

Research Progress on Chinese Medicine Specialty Care for Depressed Patients after Stroke

Mengdan Deng^{1,a}, Xiaoyan Duan^{2,b,*}

¹Shaanxi University of Chinese Medicine, Xianyang, 712046, China

²Affiliated Hospital of Shaanxi University of Chinese Medicine, Xianyang, 712000, China

^adengmengdan0621@163.com, ^bduanxiaoyan0622@163.com

*Corresponding author

Abstract: Post-stroke depression is a common complication in stroke patients, which seriously affects the quality of life of patients and their families, and increases the morbidity and mortality rate. As the characteristics and advantages of Chinese medicine are getting more and more attention, Chinese medicine characteristic nursing has been gradually applied to the treatment of stroke depression with the advantage of simplicity and cheapness, and has achieved remarkable results. This paper combs through the latest progress of Chinese medicine characteristic care for depressed patients after stroke, and reviews the aspects of Chinese medicine nursing techniques, traditional Chinese medicine exercises and Chinese medicine emotional care, aiming to provide reference for carrying out Chinese medicine characteristic care suitable for depressed patients with stroke, and to provide direction for the subsequent research.

Keywords: Stroke; Post-stroke depression; TCM characteristic care; Traditional exercises; Review

1. Introduction

Stroke is the leading cause of disability and death among adults in China, characterized by high morbidity, high disability, high recurrence and high mortality [1]. It not only leads to sequela such as hemiparesis, aphasia, cognitive impairment, etc., but also triggers patients to develop emotional and mental disorders after prolonged suffering, among which post-stroke depression is the most common [2]. Post-stroke depression (PSD) refers to a series of syndromes occurring after stroke with depressive manifestations and corresponding physical symptoms, which are mainly characterized by decreased interest, behavioral changes, slow thinking, large mood swings, early waking up or excessive sleep, pessimism, and even suicidal thoughts [3]. The results of a meta-analysis showed that the total prevalence of PSD in China was 34.9%, and PSD not only affects the neurological function repair of stroke patients and reduces their quality of life, but also imposes a huge economic burden on their families and society [4]. The National Nursing Career Development Plan (2021~2025) issued by the National Health and Hygiene Commission [5] points out that the development of TCM nursing should be promoted, and dialectical nursing and TCM specialty nursing should be actively carried out to give full play to the important role of TCM nursing in the prevention, treatment and rehabilitation of diseases. Chinese medicine specialty nursing is characterized by simple operation and wide applicability. In this paper, we review the research progress of Chinese medicine specialty care for PSD, aiming to provide reference for clinical care of PSD patients.

2. Stroke etiology, pathogenesis and syndrome typing

There is no record of PSD in Chinese medicine, and PSD is considered to be a combination of "stroke" and "depression" [6]. The pathogenesis of stroke is always attributed to yin and yang imbalance, rebellious qi and blood, internal injury and accumulation of damage, excessive emotional and emotional, dietary disorders, and hypertrophy, etc., resulting in the stagnation of deficiency qi and liver yang, or phlegm-heat arising from phlegm and phlegm-dampness, which causes the internal wind to rotate, and the qi and blood to reverse the disorder, and then rush to violate the brain, resulting in blood stasis in the brain veins or blood overflow outside the veins, and then the onset of stroke. The etiology of depression evidence is always the injury caused by emotion [7], liver loss of detachment, spleen loss of healthy transportation, heart loss of nourishment, internal organs and qi and blood imbalance is the main pathogenesis of this

disease, the disease position in the liver, followed by the heart and spleen. From the viewpoint of the pathogenesis of PSD and stroke, the main cause of PSD is the deficiency of qi and blood after stroke and the loss of nourishment of the heart; or the stagnation of qi and the internal growth of phlegm and silt. Many contemporary Chinese medicine scholars have categorized PSD under the category of "depression due to illness" and extended the etiology and pathogenesis of "depression evidence". Yuan Lei ^[8] and others believe that the core pathogenesis of PSD is liver qi stagnation and qi dysfunction, with phlegm and stagnation as the pathologic factors involving the heart, liver, spleen, lungs, and kidneys. Zhao Rui ^[9] et al. suggested that the main pathogenesis of PSD is deficiency of kidney essence, and the deficiency of kidney essence is insufficient for the medulla oblongata to transform and produce, and the brain loses its nourishment, and then the symptoms of depression appear. For the pathogenesis of this disease, there are different views such as kidney essence deficiency and liver qi depression. At the same time, modern medical practitioners also discuss the pathogenesis of the disease from the point of view of the real and the imaginary, with the internal organs in full swing as the real, with qi and depression, phlegm, silt and blood as the standard as the real. The common types are liver-qi stagnation, heart-spleen deficiency, heart-kidney yin deficiency, and phlegm-qi stagnation.

