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Research Progress on the Combined Use of Acupuncture and Pharmacotherapy in the Treatment of Depression

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Abstract. Depression is a common psychiatric disorder that seriously endangers both physical and mental health. Conventional antidepressant treatments, including pharmacotherapy and psychotherapy, are often limited by delayed onset, unstable efficacy, poor patient compliance, and frequent adverse effects. In recent years, the combination of acupuncture and pharmacotherapy has attracted increasing attention due to its synergistic efficacy, enhanced safety, and reduced side effects. This review summarizes recent advances in the clinical and mechanistic studies of acupuncture combined with Western or traditional Chinese medicine in the treatment of depression. The therapeutic mechanisms involve modulation of neurotransmitters, regulation of immune and neuroendocrine functions, and bidirectional brain–gut axis adjustment. Clinical studies have shown that this combined approach not only alleviates depressive symptoms but also improves quality of life and demonstrates unique advantages in special populations such as adolescents, elderly patients, and perimenopausal women. Moreover, acupuncture–drug combination therapy is associated with fewer adverse effects compared with pharmacotherapy alone. Recent innovations, such as hydrogel-assisted acupuncture systems, further broaden the potential applications of integrative treatments. Although promising, challenges remain in standardization, protocol optimization, and individualized treatment strategies. Future research should focus on establishing unified clinical guidelines, expanding evidence in special populations, and elucidating underlying mechanisms to promote the broader clinical application of acupuncture–pharmacotherapy in depression.

Keywords: Acupuncture–pharmacotherapy combination, Depression, Mechanism, Clinical efficacy, Safety

1. Introduction

Depression is a psychiatric disorder characterized primarily by persistent low mood, often accompanied by symptoms such as reduced digestive function, loss of interest, and sleep disturbances. In severe cases, patients may develop suicidal ideation or behaviors [1]. According to the latest data from the World Health Organization, there are approximately 350 million people worldwide suffering from depression, and under the influence of the COVID-19 pandemic, the prevalence has increased significantly by about 28% [2]. At present, modern medical treatments for depression mainly include antidepressant medications and psychotherapy [3]. However, clinical

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practice has shown that these conventional approaches have significant limitations. Traditional antidepressants are not only limited in their effectiveness but are also prone to adverse effects such as gastrointestinal reactions and sexual dysfunction [4]. Psychotherapy, while useful, is often constrained by poor patient compliance and unstable outcomes in clinical application [5].

In recent years, the combination of acupuncture with Western or traditional Chinese medicine has played an increasingly important role in the prevention and treatment of various types of depression. This combined approach exerts effects through multiple pathways, acupoints, mechanisms, and levels. Acupuncture combined with medication can not only enhance the efficacy of antidepressants and mitigate their side effects but also improve patient adherence to treatment, thereby significantly increasing therapeutic effectiveness [6]. This characteristic of "enhancing efficacy while reducing toxicity" makes it an important strategy for optimizing depression treatment. Therefore, this review systematically retrieved studies from major domestic databases, analyzed clinical research on acupuncture–pharmacotherapy combination in depression, and explored its efficacy and safety, in order to provide scientific evidence for clinical application.

2. Mechanisms of acupuncture combined with pharmacotherapy in the treatment of depression

2.1. Neurotransmitter regulation

The pathogenesis of depression is highly complex, with two major classical hypotheses: the monoamine hypothesis and the diathesis–stress hypothesis. The monoamine hypothesis proposes that depression results from a decline in neural function caused by decreased levels of monoamine neurotransmitters in the brain, including serotonin (5-hydroxytryptamine, 5-HT), noradrenaline (NE), and dopamine (DA). Most conventional antidepressants, such as selective serotonin reuptake inhibitors (SSRIs), target 5-HT and NE by increasing their availability in the synaptic cleft. However, these drugs act slowly and are not universally effective in all patients [7].

