

Visual Analysis of Sanyinjiao(SP6) Studies Based on CiteSpace

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Abstract. Objective To conduct a visual analysis of literature around the Sanyinjiao (SP6), and to explore the research process, hot spots and future development trend of the Sanyinjiao (SP6) in the past 20 years. Methods CNKI was used as the data source, and the basic and clinical research literature collected from January 2000 to December 2022 were visually analyzed by using citespace software, and the relevant maps of keywords, authors and institutions were drawn. Results In the basic study, 287 articles were included, and 9 keywords were clustered, with the highest acupuncture centrality (0.46), the author with the highest number of publications was Zhu Jiang (33 articles), and the institution with the largest number of publications was the School of Acupuncture and Tuina of Beijing University of Chinese Medicine (42 articles). The clinical study included 1794 articles, and 9 keyword clusters were obtained, Yinlingquan had the highest centrality (0.46), the authors with the most publications were Zhu Jiang, Wang Pei, Hu Shangqing, Ma Yuxia (7 articles), and the institution with the largest number of publications was Guangzhou University of Chinese Medicine (59 articles). Conclusion The dynamics and trends of the number of literature changes in basic and clinical research are revealed, and the research content and research hotspots of Sanyinjiao(SP6) in basic and clinical applications are analyzed.

Keywords: Sanyinjiao (SP6), Acupuncture, Basic research, Clinical research, CiteSpace.

Acupuncture is an important content in the motherland medicine, it includes meridians, acupoints, acupuncture, clinical therapy, acupuncture and moxibustion medical books, experimental acupuncture parts, and indications, obvious curative effect, simple operation, economic and safe advantages, in our country has been favored by people for thousands of years, and acupoints is the important foundation of the human viscera, meridians, qi and blood operation, for the prosperity and development of the Chinese nation made an indelible contribution, including Sanyinjiao(SP6), for one of the ten total point. Bei Ji Qian Jin Yao Fang(Invaluable Prescriptions for Emergencies) mentioned that Sanyinjiao (SP6) can treat many women's amenorrhea, leucorrhea increase, lunar menstruation more or too little, premenstrual syndrome, menopausal syndrome and other gynecological diseases. As mentioned in A-B Classic of Acupuncture and Moxibustion, Sanyinjiao (SP6) can treat the swelling and painful heel, rheumatoid arthritis, palpitations and insomnia. Sanyinjiao (SP6) is the intersection of three Yin meridian, which can play a role of regulating the spleen and stomach, regulating the liver and kidney. It has a wide application in clinical practice and can play a good curative effect. At present, the research on Sanyinjiao (SP6) is mainly based on the clinical efficacy of acupoints and the exploration of modern mechanism of action, while there is no visual analysis of Sanyinjiao (SP6) in basic and clinical aspects.

CiteSpace Created by Dr. Chen Chaomei from Drexel University in the java language, it can effectively transform complex data into understandable form, so as to show more intuitively, and effectively retrieve future changes in the field of knowledge. Current studies use CiteSpace to analyze the hotspots and trends of various diseases, such as acupuncture for low back pain[1], Acupuncture for knee osteoarthritis[2], Acupuncture for the treatment of lumbar intervertebral disc herniation[3]And., and less visual analysis of a particular acupoint. Through sorting out the literature

of nearly 20 years, the author found that there is no visual analysis of the Sanyinjiao. Therefore, this paper includes relevant literature from both basic and clinical aspects, shows the research focus, hot spots and trend of Sanyinjiao basic and clinical fields in the way of visual map, and conducts in-depth discussion, so as to provide reference and basis for basic researchers and clinical practitioners of Sanyinjiao.

1. Data and methods

1.1. Data retrieval

According to CNKI as the data source, we classified and compared the relevant literature from January 1,2000 to December 31,2022. In the basic research studies, Professional search was performed with SU = Sanyinjiao + SP6 AND SU= rat + rabbit, A total of 425 literatures were retrieved, Among them, 356 articles are in Chinese literature; In the clinical studies, Professional search with SU = Sanyinjiao + SP6 AND SU =patient + efficacy + clinical + observation, A total of 3301 articles were retrieved, Among them, 3,225 are in Chinese literature, In these articles, We screened 3225 Chinese literature, Excluding the invalid literature, Such as medical plans, meetings, newspapers, results, etc., Through the human review, Basic research yielded 287 articles, Clinical studies yielded 1794 articles.

1.2. Data processing

The literature was exported in Refworks format from CNKI and converted into identifiable format by CiteSpace software.

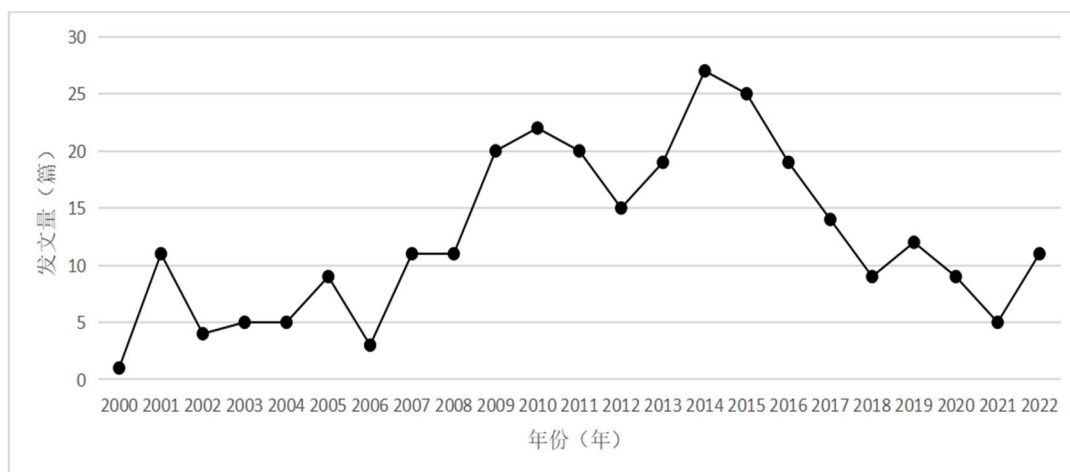
1.3. Parameter settings

The Time Slicing is set from 2000-2022, with one unit cutting in 1 year; keyword, author and organization respectively; calculus time threshold (TopN) is 50.