3. Chinese medicine speciality care for PSD

Chinese medicine characteristic nursing refers to under the guidance of Chinese medicine theory, established on the basis of the concept of holistic nursing, the use of evidence-based nursing method, the person as an organic whole, through the collection and analysis of Chinese medicine four diagnostic data, to clarify the symptoms of the disease, and accordingly formulate the corresponding nursing countermeasures, so as to realize the overall health concept and the concept of life that maintains a dynamic balance between human beings and the social environment, the natural environment ^[10].

3.1. Chinese Medicine Nursing Technology

3.1.1. Moxibustion

Moxibustion is the moxibustion method in traditional Chinese medicine acupuncture and moxibustion therapy, which is a therapeutic method to make moxa leaves into moxa sticks or moxa pillars, smoked or warmed after ignition to burn the acupuncture points on the body surface or specific parts of the body, and regulate the disordered physiological function of the human body through the circulation of meridians with the help of its temperature and the stimulating effect of the drug, to achieve the promotion of the human body's blood circulation, dredging of the meridians, and to play the prevention of diseases and health care purposes ^[11]. Animal experiments have confirmed ^[12] that the mechanism of moxibustion to improve the symptoms of depression in model rats is related to the fact that moxibustion can increase the expression of tryptophan hydroxylase 2, decrease the protein expression of monoamine oxidase A, and affect the production of 5-hydroxytryptamine, thus playing a role in improving the symptoms of PSD in rats. The clinical selection of acupuncture points for moxibustion in patients with PSD is mostly taken from the six Shen points, including Shenmen, Shendao, Shenting, Shenfeng, Shenzang, and the four Shencong, which are closely related to the heart and spirit, and have the function of tranquilizing the heart and health care. The six Shen points are closely related to the heart and spirit, and have the efficacy of tranquilizing the heart and calming the mind ^[13]. Shan Ning ^[14] and other patients with PSD were treated with moxibustion on the basis of conventional internal medicine treatment and nursing care, taking the "six god points" and applying hanging moxibustion for 30 min each time, once a day, and the patients' symptoms of depression improved and their quality of life improved after 8 weeks of treatment. Chang Feng ^[15] took Baihui, Hegu, Liver Yu, Spleen Yu, and Foot Sanli acupoints for acupuncture and moxibustion treatment, 20 minutes each time, once a day, and after 4 weeks of treatment, Hamilton depression scale (HAMD) scores decreased, and modified Barthel Index Scale (MBI) scores increased significantly. It can be seen that the depressive symptoms of PSD patients can be effectively improved by moxibustion, but at present, no acupoints were identified according to the different types of PSD patients, which needs to be further explored in the future. At the same time, the skin condition of the patients should be evaluated before moxibustion operation and the precautions should be explained, such as skin infection, ulcer, scar and other parts of the skin should not be moxibustion; moxibustion should not be bathed for half an hour; if dizziness, nausea, vomiting and other symptoms of moxibustion occur during the moxibustion process, it is necessary to stop moxibustion operation immediately, relax the body to maintain a state of lying down, and then rest for a few moments to choose whether or not to continue the moxibustion..

