（1962. 06—），女，硕士，编审，研究方向：针灸现代文献整理与临床运用，E-mail：qishulan0606@sohu. com

但在 20 世纪 80 年代改革开放之前，国外期刊上鲜有国内作者发表针灸类文章，而在改革开放以后，随着国家对针灸科研发展的重视，人民群众对针灸需求的提升和部分考核要求的出台，国内的针灸学者更加注重将针灸研究中的发现刊登到具有世界影响力大的期刊上，以增加针灸的国际影响力。随着针灸疗法热潮迭起，世界各地相继出现了中医类、针灸类杂志，而国内的针灸期刊却出现高质量文章难寻的局面。为此笔者对近 10 年中国大陆针灸学者在国际上的发文现状，国外刊发针灸文章的期刊情况进行梳理研究，以了解中国大陆针灸学者在国外杂志上的发文情况，并对其进行分析，寻找针灸研究热点与最新发展方向，为未来针灸进一步研究或相关政策制定提供数据支持。

1 资料与方法

1.1 检索策略 计算机检索 Pubmed 与 Embase，检索词包括“acupuncture”“acupuncture therapy”“electro-acupuncture”“auricular acupuncture”“cupping therapy”“catgut embedding”“moxibustion”“scraping”“tuina”等，并使用相关自由词、款目词进行检索，检索范围为 2007 年 1 月至 2017 年 12 月。以上所有检索结果都经过两位研究员多次预检后确认。

1.2 纳入标准 1）以中国大陆作者为第一、第二或通讯作者发表的有关“针灸”的文章；2）在国外杂志中正式发表的文章。

1.3 排除标准 1）有关针灸的会议通知、消息、评论等；2）含针灸词汇，非针灸内容的文章。

1.4 研究方法 将数据库中搜索所得文献导入 endnote 进行软件去重，并排除非大陆作者文章与刊登在国内期刊的文章。对信息残缺文献通过学术类平台进行 2 次检索并补全信息，将剩余文献题录导入 noteExpress，再次进行剔除筛选后，生成 Excel 信息表格，由两位研究员按照纳入与排除标准进一步筛选文献，并进行小组讨论，确定最终文献。

2 结果

本次研究初检获得文献 57 338 篇文，通过纳入与排除标准梳理，最终获得实际文献 1 967 篇。见图 1。

2.1 中国大陆学者在国外期刊年发文数量情况 使用 Excel 制表梳理后，2007—2017 年大陆作者在国外期刊发表针灸文章呈逐年上升趋势，除 2010 年和 2016 年比上年下降外，其他年份均比上年度升高，2007 年大陆学者在国外期刊发表针灸文章只有 37 篇，到 2017 年已增至 347 篇，增长了近 10 倍。见图 2。

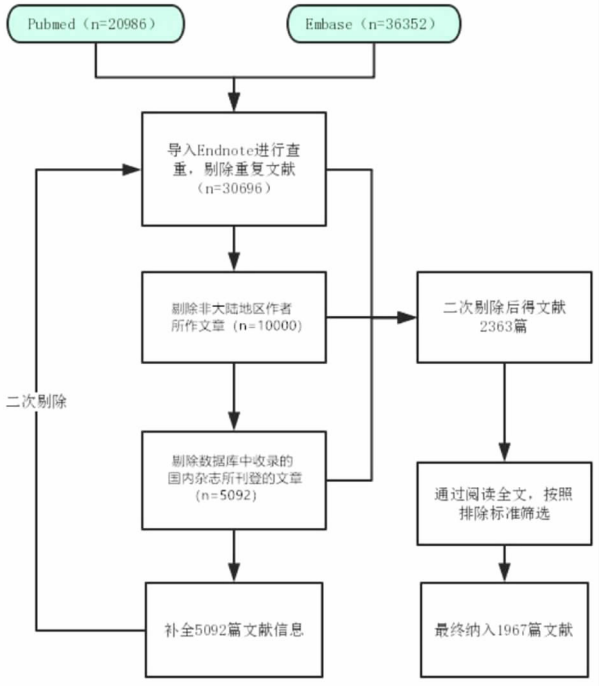

图 1 文献筛选流程及确定文献数

图 2 2007—2017 年中国大陆学者在国外期刊年发文数量趋势图

2.2 大陆作者国外发表针灸文章的期刊数量增长情况 近 10 年中共检索出 440 种期刊刊登了大陆地区作者的针灸文献。2007 年只有 26 种期刊刊登了大陆地区作者发表的针灸类文献，到 2017 年已经增长为 135 种期刊。2007—2017 年国外期刊刊登大陆学者针灸文献的期刊呈逐年增长趋势，但在 2009—2011 年、2012—2013 年、2015—2016 年分别处于平台期，2017 年又大幅增长。见图 3。