2. Results

2.1. Time distribution of literature publication

With each year as a time node, we analyzed the basic research (Figure 1) and clinical research (Figure 2). The results found that in the basic research, 2000-2006,2003-2004,2006-2014, the previous period, about 16, in 2014,27, every year from 2014-2018, stable from 2018-2022, reciprocal changes. In clinical studies, the overall number of articles increased from 2000 to 2011, among which the number of articles in 2011 surged to 142. After 2011, the annual number of articles showed an overall downward trend.



1Figure 1. Trend chart of basic research publications

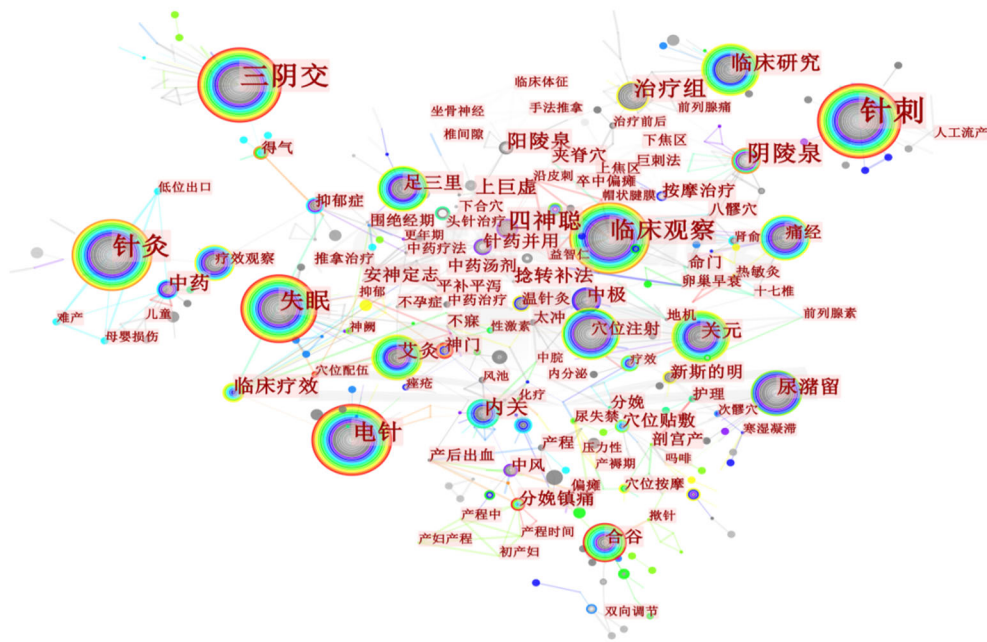


Figure 4. Co-occurrence diagram of keywords in clinical research

Table 1. Top five categories of keywords in basic research

therapeutic tool			Acupoint compatibility			research emphasis		
keyword	frequency	centrad	keyword	frequency	centrad	keyword	frequency	centrad
electroacupuncture	118	0.2	Zusanli	26	0.37	dysmenorrhea	22	0.11
acupuncture	46	0.46	Guanyuan	22	0.42	insomnia	19	0.1
moxa-moxibustion	11	0.03	Hegu	16	0.07	perimenopausal	8	0.16
Inverse needle	5	0.18	Shenmen	11	0.06	Promote childbirth	5	0.04
acupuncture and moxibustion	4	0.01	Neiguan	5	0.12	depression	5	0.02

Table 2. Top five categories of keywords in clinical research

therapeutic tool			Acupoint compatibility			research emphasis		
keyword	frequency	centrad	keyword	frequency	centrad	keyword	frequency	centrad
acupuncture	475	0.32	Zusanli	58	0.08	insomnia	109	0.13
acupuncture and moxibustion	259	0.19	Guanyuan	51	0.28	retention of urine	58	0.08
electroacupuncture	142	0.14	Hegu	42	0.10	dysmenorrhea	51	0.06
acupoint injection	76	0.13	Neiguan	34	0.17	depression	17	0.29
moxa-moxibustion	69	0.12	Sishencong	25	0.39	stroke	16	0.05

From Table 1 to Table 2, it can be found that in the treatment methods of 2000-2022, the most popular basic research choice is electroacupuncture, while the most popular clinical research choice is acupuncture. In basic and clinical research, Zusanli is the most selected for acupoints, followed by Guanyuan, Hegu, Shenmen, Neiguan, Sishencong, etc. Basic and clinical research focus have dysmenorrhea and insomnia, it also proves that the Sanyinjiao is the intersection of liver channel, spleen channel and kidney channel, Shenmen also has certain curative effect for heartache, upset, shock, zheng, forgetfulness, insomnia, epilepsy and heart disease, so the Shenmen, Sanyinjiao points alone or joint compatibility can change patients with anxiety and insomnia symptoms, meanwhile the two points combination is the classic clinical acupoint compatibility. The other clinical research focus is urinary retention.