A randomized controlled clinical study compared electroacupuncture combined with Ning Shen Fang to Shugan Jieyu Capsules combined with Livzon tablets in 120 peri-menopausal women with mild-to-moderate depression. After 12 weeks of intervention, levels of key neurotransmitters—gamma-aminobutyric acid (GABA), NE, 5-HT, and DA—were significantly higher in the acupuncture–drug group than in the drug-only group. This confirmed that the combined therapy exerts dual regulatory effects: on the one hand, it enhances sex hormone levels, and on the other, it optimizes neurotransmitter balance, thereby more effectively improving peri-menopausal depression symptoms [8]. Similarly, in a study on patients with post-stroke depression (PSD), electroacupuncture through acupoints combined with oral Jieyu Tongluo Decoction significantly elevated plasma 5-HT levels compared with traditional Chinese medicine or Western medicine alone, while producing fewer adverse reactions. This further demonstrated that acupuncture combined with herbal therapy is superior to either therapy alone, offering a reliable strategy for increasing serotonin levels and improving outcomes in PSD [9].

Overall, combining acupuncture with Chinese or Western medicine demonstrates synergistic benefits in modulating neurotransmitter systems. Compared with pharmacotherapy alone, such combination therapy significantly enhances neurotransmitter levels and produces stronger antidepressant effects . This approach is particularly suited for subtypes of depression characterized by impaired monoamine neurotransmitter function.

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2.2. Immune regulation

Recent research has revealed a close relationship between immune dysfunction and depression, particularly the role of pro-inflammatory cytokines produced by innate immune activation, leading to the emergence of the "cytokine hypothesis" of depression [10].

Clinical studies prove that acupuncture combined with pharmacotherapy offers significant advantages in regulating neurotransmitters and inflammatory factors. For example, in a study of 120 patients with depression, the group treated with Shugan Yangxin acupuncture combined with Western medicine exhibited higher serum levels of 5-HT, interleukin (IL)-4, and IL-10, as well as lower levels of IL-6 at 1, 2, 4, and 6 weeks compared with the drug-only group, indicating reduced inflammation. This suggests that acupuncture can effectively modulate the imbalance of pro- and anti-inflammatory cytokines secreted by Th1 and Th2 cells, thereby alleviating depressive symptoms [11]. Another randomized controlled trial involving 90 patients with depression further confirmed that after four weeks of combined therapy, serum concentrations of IL-1, IL-6, IL-4, and IL-10 were all significantly lower than in the drug-only group. Collectively, these findings suggest that acupuncture combined with SSRIs not only enhances monoamine neurotransmitter levels but also improves neuroinflammatory status, thereby exerting a more pronounced antidepressant effect [12].

Therefore, for certain subtypes of depression, treatment strategies based on immune regulation display unique clinical value. Compared with pharmacotherapy alone, acupuncture and medication more effectively correct cytokine imbalance and improve neuroinflammation, leading to superior antidepressant efficacy [13].

2.3. Neuroendocrine regulation

The hypothalamic–pituitary–adrenal (HPA) axis is a key neuroendocrine stress-response system that maintains homeostasis and regulates behavior, mood, immunity, and metabolism. Dysregulation of the HPA axis is recognized as an important factor in the pathogenesis of depression [14]. Clinical studies have shown that acupuncture combined with pharmacotherapy exerts superior effects compared with medication alone in regulating neuroendocrine function. For example, in patients with hypothyroidism and depressive symptoms, acupuncture combined with levothyroxine significantly reduced serum thyroid-stimulating hormone (TSH) and thyroglobulin antibody (TgAb) levels compared with levothyroxine alone, while also improving mood-related symptoms [15]. Similarly, in patients with mild-to-moderate depression, combination therapy produced greater reductions in Hamilton Depression (HAMD) and Self-Rating Anxiety Scale (SAS) scores, along with more pronounced decreases in plasma adrenocorticotropic hormone (ACTH) and cortisol (CORT) levels, than either drug therapy or acupuncture alone [16]. These findings indicate that acupuncture–drug combinations can more rapidly and effectively alleviate depressive symptoms by modulating neuroendocrine function, particularly through regulation of the HPA axis. Thus, neuroendocrine modulation represents an important therapeutic mechanism for improving emotional and behavioral symptoms in depression [17].

2.4. Brain–gut axis regulation

The brain–gut axis is a bidirectional neuroendocrine signaling system linking central emotional regulation with peripheral gastrointestinal function [18]. Gut microbiota play a pivotal role in this process, influencing neurotransmission, neuroplasticity, and ultimately mood regulation. The

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microbiota–gut–brain axis hypothesis suggests that dysbiosis may directly or indirectly contribute to the onset and progression of depression[19]. Recent studies indicate that acupuncture combined with pharmacotherapy can modulate this axis more effectively than pharmacotherapy alone. For example, in postpartum depression, patients receiving combined treatment showed greater improvements in depressive and anxiety symptoms compared with those receiving medication alone, with significantly higher levels of short-chain fatty acids, glutamate, and GABA—key gut-derived metabolites [20]. In post-stroke depression, electroacupuncture targeting brain–gut–axis-related acupoints, when added to standard therapy, produced greater improvements in serum levels of gastrin (GAS), serotonin (5-HT), and brain-derived neurotrophic factor (BDNF), while reducing somatostatin (SS), leading to better recovery of neurological function and daily living ability [21].