图 3 2007—2017 年国外刊登中国大陆作者针灸文章的期刊数量

2.3　大陆作者国外发表针灸文章发文量前 20 的期刊情况　本次研究发现，占发文总数一半以上的文献发表在前 20 种期刊上，收录针灸文章最多的前 20 种期刊中多数为 SCI 收录期刊，且影响因子较高（影响因子于 2018 年 10 月份检索）；期刊出版地以美国期刊居多，其中以美国出版的刊登亚洲补充替代医学为主的[4]《循证补充替代医学》（Evidence-based Complementary and Alternative Medicine，）发文最多，以英国出版的《Cochrane 系统评价数据库》（Cochrane Database of Systematic Reviews）杂志的影响因子最高。见表 1。

2.4　大陆作者国外发表针灸文章作者的地区分布　本次研究共统计出我国大陆有 28 个地区的作者向国际期刊发表了针灸文章，涉及百余家单位，向国外期刊发表针灸文章以北京地区作者发文最多，其次是上海、广州、四川。见图 4。

2.5　大陆作者国际发表针灸文献分类　本次研究根据针灸文献类型大致分为临床研究、实验研究、文献研究、医案、器械研究、临证经验、思路方法研究及其他 8 种，其中近半数为临床研究，实验研究约占总文献数的四分之一。近年来针灸研究重心偏向临床研究，国外杂志对医案类研究刊登较少，几乎很少刊登临证经验类的文献。对文献研究类的文章刊登较多，其中多偏向于综述、回顾类文章。其他包括针灸医师个人见解、文章讨论、问卷调查、医学环境分析等。见表 2。

表 1　大陆作者国外发表针灸文章前 20 期刊的基本情况

排名	期刊	sci 收录	影响因子（IF）	发表数量（篇）	占总比（%）	出版地址
1	Evidence-based Complementary and Alternative Medicine	是	2.064	365	18.43	美国
2	Acupuncture in medicine：journal of the British Medical Acupuncture Society	是	2.275	122	6.23	英国
3	Journal of Alternative and Complementary Medicine	是	1.498	91	4.57	美国
4	Trials	是	2.067	80	4.07	英国
5	BMC Complementary and Alternative Medicine	是	2.109	67	3.37	英国
6	PLoS ONE	是	2.766	51	2.56	美国
7	International Journal of Clinical and Experimental Medicine	是	1.11	35	1.76	美国
8	BMJ Open	是	2.413	32	1.61	英国
9	Cochrane Database of Systematic Reviews	是	6.754	31	1.57	英国
10	European Journal of Integrative Medicine	是	0.698	30	1.56	荷兰
11	Neuroscience Letters	是	2.159	30	1.56	爱尔兰
12	The American journal of Chinese medicine［刊名已更改］新刊名：Comparative medicine East and West			28	1.41	新加坡
13	Scientific reports	是	4.122	27	1.41	英国
14	Medical Acupuncture			25	1.26	美国
15	Medicine（United States）	是	2.028	23	1.16	英国
16	Chinesische Medizin			22	1.11	德国
17	Integrative Medicine Research			22	1.11	韩国
18	Complementary Therapies in Medicine	是	2.084	21	1.06	苏格兰
19	JAMS Journal of Acupuncture and Meridian Studies			20	1.01	韩国
20	African Journal of Traditional，Complementary and Alternative Medicines	是	0.59	14	0.75	尼日尔