2.2.2. Cluster analysis of keyword

According to Figure 3-4, we used the LLR algorithm to show the hotspots of Sanyinjiao research, and the results showed the top 9 clusters (Figure 5-Figure 6). The cluster module value (Modularity, Q value) of basic study was 0.8305 (> 0.3) and the mean contour value (Silhouette, S value) was 0.9575 (> 0.5); the Q value of clinical study was 0.8865 (> 0.3) and the S value was 0.9745 (> 0.5), which indicates that the cluster structure is significant and the results are very reasonable and reliable.

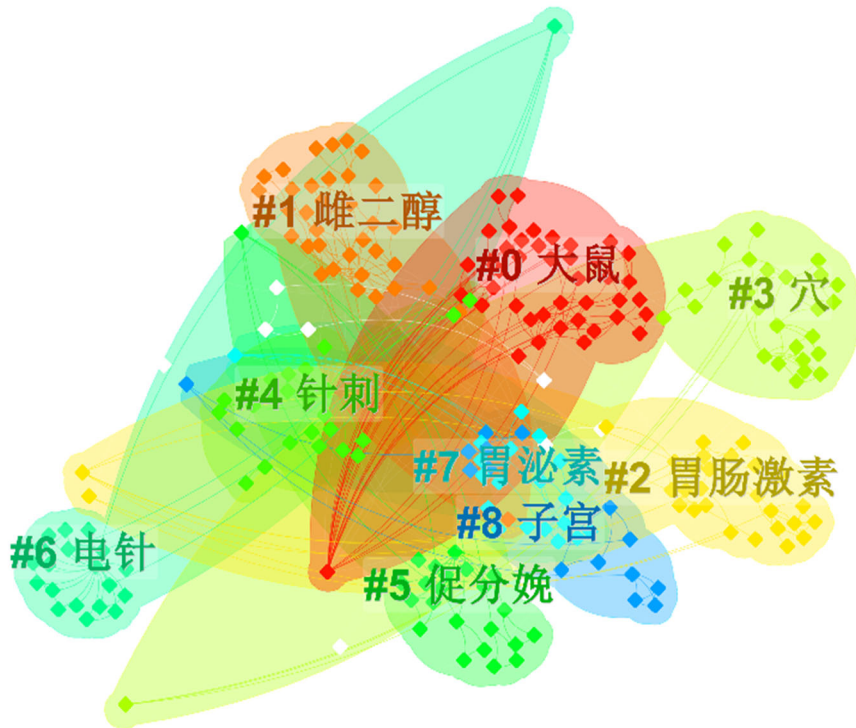


Figure 5. A keyword clustering diagram for basic research

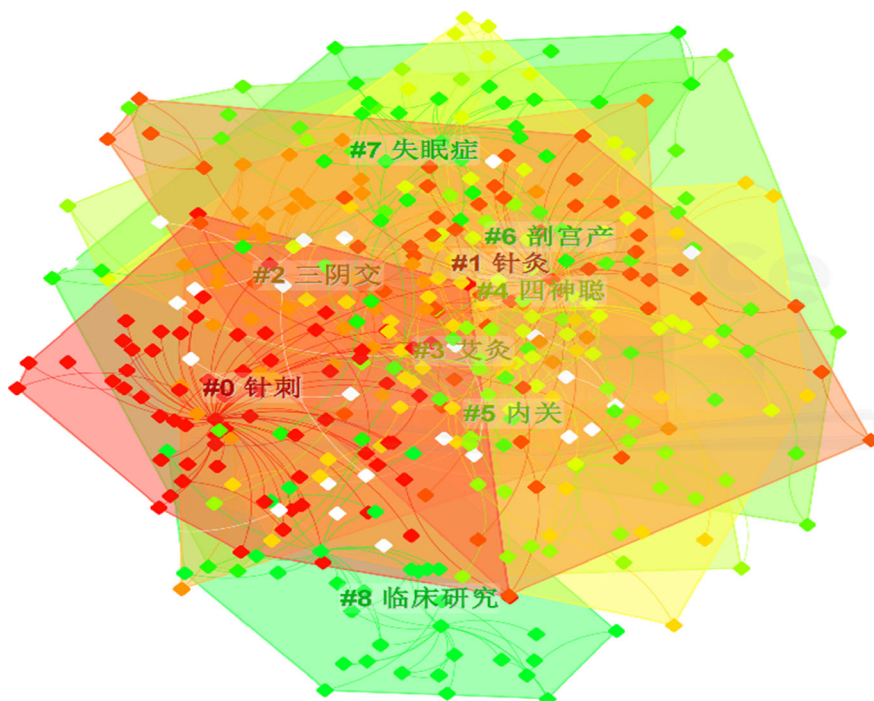


Figure 6. Keyword clustering plot for clinical research

The nine clusters in the basic study were in order # 0 rats, # 1 estradiol, # 2 gastrointestinal hormone, # 3 acupoint, # 4 acupuncture, # 5 accelerating labor, # 6 electroacupuncture, # 7 gastrin, # 8 uterus. The first two clusters were rat and estradiol. The representative words in the largest cluster of rats include experimental studies, spleen meridian acupoints and ultrastructure, suggesting that the clustering results are in line with the objective fact that basic research takes rats as the primary experimental animal model. The second largest cluster is estradiol which representative words include guanyuan, testosterone, etc. The combination of the two clusters indicates that Sanyin and guanyuan play an important role in regulating estradiol, testosterone and other sex hormones in rats in basic research. The 9 clusters in clinical research were # 0 acupuncture, # 1 acupuncture, # 2 Sanyinjiao, # 3 moxibustion, # 4 Sishencong, # 5 Neiguan, # 6 cesarean section, # 7 insomnia, # 8 clinical studies. In addition to the Sanyinjiao itself, the top three clusters are acupuncture, acupuncture and moxibustion, which suggest that the main means of clinical research on the Sanyinjiao are acupuncture and moxibustion, and the fourth cluster is the Sishencong, which indicates that the hot spot of the Sanyinjiao in clinical research is the Sishencong.