3.1.2. Buried beans at ear points

Ear acupuncture point burying beans is the use of Wang Bu Liuxing seeds, Lai Lai, white mustard and other round substances applied to the ear acupuncture points, stimulate the auricular acupuncture points or reaction points, through the meridian conduction, and to achieve the purpose of prevention and treatment of disease a therapy. It has the efficacy of regulating nerve balance, sedation and pain relief, dredging meridians, harmonizing qi and blood, and regulating internal organs [16]. The auricle and the twelve meridians are closely linked, and for the twelve meridians convergence, as the "Spiritual Pivot - mouth ask" said: "the ear, the Zong vein of the poly also." Explain that the ear and human organs have a close physiological connection. Auricular acupuncture points buried beans take subcortical, kidney, heart and other points. Subcortical is the representative region of the cerebral cortex, stimulation of subcortical points can regulate the excitation and inhibition of the nerve center; kidney hidden innate gas, kidney points can replenish the marrow and benefit the essence; the heart is the master of the five viscera and six bowels, the heart acupuncture point can nourish the blood and blood vessels [17]. Gao Lianqian [18] et al. randomized grouping of PSD patients, the control group took conventional treatment plus oral tretinoin treatment, the intervention group in addition to the above treatment, in the subcortical and the heart, liver, Shenmen, kidney and other acupuncture points for auricular burying beans, the patient is instructed to perform 3 times a day, each time to press and knead for 5 min, after 8 weeks of treatment, the two groups of patients with HAMD scores, MBI scores have improved, and the intervention group is higher than the control group, at the same time The total effective rate of the intervention group was 83.33%, which was higher than that of the control group, indicating that both depressive symptoms and life ability of PSD patients were significantly improved. Miao Chunhua [19] et al. randomly grouped PSD patients, the control group performed routine care, and the observation group selected Shenmen, heart, and sympathetic for auricular acupoint pressure treatment on its basis, and pressed three times a day for five minutes at each acupoint, and after a period of three-month treatment, the depression scores of the patients were lower than before, and the depressive symptoms were improved. This therapy is simple, long-lasting stimulation, significant therapeutic effect, in the process of nursing care should be taught to patients to press their own methods, such as informing the pressure should not be too much pressure and do not rub, and should also be timely for the patient to replace the wet or polluted ear patch.

3.1.3. Acupressure

Acupressure is a non-invasive treatment modality of Chinese medicine, which is an important part of Chinese medicine, based on the theory of acupuncture and moxibustion, and is a kind of deformation of acupuncture and moxibustion treatment [20]. It is under the guidance of Chinese medicine meridians and acupoints, through the manipulation of specific parts of the human body, and then to achieve the regulation of dredging qi and blood, to wake up the brain and open the mind, tranquilize the mind and tranquilize the spirit, calm and relieve the efficacy of pain [21]. Wang Qingmei [22] divided PSD patients into two groups, the control group was given conventional care and medication, and the observation group was given narrative care and acupressure on the basis of which the points of Taichong, Liver Yu, Neiguan, Baihui and Hegu were selected for pressing and kneading twice a day for 5 min at each point, and the Hamilton depression scale score was assessed after two months of treatment, and the results showed that acupressure helped to improve PSD patients' The results showed that acupressure helps to improve the symptoms of depression in PSD patients. Fang Suzhu [23] and others observed the effect of head acupoint massage on PSD patients through their own controlled trial, selecting Baihui point, solar plexus point, four Shencong point, Shenting point as massage points, twice a day, 10-15min each time, for a period of three months of head acupoint massage, the results showed that HAMD scores were reduced, and the patients' depressive symptoms were improved. Li Jingli [24] et al. divided PSD patients into two groups, the control group for conventional treatment, the observation group on the basis of the five elements of music therapy combined with acupressure intervention, the main acupuncture points selected Hundred Clubs, the Divine Gate and the four Guan, the matching points selected Foot Sanli, Sanyinjiao and other points, each point massage for 2 minutes, twice a day, six courses of treatment after the HAMD scale, the results showed that the acupressure can improve the PSD The results showed that acupressure can improve the depressive symptoms of patients with PSD and also improve their quality of life. Before performing acupressure, the patient should be evaluated whether there are contraindications such as thrombosis and bleeding, and the patient's skin condition should be evaluated at the same time; the practitioner should pay attention to the coordination of soft techniques, consistent movements, moderate strength, and the patient's status should be evaluated at any time to make adjustments.