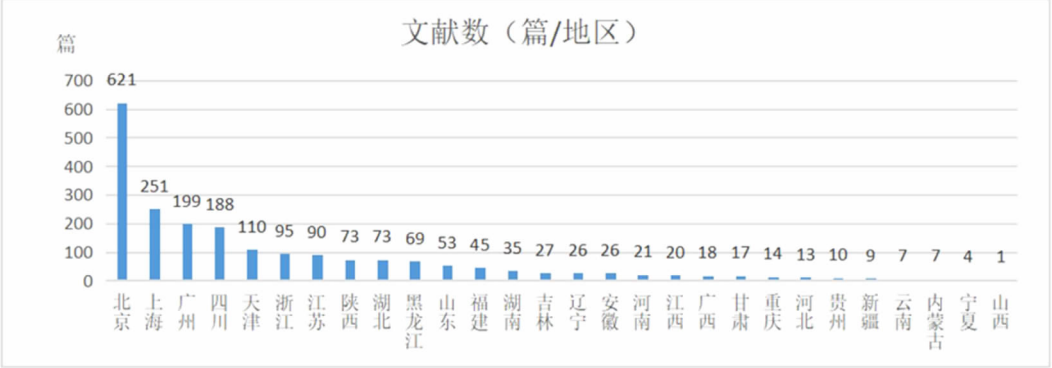

图 4　我国各地区作者针灸国际发文情况

表 2 大陆作者国际发表针灸文献分类

文献类型	数量(篇)	占比(%)
临床研究	952	48.40
实验研究	520	26.44
文献研究	410	20.84
医案	29	1.47
器械研究	9	0.46
临证经验	6	0.31
思路与方法	6	0.31
其他	35	1.78

2.6 大陆针灸学者国际发文研究病症情况 本次研究发现,国际发文涉及研究病种 187 种病症,其中以痛证居多,包括偏头痛[6-14]、痛经[15-21]、腰痛[22-28]、颈肩疼痛[29-36]、关节疼痛[37-40]等,其次为卒中,包括脑出血[41-45]、脑缺血[46-54]、脑梗死[55-61]、卒中并发症[62-69]、卒中术后恢复[70-74]等。在众多病症中,针灸对情志类的心理疾病效果也较好,如抑郁[75-83]、焦虑等[84-91]。见表 3。

表 3 大陆针灸学者国际发文研究病症情况(篇)

病症	总数	临床	实验	文献	医案	其他	临证经验
痛证	203	112	55	32	2	2	0
卒中	160	65	39	27	1	1	0
痴呆	66	24	31	13	4	0	0
关节炎	61	29	16	16	0	0	0
抑郁	58	26	28	3	1	0	0
癌症	57	31	4	19	0	0	2
脊损伤	39	11	23	4	1	0	0
失眠	27	15	1	10	1	0	0
糖尿病	26	12	4	9	0	0	0
高血压	25	13	7	4	1	0	0
消化不良	25	16	4	5	0	0	0
肠易激	23	10	9	4	0	0	0
面瘫	23	14	4	3	2	0	0
肥胖	22	13	4	4	1	0	0
哮喘	18	9	5	4	0	0	0
帕金森	17	7	7	3	0	0	0
便秘	16	11	2	3	0	0	0
多囊卵巢综合征	16	12	2	2	0	0	0
呕恶	14	9	2	2	0	1	0
心肌缺血	13	2	10	1	0	0	0

由表 3 不难看出,针灸学者研究的大多数疾病都是偏重于临床,但是痴呆、抑郁、脊损伤等疾病偏重于对针灸作用机制研究。而且不论哪种功能疾病医案和临证经验都不多。

3 讨论

本次研究选择了以收录美洲及亚太地区为主的医学类文献的 Pubmed 和以收录欧洲为主的医学类文献的 Embase 这 2 个国外重要的医学类数据库,[92]以此为基础研究针灸在国际上的发文状况以及刊登针灸文章的期刊发展情况,以了解针灸在国际上的发展趋势。从研究结果看,中国大陆针灸学者在国外期刊上发文逐渐增多,从 2007 年的 37 篇到 2017 年增长到 345 篇,说明针灸在国际上的交流热潮逐渐高涨,针灸真正走向了国际;国外刊登针灸文献的期刊逐年增多,从 2007 年的 26 种到 2017 年的 135 种期刊。研究发现目前已经有 400 多种期刊刊登针灸文献,尤其处于发达国家的美国、英国等刊登针灸文章的期刊发展迅猛,这也是针灸被国际认可形势发展的需要,反映了世界对针灸学术交流的重视。