2.2.3. Occurrence analysis of Keyword

On the basis of the cluster map, there were 4 emergent words in basic research and 13 emergent words in clinical research. We sorted the words in the order of when they appeared (Figure 7-Figure 8). Studies have shown that the key words of Sanyinjiao have undergone significant periodic changes. From 2005 to 2008, research focused on regulation of estradiol hormones, while from 2010 to 2011, on dysmenorrhea, from 2014 to 2017, on Shenmen acupoints, and from 2016 to 2019, on insomnia. From 2000 to 2014, there were some overlaps in clinical studies, mainly on the clinical effects of acupuncture, traditional Chinese medicine, water acupuncture, moxibustion and acupoint embedding, and the first choice is Yinlingquan and Baihui; After 2014, the research devote on the clinical effects of labor analgesia and gas gain effect. While the outbreak time of the basic research until 2022 is not present, and the keyword outbreak time is not more than 4 years, the basic research is not persistent and the trend is not clear; the clinical research includes labor analgesia until 2022 (2015-2022), gas (2016-2022) and clinical efficacy (2014-2022), indicating that the efficacy observation and gas effect of labor analgesia are the hotspot and trend of the current study.

Top 4 Keywords with the Strongest Citation Bursts



Figure 7. Prescurrence of keywords in basic research

Top 13 Keywords with the Strongest Citation Bursts



Figure 8. Prescurrence of keywords in clinical research

2.2.4. Keyword time line diagram

According to the time span of each cluster and the connection between each cluster, the time line diagram of keywords is drawn (Figure 9-Figure 10), which shows the historical evolution of each keyword studied in the Sanyinjiao in more than 20 years. The abscissa in the figure is the time axis, and the is the cluster name. As can be seen from the figure, the timeline of basic research is diversified, including the correlation analysis of gastrointestinal, psychiatric, endocrine and other diseases, and the timeline of clinical research is multi-node distribution, mainly including the correlation analysis of acupuncture and Chinese medicine, disease types, treatment methods and other aspects.