Overall, clinical evidence demonstrates that acupuncture combined with medication exerts dual modulatory effects on both the central nervous system and gut microbiota. This "central–peripheral" multi-target mechanism promotes neurotransmitter balance (e.g., 5-HT, GABA), enhances neuroplasticity, and restores healthy microbiota composition and metabolite profiles. Such integrative regulation provides not only new insights into the pathophysiology of depression but also novel therapeutic pathways for its clinical management [22].

3. Clinical efficacy

3.1. Symptom improvement

Clinical studies consistently show that acupuncture combined with Chinese or Western medicine provides greater improvement in depressive symptoms than medication alone, and it is also effective for some treatment-resistant cases [23]. For example, in patients with post-stroke depression, combined therapy with herbal decoctions and antidepressants resulted in higher response rates, lower Hamilton Depression (HAMD) and Pittsburgh Sleep Quality Index (PSQI) scores, and better recovery of neurological function compared with drug treatment alone [24]. Similarly, in Alzheimer's disease patients with comorbid depression, acupuncture plus modified herbal prescriptions produced greater reductions in depressive scores and improved mental status compared with conventional pharmacotherapy [25]. These findings highlight the superior efficacy of integrated approaches, especially in complex cases with comorbidities where drug therapy alone is insufficient [26].

3.2. Quality of life

Beyond symptom relief, acupuncture–drug combinations significantly enhance patients' quality of life, particularly in domains such as sleep and digestion[27]. In peri-menopausal women with mood disorders, combination therapy outperformed either acupuncture or herbal medicine alone in reducing depressive scores and improving overall well-being [28]. In patients with depression and gastrointestinal dysfunction, acupuncture added to herbal therapy not only alleviated depressive symptoms and negative cognitive bias but also improved quality-of-life scores more effectively than herbal therapy alone [29]. This demonstrates that integrative therapy addresses both psychological and somatic aspects of depression, offering a more holistic benefit [30].

3.3. Special populations

Acupuncture combined with medication shows distinct advantages in populations with unique physiological or pathological features, such as adolescents, elderly post-stroke patients, and peri-

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menopausal women[31–32]. For adolescents, where drug response rates are lower and adverse effects are a concern, acupuncture plus herbal remedies tailored to liver–heart–kidney imbalances provides better outcomes [33–34]. In elderly patients with post-stroke depression, integrative therapy not only improves mood but also supports systemic recovery and reduces risks associated with pharmacotherapy [35–36]. For peri-menopausal women, acupuncture and herbal approaches that nourish liver and kidney function help restore hormonal balance and reduce side effects of antidepressants, thereby improving both efficacy and safety [37–38].

In summary, acupuncture combined with pharmacotherapy offers distinct advantages in enhancing clinical efficacy, improving quality of life, and providing safer, more personalized treatment for special populations. It represents a valuable complementary strategy for optimizing depression management.

3.4. Fewer adverse reactions

There are many approaches for the treatment of depression, including antidepressant medications, acupuncture, psychotherapy, and physical therapy. In addition to focusing on efficacy, treatment safety must also be considered. Acupuncture combined with pharmacotherapy has been shown to have fewer side effects [39].

Multiple clinical studies have confirmed that this combined approach offers both significant efficacy and a favorable safety profile. For example, in a randomized controlled trial involving 130 patients with post-stroke depression of the liver qi stagnation type, participants were divided into a group receiving conventional Western medicine and a group receiving acupuncture at the “Seven Acupoints at the Skull Base.” After four weeks, both groups showed reductions in PSQI scores, HAMD scores, and total scores of traditional Chinese medicine (TCM) syndromes, but the acupuncture group showed greater improvements. Additionally, serum IL-6 and homocysteine levels decreased, while 5-HT, gastrin (GAS), and brain-derived neurotrophic factor (BDNF) levels increased, with more favorable changes in the acupuncture group. These results indicate that acupuncture at the skull base points helps reduce inflammatory responses, regulate neurofactors, and improve cerebral blood flow, thereby enhancing clinical outcomes [40].