3.2. Traditional Chinese medicine exercises

It has been shown that aerobic exercise, as a physical therapy with rehabilitation characteristics, has a significant effect on the improvement of PSD [25]. Eight-duanjin and taijiquan are the typical representatives of traditional Chinese medicine gongfu, which have good health care functions, and at the same time are very helpful in regulating the body and mind, which can regulate the internal organs and dredge the meridians by adjusting breathing, posture and intention, and achieve the purpose of health care and health maintenance, and prevention of disease before it occurs [26]. Liu Xiaoyu [27] et al. conducted Badaanjin intervention for PSD patients for 45 min each time, 3 times a week for 4 weeks, and the HAMD score and balance function scale score after the intervention showed that the patient's depressive state was reduced, and at the same time, the patient's balance function was improved. Chen Yunfeng [28] et al. carried out Baduanjin intervention for PSD patients for 30 min each time, once in the morning and once in the evening, 10 d for a course of 4 consecutive courses, and the post-intervention HAMD scores showed that the patient's depressive state had been reduced, the quality of life had been raised, and at the same time, the patient's mental and physical function had been improved. Li Xiaoyun [29] et al. conducted a modified taijiquan intervention on PSD patients for 1h per day for 12 weeks, and measured the patients' upper extremity hand function scores and Hamilton Depression Scale scores. The results showed that taijiquan helped to improve the patients' motor ability and reduce their depressive state. When performing traditional Chinese medicine gongfu interventions, attention should be paid to monitoring the patients' heart rate and blood pressure, and attention should also be paid to adjusting the exercise intensity so that the patients feel slightly sweaty but not fatigued, and the exercise should be performed only when the patients have reached a certain functional state. Traditional Chinese medicine techniques such as Baduanjin and Taijiquan require less specialized knowledge and skills from patients and caregivers, are easy to learn, and have fewer space constraints, so they can be practiced at home or in the community, which is conducive to the patient's subsequent recovery.

3.3. Emotional Care in Traditional Chinese Medicine

The so-called emotions refer to the seven human emotions of happiness, anger, anxiety, thoughts, sadness, fear and shock. Chinese medicine believes that "seven emotions" is a normal physiological phenomenon of human beings, is a protective response to external stimuli and internal stimuli, beneficial to physical and mental health. The seven emotions are important causative factors for PSD patients with paralysis, aphasia, poor self-regulation ability, and easy to produce fear, depression, sadness and other emotions [30]. A Meta-analysis [31] showed that TCM affective care could help reduce the level of depression in stroke patients, but its long-term effect needs further study. The "Examination of Medical Formulas-Emotional and Spiritual Doors" says: "Emotional and Spiritual excesses are not curable by medicines, but must be overcome by emotions". It can be seen that affective diseases need to be treated with affective therapy [32]. (1) Emotional and spiritual victory method: medical personnel should assess the existing emotional and spiritual types of PSD patients in a timely manner, using the theory of the five elements of mutual restraint, the treatment of sadness over anger, anger over thought, thought over fear, fear over joy, joy over worry, etc., and choose another emotional and spiritual and its opposite, so as to achieve the emotional and spiritual victory and alleviate the purpose of the undesirable moods [33]. (2) Chinese medicine five elements music therapy: Zhong Da Yuan et al. [34] showed that music therapy can improve the symptoms of depression in PSD patients and can be widely used. According to the "five elements theory" and "five tones theory of healing", the connection of five tones - five organs - five Zhi is formed, and the five tones affect the function of the corresponding internal organs, so as to achieve the purpose of treating the disease [35]. At the same time, different types of evidence use different tunes of music, such as liver and qi depression can be used in every day time, ugly time (23:00 to the next day 03:00) to choose the angle tune music (angle for the sound of the liver belongs to the wood), such as the "eighteen Barbarian Barbarian clippings", which can play a role in relieving the liver and depression and uplifting the mood; heart and spleen deficiency can be used in the daily epoch time, sixth hour (7:00-11:00) to choose the Gong tune music (Gong for the spleen's voice of earth), such as the "Night of the Spring River Flowers", "the spring river flowers and moonlight", "the spring river flowers and moonlight", and the "spring river flowers and moonlight". The Moonlit Night of Spring River", which can restore the spleen's function of transportation and digestion. Five elements music therapy has good application effect in stroke depression, but PSD has deficiency and reality, and there are different types of evidence, so the music should be used to recognize the evidence and select the right music for the disease, so as to achieve the key effect.