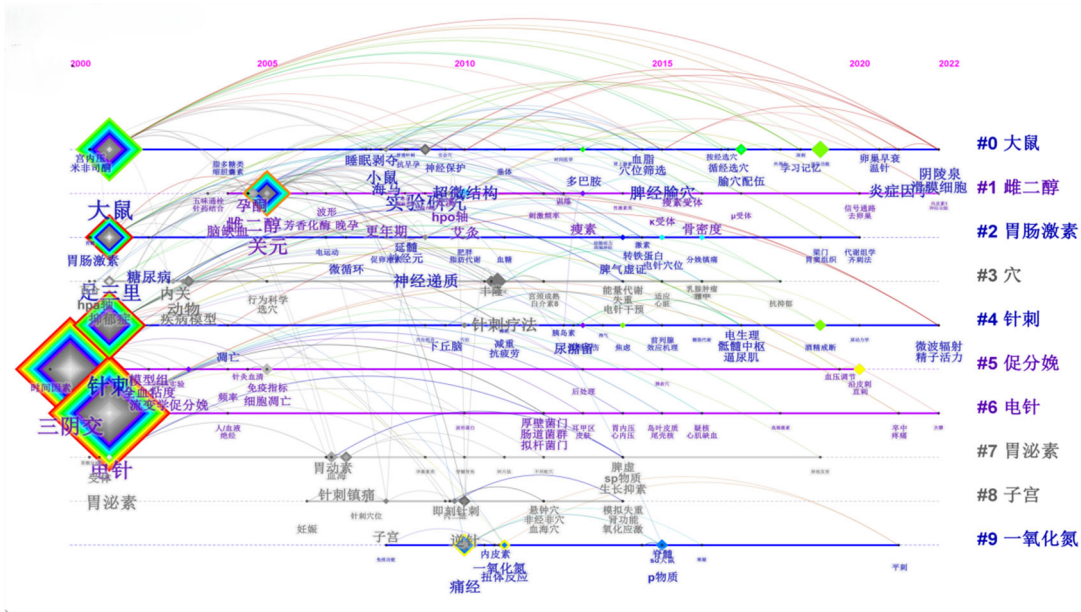


Figure 9. Timeline plot of basic research

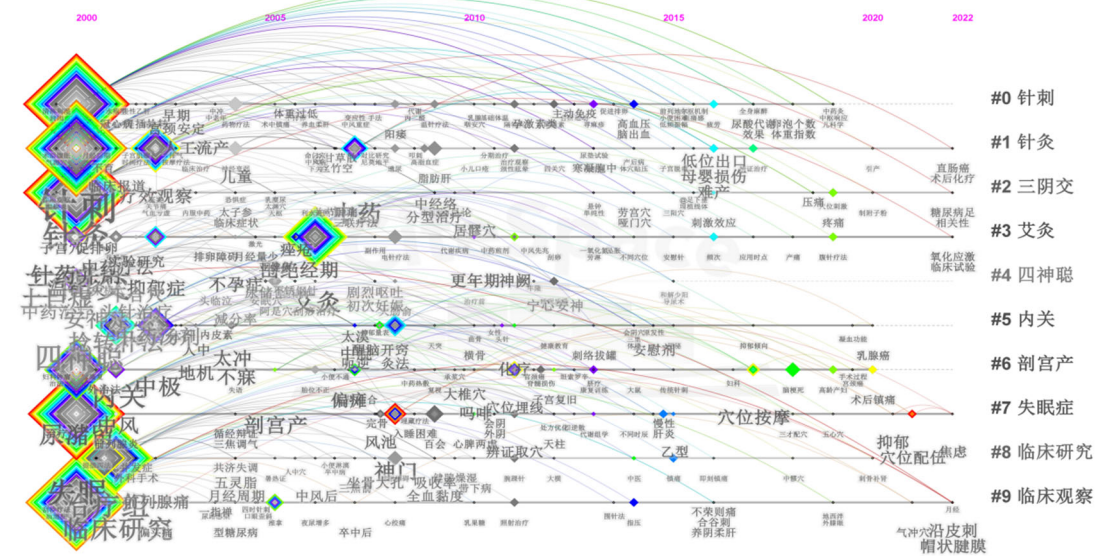


Figure 10. Timeline plot of the clinical study

2.3. Visualization and analysis of author

By analyzing the included literature, the authors of the top 10 basic research publications and the top 12 clinical research publications were counted respectively (Table 3-Table 4). As can be seen from the table, the authors with the most basic research publications were Zhu Jiang (33), and Wang Pei (7), Hu Shangqing (7), Ma Yuxia (7) and Zhu Jiang (7). According to Price's Law, the minimum number of core authors in basic research is about 4, so there are 40 core authors with 356 articles,

accounting for 35.42% of the total articles; the minimum number of core authors in clinical research is 2, so there are 166 core authors with 416 articles, accounting for 46.06% of the total articles, suggesting that the clinical research field of acupuncture and moxibustion has basically formed a core author team, while the basic field has not yet been formed. Among them, Zhu Jiang had a clinical publication of 7 and 33, which was the highest in the two fields with outstanding contributions. Zhu Jiang's research direction mainly covers the mechanism of acupuncture for primary dysmenorrhea and the regulation mechanism of the analgesic effect of acupuncture in Sanyinjiao[4, 5]. And through comparison, we find that the authors of basic and clinical research are different, which suggests that the communication between basic research and clinical research needs to be strengthened.

Table 3. authors of the first 10 in basic research

order number	Post volume	author
1	33	Kong Chu
2	32	Ren Xiaoxuan
3	26	Zhang Lufen
4	23	Guo Mengwei
5	22	Zhao Yafang
6	17	Bo Ji
7	15	Chun Hwa Lee
8	12	Xiao-hong li
9	9	Yang Jiamin
10	9	Cheng Kai

Table 4. authors of the first 12 in clinical research

order number	Post volume	author
1	7	Wang Pei
2	7	Hu Shangqing
3	7	Ma Yuxia
4	7	Kong Chu
5	6	Ma Shuxiang
6	6	Lin chi
7	6	Gold ring
8	6	Hao Jie
9	6	Jin-sen he
10	6	Cui jianmei
11	6	Hu Nijuan
12	6	Wu Guiwen