我国大陆地区的作者无论是在发文量还是在发文质量上都越来越高,近几年出现了许多影响因子在 15 分以上的期刊刊登了针灸文章[93-99],而且研究涉及的疾病也非常广泛,各个疾病的疗效受到国际医学界认可,说明针灸的科学研究越来越规范严谨。发文量以北京、上海、广州三地居多,这和近些年国家自然科学基金的项目支持基本呈正相关[100],一方面说明了这些地区科研水平较高,科研氛围较浓,另一方面说明了针灸的发展和推广离不开国家的支持。值得注意的是,早期大部分为单个地区(医院或单位)发文,但近几年多中心合作发文数量呈上升趋势,国际合作逐渐增多。诚然,近几年各地区合作加深,但不可否认的是科研氛围相对落后的地区参与度仍然偏低。这和国家科研资源的分配有关,也和当地政府的政策有关。在文献中我们发现有的研究项目为科研水平较高的科研单位牵头,与科研水平相对落后的地区合作,共同研究,统一对试验人员进行培训,取得了较好的研究成果,这为未来合作临床试验的开展提供了新思路。

在病种方面我们发现中医对于痛证的疗效非常显著,在发文数量与质量上都比较高,是近期国际针灸研究的重点。作为为常见的症状或主诉,这里讨论的是由致病因素形成的影响正常工作和生活的病理性疼痛。由于西方国家治疗痛症以止痛药物为主,这间接导致了止痛药物的滥用。据每日经济网报道,美国疾病预防控制中心(CDC)主任 Robert Redfield 表示,由于吸食药物过量和自杀数量正在加速上升,当前的健康数据非常“令人不安”,而这 2 种死亡原因也共同导致美国人的预期寿命连续第二年下降。用于麻醉止痛的芬太尼便是“过量药物”中的典型代表[101]。正是出于以上的情况,西方国家格外重视疼痛的替代疗法,使得近十年痛证研究发表文章较多。针灸因为在痛证的治疗上的卓越表

现而使得国外期刊对痛证研究的文章格外重视，即使是在目前止痛药物飞速发展得情况下，针灸治疗痛证仍然是目前研究的前景。

近几年来，在国际杂志，尤其是 SCI 源刊上发表文章已经成为评价科研成绩与水平的重要指标和评职晋级的重要依据，[102]一项举措一方面提高了科研人员的科研积极性和科研写作能力，但另一方面也导致了大量高质量高水平的论文流向国外。2012 年，美国《科学引文索引》(Science Citation Index，SCI)收录的 176 个学科领域的高影响力期刊论文中，我国科技人员发表论文总数为 4 020 篇，其中 80%发表在国外期刊上[103]，这造成了我国科研成果严重外流，致使国内杂志的文章质量难以提升，直接影响了我国期刊的国际影响力。

如何提高期刊的学术水平和影响力，一方面国内期刊应提升竞争意识，拓宽思路，吸引高质量的稿源。在这一点上，国外的一些期刊的做法值得借鉴：国外一些著名期刊对优质稿件现在都采取了“级联式评审”，即投向自己期刊的学术文章，按照质量高低逐次推荐给自己的主刊与子刊上，尽最大努力截留优秀成果[104]。如果国内科技期刊仍缺少必要的市场敏感性，缺乏竞争意识，会有更多的优秀稿件流向国外；另一方面对科研成果和人才的评价体系也需要有所调整。20 世纪 80 年代末中国首次引入以 SCI 发表量评价教师职称，到如今 SCI 评价体系已经深入科研评价的方方面面，从 2010 年起我国一直都是 SCI 发文量第二多的国家，但是我国的科研创新量却并未提升，甚至形成了 SCI 商业体系[105]。这导致了科研人员和临床医生一味地追求 SCI 数量，大有“唯 SCI 论英雄”的倾向。科研单位制定出计量与计效相结合的合理的人性化的评价体系成为当务之急。科研评价体系虽积弊日深，但可喜的是现今已经有不少医院取消对 SCI 论文的重金奖励，更加倾向于临床疗效评价，注重 SCI 论文的成果转化。[106]

本次研究采用的并非是全数据库搜索，而是选择了其中 2 个较有代表性，范围较广的数据库，数据虽然具有代表性，但却缺乏全面性，是本次研究的缺点与不足之处。然而，仅仅这 2 个数据库就已经显示出针灸在国际上的热潮与趋势。

针灸作为中国中医学的一部分，它的实用性和有效性使它成为了中医药向外推广的先头兵，而大陆地区的作者发表的针灸文献无疑可以体现出针灸国际认可度的逐年提升。从少数不知名的期刊才能发表针灸文献到一些影响因子高的期刊也可以发表的这些文献，从不受认可的民间疗法到进入一些国家的医保报销范围，针灸在不断发展，针灸研究者也在不断进步，努力提高科研水平和临床技能，加强国际交流，提高国内针灸期刊的学术质量和影响力，让针灸惠及全人类，是我们的目标。

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