3.4. Other TCM Nursing Techniques

Acupuncture point dressing is based on the meridian theory of Chinese medicine, the drug will be ground into honey, vegetable oil, vinegar, etc. and blended into a paste, paste, or soup boiled into a paste, directly applied to acupuncture points, through the stimulation of drugs on the human body acupuncture points, play a role in balancing yin and yang, and regulate the function of internal organs and so on [36]. Wang Hao [37] and other PSD patients are divided into two groups, the control group for conventional treatment, the observation group on the basis of acupoints (selected points for danzhong, Neiguan, diaphragm acupoints, tai chong), weekly paste 5d, once a day, the length of 8h, for a consecutive 28d of intervention, the results show that the experimental group effective rate of 93.33%, significantly higher than the control group, indicating that acupoints can effectively improve the depression state of PSD patients and has good safety. The results showed that the effective rate of the experimental group was 93.33%, which was significantly higher than that of the control group. As a non-invasive traditional Chinese medicine nursing technology, acupoint application can be applied to the patient's body, which is widely used in the clinic, but there are fewer clinical studies on depression in stroke, and there are no acupoint application medications for different types of evidence, which need to be further explored in the future.

Acupuncture point injection, also known as hydroacupuncture, is a new therapy combining acupuncture, acupoints, and drugs under the guidance of Chinese and Western medicine theories and on the basis of the role of acupoints and drug properties to produce a compound effect [38]. By injecting drugs at acupoints or reaction points, it plays the role of harmonizing yin and yang, supporting the positive and dispelling the evil, and so on, so that the organism achieves the state of yin and yang secret. Wang Feng [39] et al. divided the patients into two groups, the control group was treated with fluoxetine, and the observation group was treated with acupuncture combined with acupoint injections, 2 times a week, 1 ml of safflower injection at each acupoint each time, and after 2 months of intervention, the results showed that the symptoms of depression in patients with PSD did improve and the quality of life was improved. Before performing acupoint injection, we must explain the possible discomfort to the patients and obtain their cooperation, pay attention to the aseptic operation when performing acupoint injection, choose the appropriate syringe and needle, and avoid the scarred blood vessels and other places.

4. Conclusions

Traditional Chinese medicine (TCM) specialty care provides a simple and easy method for the care of PSD patients and improves the depressive symptoms of PSD patients to a certain extent. Currently, TCM nursing techniques used for this disease include moxibustion, acupressure, and auricular acupuncture point burying beans, which have the advantages of easy operation, high safety, and high adaptability for patients, and are widely used in clinical practice. Traditional Chinese medicine techniques, such as Baduanjin and Taijiquan, play an important role in the rehabilitation of PSD patients, as they are less restricted by the venue, easy to learn and highly popularized, which are easy to be mastered and practiced by PSD patients. According to the theory of the five elements, TCM emotional care adopts the method of emotional and emotional phase victory and TCM five elements music therapy to alleviate the symptoms of depression in PSD patients, and then improve their depression level. Acupressure and acupoint injection can act on the body through acupoints, which can also achieve the purpose of improving the depression level of PSD patients. However, there are some problems in the characteristic care of Chinese medicine for PSD patients: ① There is still a lack of evidence-based selection of acupoints for moxibustion, acupressure, auricular acupuncture point, acupoint application and other Chinese medicine care techniques, and the future should be based on evidence, according to the patient's type of evidence to identify the acupoints, for better treatment results in the future. ② Clinical studies on acupoint application and acupoint injection are less, and further research is needed in the future. ③ We can conduct reticulated Meta-analysis based on the current existing studies to compare different intervention methods and select the optimal intervention method, which can guide clinical practice. (iv) Different TCM nursing techniques can be applied jointly to further explore the effectiveness and safety of their application to PSD patients.

References

[1] Wang Longde, Peng Bin, Zhang Hongqi et al. Summary of the China Stroke Prevention and Control Report 2020[J]. Chinese Journal of Cerebrovascular Disease, 2022,19(02):136-144.