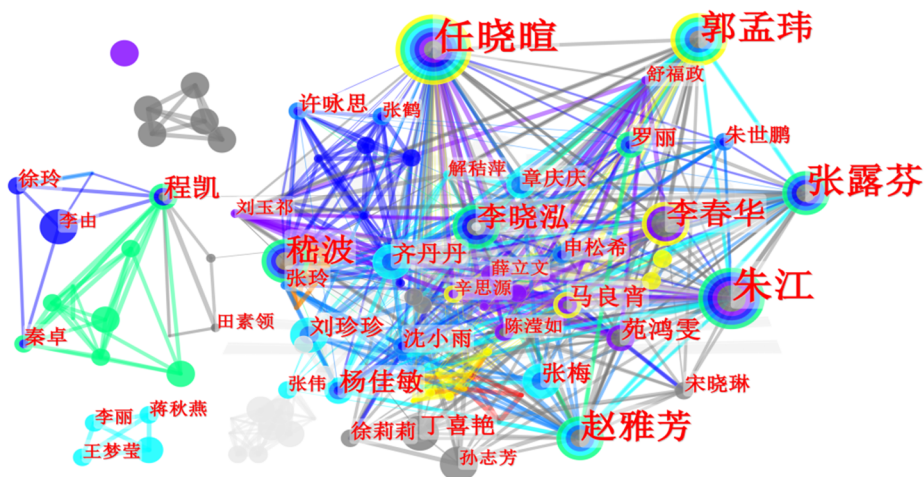


Figure 11. Co-occurrence diagram of the basic research authors

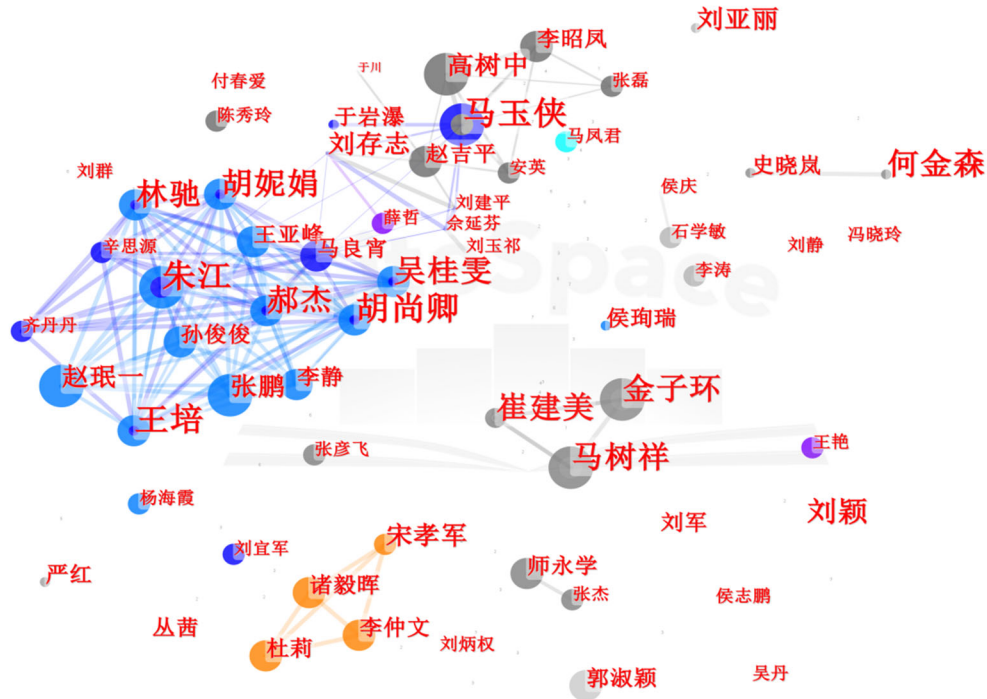


Figure 12. Co-occurrence diagram of the clinical research authors

In the basic research from Figure 11, Zhu Jiang, Ren Xiaoxuan, Zhang Lufen, Guo Mengwei are very closely connected and they are all affiliated to Beijing University of Chinese Medicine, and have formed an extensive contact team. This study aimed to investigate the role of electroacupuncture intervention in the improvement of uterine microcirculation in rats with dysmenorrhea[6, 7]. As can be seen from Figure 12, in the clinical research, Zhu Jiang, Hao Jie, Wang Pei and others formed the first research team network, Ma Yuxia and Gao Shusheng formed the second research team network, and Ma Shuxiang, Cui Jianmei and other representatives also took shape. The comparison of basic and clinical network shows that the basic team network is closely connected and concentrated, which is mainly based on Zhujiang team; the clinical team network is relatively scattered and the distribution is scattered. At the same time, it is found that the clinical research team is closely connected, but there is a lack of communication between the teams. The future clinical research can be a breakthrough point to strengthen the cooperation.

2.4. Visual analysis of research institutions

Through the analysis of the literature, we can build a co-occurrence map of basic research (> 4) and clinical research (> 2) institutions (Figure 13-Figure 14). As can be seen from the figure, the volume of basic research is large, and each institution has more publications; while the volume of clinical research is small, mainly in the University of Chinese Medicine and its affiliated hospitals. This indicates that there is an uneven development between different research institutions. Inter-agency cooperation should not seek only between universities and hospitals in a certain province, but should expand to a broader field and strengthen communication and contacts to promote common development. Beijing University of Traditional Chinese Medicine, Liaoning University of Traditional Chinese Medicine and Chengdu University of Traditional Chinese Medicine are the top 3 institutions in basic research; Guangzhou University of Traditional Chinese Medicine, Shandong University of Traditional Chinese Medicine and Beijing University of Traditional Chinese Medicine are the top 3 institutions in clinical research. Beijing University of Traditional Chinese Medicine has made outstanding contributions in both basic and clinical aspects, and the surrounding areas can strengthen the learning exchanges with it.