- [2] Wang Hui, Chang Huanxian. *Research progress of depression-related risk factors after stroke*[J]. *China Prescription Drugs*, 2018, 16(01):27-29.
- [3] Kwon B, Lee EJ, Park S, Lee JS, Lee MH, Jeong D, Lee D, Kwon HS, Chang DI, Park JH, Cha JK, Heo JH, Sohn SI, Kim DE, Choi-Kwon S, Kim JS. *Long-Term Changes in Post-Stroke Depression, Emotional Incontinence, and Anger*[J]. *J Stroke*. 2021 May; 23(2):263-272.
- [4] LI Shiming, FENG Wei, CUI Fengwei et al. *Meta-analysis of the prevalence of post-stroke depression in China*[J]. *Journal of practical medicine*, 2021, 37(16):2058-2064.
- [5] *National Nursing Career Development Plan (2021-2025)*[J]. *China Nursing Management*, 2022, 22(06): 801-804.
- [6] Liu Lijuan. *Study on the correlation between TCM patterns and factors of HAMD in patients with post-stroke depression*[D]. *Shandong University of Traditional Chinese Medicine*, 2020.
- [7] LIU Yunyun, SONG Lin, CHEN Yun et al. *Discussing the experience of Professor Cheng Choufu in treating depression by using Dangdian Yiwu San*[J]. *Inner Mongolia Traditional Chinese Medicine*, 2014, 33(06): 96.
- [8] YUAN Lei, YANG Jinping, WANG Minling. *Etiology and pathogenesis of post-stroke depression*[J]. *Journal of Practical Chinese Medicine Internal Medicine*, 2014, 28(06):22-23.
- [9] ZHAO Rui. *A discussion on the feasibility of tonifying kidney and activating blood to resolve phlegm in the treatment of post-stroke depression*[J]. *Chinese medicine clinical research*, 2016, 8(17):146-148.
- [10] PENG Min, WANG Sunya. *SWOT analysis of Chinese medicine characteristic nursing in clinical application*[J]. *Contemporary Nurses(Zhongdian)*, 2017(06):84-87.
- [11] Li Mengqi. *Observation on the therapeutic effect of moxibustion combined with acupoint pressure in the treatment of nausea and vomiting after chemotherapy for gynaecological malignant tumours* [D]. *Shandong University of Traditional Chinese Medicine*, 2022.
- [12] Xiao Aijiao, Liu Jiemin, Gong Lili et al. *Effects of moxibustion on the expression of tryptophan hydroxylase 2 and monoamine oxidase A in neonatal mice post-stroke depression model*[J]. *Liaoning Journal of Chinese Medicine*, 2019, 46(01):178-180+228.
- [13] Li Yanlan, Zhang Jinhua. *Emotion and desire adjustment method combined with moxibustion for the treatment of 60 cases of depression in stroke*[J]. *Guangming Traditional Chinese Medicine*, 2022, 37(6): 950-952.
- [14] Shan Ning. *Observation on the therapeutic effect of moxibustion at six god points with psychological intervention in treating post-stroke depression*[J]. *Sichuan Traditional Chinese Medicine*, 2017, 35(02): 180-182.
- [15] Chang Feng. *Observations on the efficacy of acupoint moxibustion combined with fluoxetine in treating post-stroke depression of liver depression and spleen deficiency type*[J]. *Journal of Practical Chinese Medicine*, 2022, 38(07):1140-1142.
- [16] Jiao J, Wang B, Chen B et al. *Current status of the application of Chinese medicine nursing techniques in the prevention and treatment of chemotherapy-associated nausea and vomiting*[J]. *Tianjin Nursing*, 2022, 30(01):120-123.
- [17] Cui M. *Progress of research on the clinical application of auricular acupoint burying bean therapy* [J]. *Chinese Folk Therapy*, 2019, 27(20):101-103.
- [18] Gao Zhenqian. *Observation on the efficacy of auricular pressure bean in the treatment of post-stroke depression*[D]. *Liaoning University of Traditional Chinese Medicine*, 2021.
- [19] Miao Chunhua. *Application study of auricular acupressure with Chinese medicine affective care for stroke patients with depression*[J]. *Sichuan Traditional Chinese Medicine*, 2023, 41(02):221-223.
- [20] SUN Min, ZHANG Lei, ZHANG Huamin et al. *Effects of acupressure on hypertension with insomnia: a Meta-analysis based on a randomised controlled trial*[J]. *Lishizhen Medicine and Materia Medica Research*, 2021, 32(06): 1528-1531.
- [21] ZHOU Jia-Tong, YU Jing-Rui. *Effects of compound essential oil acupressure on sleep quality and cognitive function in the elderly*[J]. *Chinese Journal of Gerontology*, 2018, 38(24):6098-6101.
- [22] WANG Qingmei, LI Bo, TONG Ying et al. *Effects of narrative nursing combined with acupressure on depression, anxiety and quality of life in depressed patients after stroke*[J]. *Western Traditional Chinese Medicine*, 2023, 36(02):113-116.
- [23] FANG Suzhu, LIU Fang, CHEN Song, et al. *Effects of head acupoint massage on patients with anxiety and depression after stroke*[J]. *Health Must Read*, 2019(22):88-89.
- [24] Li Jingli. *Effects of acupressure combined with five elements music therapy on clinical symptoms and quality of life of patients with post-stroke depression with sleep disorder*[J]. *Sichuan Traditional Chinese Medicine*, 2019, 37(05):190-192.
- [25] Li C, Xu X, Wang Z, Wang Y, Luo L, Cheng J, Chen SF, Liu H, Wan Q, Wang Q. *Exercise ameliorates post-stroke depression by inhibiting PTEN elevation-mediated upregulation of TLR4/NF- κ B/NLRP3 signaling in mice*. *Brain Res*. 2020 Jun 1;1736:146777.