Figure 13. Co-occurrence diagram of basic research institutions

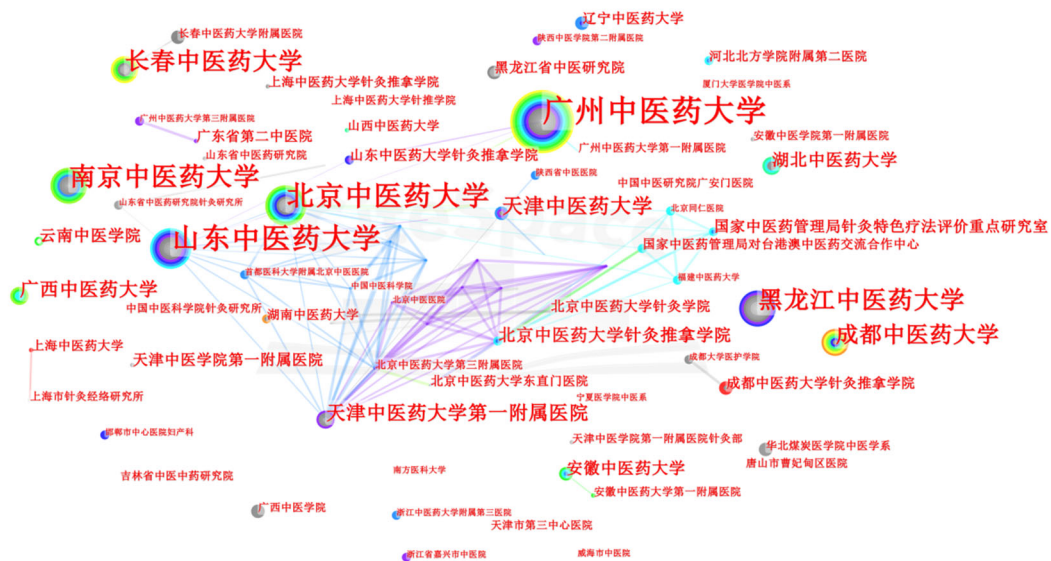


Figure 14. Co-occurrence diagram of clinical research institutions

3. Discuss

3.1. Research overview of Sanyinjiao intercourse in basic and clinical studies

According to the trend chart of the number of publications, basic and clinical research is in a fluctuating upward trend between 2000 and 2014. Since 2014, the number of basic and clinical research publications has been on a downward trend, while in the past two years, the number of basic research publications is likely to be gradually rising, and the number of clinical research publications may be at a stable level. In the amount of statistical analysis, clinical research publications is much higher than basic research, based on this situation, the author thinks that it is necessary to strengthen the basic research about Sanyinjiao points to provide more powerful theoretical support for clinical research. By this way, we can promote the development of clinical and basic research, contribute to the motherland medical heritage.

From the point of the author distribution, both in basic research and clinical research, the number of published paper of professor Zhu Jiang is the most, it shows that represented by professor Zhu Jiang team in the Sanyinjiao research has formed a mature technology research team, and basic research in Zhu Jiang, Ren Xiaoxuan, Zhang Lufen, Guo Mengwei as the first research team network which was closed contacted with other teams, realize the knowledge sharing between the team and team, the theory and mechanism of Sanyinjiao in research has extremely important far-reaching significance. However, in clinical research, the lack of communication and connection between teams and the relatively closed academic communication have limited the further development of this field to some extent.

From the perspective of institutional distribution, Beijing University of Traditional Chinese Medicine, Liaoning University of Traditional Chinese Medicine, Chengdu University of Traditional Chinese Medicine, State Administration of Traditional Chinese Medicine formed four large clusters and become the main positions for basic research of Traditional Chinese Medicine. Early research on the Sanyinjiao is Liaoning University of Traditional Chinese Medicine; Guangzhou University of Traditional Chinese Medicine, Shandong University of Traditional Chinese Medicine, Beijing University of Traditional Chinese Medicine, Nanjing University of Traditional Chinese Medicine, Heilongjiang University of Traditional Chinese Medicine, Changchun University of Traditional Chinese Medicine formed six large clusters and become the main positions for clinical research, However, the early study on Sanyinjiao is in various regional hospitals.

3.2. Research priorities, hot spots and trends of Sanyinjiao in basic and clinical practice

Basic research and clinical research complement and promote each other, both of them are indispensable. Basic research guides clinical research, and clinical research can in turn promote basic research. The study of Song Yue[8], Song Xiaojun[9] found that Sanyinjiao has many effects, including: immediate analgesic effect. This mechanism of pain relief is likely derived from the regulation of OT and ORT of Sanyinjiao acupoint; but there is still a lack of deep basic and clinical comparative research around Sanyinjiao acupoint. Therefore, this paper uses Cite Space software to analyze the related studies of acupuncture from 2000 to 2022 and found that the basic research focuses on dysmenorrhea and electroacupuncture while the clinical research focuses on insomnia and acupuncture. In addition, basic research hotspots and trends are unclear, while clinical efficacy, labor analgesia and qi are the hotspots and trends in clinical research.

3.3. The basic research of Sanyinjiao is weak and needs further study.

Compared the basic research with clinical research of Sanyinjiao, there is still a disconnection between the two. The amount of basic research is far lower than that of clinical research. The stagnation of basic research makes the clinical research lack certain theoretical support, which leads to the downward trend of clinical research. However, fortunately, from the trend of publication in the past two years, the basic research on Sanyinjiao has shown a recovery trend, focusing on gynecological diseases, reproductive diseases, stroke, moxibustion methods and other aspects, such as Xu Ge[10] found that Sanyinjiao can regulate sex hormone receptor expression to different degrees; Chen Tianwei[11] found that acupuncture "Sanyinjiao" can protect mouse sperm motility; Zhong Luyu[12] found that the rats could promote the recovery of nerve function in the rats[13] Through studies, it was found that different moxibustion at Sanyinjiao improved the uterine contraction and microcirculation of dysmenorrhea rats to different degrees, and flat acupuncture and moxibustion were better than straight acupuncture, which may be related to the activation of TRPV 1 and HSP 70, and then regulate the gene expression of the uterine μ opioid receptor and ET1. This is a noteworthy research direction for us scholars who do basic research.

3.4. Future research direction

Sanyinjiao is the intersection point of the Sanyinjiao channels of foot, which can be used with diseases related to the liver, spleen and kidney. According to some scholars, in addition to treating the

diseases passed in the meridians of foot too Yin and spleen, its clinical indications can be summarized into three aspects: medical diseases, surgical diseases and gynecological diseases. Internal diseases are divided into spleen and stomach diseases, liver diseases, kidney diseases, etc[14]. In the study of spleen and stomach diseases, it is found that Sanyin Jiao acupoint can lower the intestines, regulate qi and stomach, and strengthen the intestinal qi machine[15]. In this paper, in the keyword cluster analysis using CiteSpace, the third and eighth largest clusters were gastrointestinal hormone and gastrin, respectively, which suggests that the regulation mechanism of acupuncture on gastrointestinal hormone could be strengthened in the future. Studies have found that Sanyinjiao is the main point of blood, and Sanyinjiao is used to dredge qi and blood[16]. In renal diseases, acupuncture can promote bladder gasification function and achieve the purpose of relieving urination. Clinical observation of acupuncture sanyin jiao can play a certain effect on urinary retention[17]. By clinical research keyword ranking, keywords "stroke" ranked fifth, frequency 15 times, and the center is only 0.05, keywords "urinary retention" frequency 58 times, centrality only 0.08, center and frequency suggests that the current research does not belong to the center, but with the increase of frequency, may become the trend of future research. In gynecological diseases, acupuncture can play an analgesic effect[18]. According to the sudden analysis of keywords, the key word "dysmenorrhea" from 2010 to 2011 has become a research hotspot, with the highest intensity of 4.87 in the same category, but it only lasted for one year, without forming a complete research structure system to a certain extent. Therefore, scholars can also deepen their research on it.