- [26] Cao Yunsong. *Clinical research on the treatment of depression and anxiety disorders by five elements music combined with eight duanjin [D]*. Beijing University of Traditional Chinese Medicine, 2020.
- [27] LIU Xiaoyu,ZENG Wenjie,LIU Jing et al. *Effects of the traditional gongfu method of Ba Duan Jin on post-stroke depression[J]*. *Chinese Medicine Clinical Research*, 2021,13(26):86-88.
- [28] CHEN Yunfeng,LI Li,WANG Min et al. *Clinical study of five elements music therapy combined with eight duanjin in treating post-stroke depression[J]*. *Shandong Journal of Traditional Chinese Medicine*, 2017, 36(01):23-25.DOI:10.16295/j.cnki.0257-358x.2017.01.008.
- [29] LI Xiaohui,LIU Ping,XIONG Bin et al. *Clinical study of modified 24-style taijiquan on post-stroke depression[J]*. *Chinese Journal of Health Care Medicine*, 2018, 20(05):434-435.
- [30] XIN Xin,TENG Liying,WANG Suwei et al. *The effect of Chinese medicine affective nursing intervention on the psychological health of patients with post-stroke depression[J]*. *Western Traditional Chinese Medicine*, 2020,33(04):140-143.
- [31] LI Jing,YU Yufeng,YU Jinlian et al. *Meta-analysis of the effect of Chinese medicine affective care on the intervention of anxiety and depression in stroke patients[J]*. *Sichuan Mental Health*, 2020, 33(05): 451-456.
- [32] LIN Fa-Cai,WU Yun-Chuan. *Discussion on five elements music therapy based on the theory of "overcoming emotions with emotions"[J]*. *Chinese Journal of Traditional Chinese Medicine*, 2018, 33(07): 2733-2735.
- [33] XIN Xin,TENG Liying,WANG Suwei et al. *The effect of Chinese medicine affective nursing intervention on the psychological health of patients with post-stroke depression[J]*. *Western Traditional Chinese Medicine*,2020,33(04):140-143.
- [34] Dayuan Z, Lan L, Hui C, Huanjie L, Deliang L, Yihui D. *The effect of music as an intervention for post-stroke depression: a systematic review and meta- analysis[J]*. *Complement Ther Med*. 2022 Dec; 71: 102901.
- [35] YANG Yingying,FU Hanying,LIN Fazai. *Application of five elements music therapy of Chinese medicine in post-stroke depression[J]*. *China Medicine Herald*,2019,16(15):115-118.
- [36] Bai Yang. *Meta-analysis and clinical retrospective study of acupoint patch for the treatment of adhesive intestinal obstruction[D]*. Shandong University of Traditional Chinese Medicine,2022.
- [37] Wang H. *Clinical study of acupoint application combined with Haifu yuyu Tang in the treatment of post-stroke depression of qi stagnation and blood stasis type [D]*. Shandong University of Traditional Chinese Medicine,2021.
- [38] ZHAO Weiqing. *Research on the application of acupoint injection combined with traditional Chinese medicine in accelerated rehabilitation after gynaecological abdominal surgery [D]*. Shandong University of Traditional Chinese Medicine,2022.
- [39] WANG Feng,LOU Xiaomin,XIA Luomin et al. *Clinical observation of acupuncture combined with acupoint injection for the treatment of depression after ischaemic stroke[J]*. *Shanghai Journal of Acupuncture and Moxibustion*,2016,35(08):942-944.