In conclusion, this paper mainly reveals the dynamic and trend of the number of literature in basic research and clinical research, analyzes the research content and research hotspots of Sanyinjiao in basic and clinical application. There are great differences between basic research and clinical research, and the basic research is weak, so further research is needed.

References

- [1] Liang Y D, Li Y, Zhao J, et al. Study of acupuncture for low back pain in recent 20 years: a bibliometric analysis via CiteSpace [J]. *J Pain Res*, 2017,10:951-964.
- [2] Li R, Sun J, Hu H, et al. Research Trends of Acupuncture Therapy on Knee Osteoarthritis from 2010 to 2019: A Bibliometric Analysis[J]. *J Pain Res*, 2020,13:1901-1913.
- [3] Li Zhao Qiang, Qin Yi, Tian Yuanxiang, etc. Acupuncture treatment of lumbar disc herniation CiteSpace, visual analysis of knowledge graph [J]. *Chinese Acupuncture*, 2017,37 (05): 545-548.
- [4] Yang Jiamin, Shen Xiaoyu, Zhang Ling, and other acupuncture points on the degree of uterine contraction and pain-related mechanisms in cold dysmenorrhea rats [J]. *Journal of Traditional Chinese Medicine*, 2017,45 (06): 73-76.
- [5] The effect of different acupoints on uterine IP₃ in dysmenorrhea model [J]. *Chinese Acupuncture*, 2011,31 (01): 60-64.
- [6] Li Chunhua, Ren Xiaoxuan, Guo Mengwei, isoelectric on the plasma effect of thromboxane B₂ and hexanone prostanoic F₁ (α) in rat dysmenorrhea-like model [J]. *Acupuncture study*, 2011,36 (05): 347-352.
- [7] Zhao Yafang, Li Chunhua, Ji Bo, the effects of three cross and blood sea on uterine microcirculation in dysmenorrhea model rats [J]. *Journal of microcirculation*, 2011,21 (02): 4-10.
- [8] The influence of Song Yue, Ma Liangxiao, Gan Yingying, isodirect thorns and three skin thorns on oxytocin and its receptors in dysmenorrhea rats [J]. *Chinese Journal of Traditional Chinese Medicine*, 2020,35 (04): 2046-2049.
- [9] Song Xiaojun, Zhu Yihui, Wu Pei, and other studies on the acupoint compatibility effect and regulation mechanism of Shenmen and three Yin intersection to improve daytime fatigue and drowsiness in insomnia [J]. *Acupuncture study*, 2022,47 (07): 630-635.
- [10] The effect of electroacupuncture on the expression of AR and ER protein in the endometrium of rats with polycystic ovary syndrome [J]. *China Traditional Chinese Medicine Technology*, 2022,29 (05): 732-736.
- [11] Chen Tianwei, Li Haisong, Bi Huanzhou, and the effect of "three Yin jiao" on spermatogenic cells of mice with oligospermia induced by microwave radiation [J]. *Acupuncture study*, 2022,47 (10): 891-895.
- [12] Effect of Zhong Luyu, Yu Tao, Wang Meng, isoacupuncture on the expression of cortical-related active substances in the infarct area of cerebral ischemic rats [J]. *Acupuncture study*, 2022,47 (02): 135-140.
- [13] The influence of different acupuncture moxibustion methods in pastoral, Ma Liangxiao, Yu Wenyan, and other methods on the uterine contraction degree and microcirculation of rats with dysmenorrhea [J]. *Acupuncture study*, 2022,47 (03): 196-202.

- [14] Yu Bing, Wang Cong, Zhang Yongchen, Analysis of the clinical application of Sanyin Jiao point [J]. Sichuan Traditional Chinese Medicine, 2016,34 (07): 1-3.
- [15] Luo Lihua, Lao Meixin, Liang Zhiling finger pressure plus moxibustion Sanyinjiao point after the treatment of abdominal distension 104 cases [J]. Chinese Medicine, 2010,19 (12): 2142.
- [16] Qiao Yu, Zhang Zhaoyan, Lu Yan Analysis of acupuncture treatment of stroke (Qi deficiency and blood stasis) in recent ten years: New Era, New Thinking, New Crossing and New Development —— Review of 2019 Annual Meeting and 40th Anniversary of the Society of Chinese Acupuncture and Moxibustion [C], Wuhan, Hubei, China, 2019.
- [17] Pang Guojun, Zhang Ting, Tang Peifei Effect of sanyin acupoint injection for postoperative treatment of urinary retention [J]. Acupuncture in China, 2003 (12): 22-23.
- [18] Wang Yongxia, Yu Siyi, Zhang Hong, and other acupuncture and moxibustion on the mechanism of primary dysmenorrhea [J]. Journal of Chengdu University of Traditional Chinese Medicine, 2015,38 (04): 106-108.