Another study randomized 90 patients with depression of the liver qi stagnation type into three groups of 30: control group 1 received oral escitalopram oxalate, control group 2 received escitalopram plus acceptance and commitment therapy, and the treatment group received acceptance and commitment therapy combined with acupuncture using the warming-supplementing method. After six weeks, the treatment group had a significantly higher total effective rate and greater reductions in HAMD scores compared with both control groups, demonstrating that acupuncture combined with psychotherapy provides effective symptom relief with good safety [41].

Similarly, a clinical trial compared paroxetine alone with paroxetine combined with umbilical acupuncture for patients with depression of the liver qi stagnation and spleen deficiency type. After six weeks, the combination group had lower HAMD-17 scores, self-rating depression scale scores, PSQI scores, and TCM syndrome scores than the paroxetine-only group. Importantly, the incidence of adverse reactions was also lower in the combination group, suggesting that umbilical acupuncture combined with paroxetine effectively alleviates depressive symptoms, improves sleep quality, and provides better safety than drug treatment alone [42].

In summary, acupuncture combined with pharmacotherapy demonstrates superior efficacy and a lower incidence of adverse effects compared with medication alone, highlighting its clinical value as a safer and more effective treatment strategy for depression [43].

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4. Innovative acupuncture–pharmacotherapy integration: the "hydrogel–chinese acupuncture" system

In recent years, the integration of modern technology with traditional acupuncture has led to the emergence of the innovative "hydrogel–Chinese acupuncture" system, which is gradually gaining attention. This technique applies hydrogel materials at acupuncture sites to enhance both the stimulation effects of needling and the localized absorption of drugs, thereby amplifying the therapeutic impact of acupuncture–pharmacotherapy combinations. Hydrogels possess excellent biocompatibility and sustained-release properties, enabling them to continuously release active drug components at the site of stimulation and extend the therapeutic duration of acupuncture.

Furthermore, hydrogels can modulate the local microenvironment, promote neurotransmitter release, and regulate neurochemical balance, thus reinforcing the synergistic interactions between acupuncture and pharmacological treatment [44]. Such integration offers several potential advantages: (1) improved targeting and precision of drug delivery, (2) enhanced stability and persistence of acupuncture stimulation, and (3) the possibility of customizing hydrogel formulations for different subtypes of depression. Although still in its early stages, this hybrid approach exemplifies how advances in biomaterials and microengineering can modernize traditional therapies and create novel multi-modal strategies for complex psychiatric disorders such as depression.

5. Conclusion

Acupuncture combined with pharmacotherapy significantly enhances antidepressant efficacy through multi-target regulatory mechanisms, including modulation of monoamine neurotransmitters, restoration of hypothalamic–pituitary–adrenal (HPA) axis balance, reduction of pro-inflammatory cytokines, and regulation of the brain–gut axis. At the same time, this integrative approach reduces the incidence of adverse reactions commonly associated with pharmacotherapy alone, highlighting its favorable safety profile.

Despite these promising outcomes, the clinical application of acupuncture–drug combination therapy still faces challenges. Standardization and protocol consistency remain insufficient, with a lack of unified operating procedures and therapeutic guidelines, which limits individualized treatment and broader adoption in routine practice.

Future research should prioritize the standardization of traditional Chinese medicine (TCM) protocols, the optimization of efficacy evaluation systems, and the inclusion of more diverse patient populations in clinical trials. Moreover, further exploration of the mechanistic underpinnings—particularly in emerging areas such as biomaterial-assisted acupuncture (e.g., hydrogel systems)—will be essential for advancing both theoretical understanding and clinical translation. By bridging traditional therapeutic wisdom with modern biomedical innovations, acupuncture–pharmacotherapy combination therapy has the potential to evolve into a scientifically robust, safe, and effective strategy for the treatment of depression.

References

[1] Wang XH, Tang L, Pan M. Application of exercise intervention in the treatment of depression. Int J Psychiatry, 2024, 51(04): 1023–1025.
[2] Santomauro DF, Herrera AMM, Shadid J, et al. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. Lancet, 2021, 398(10312): 1700–1712.
[3] Han QL, Lu WJ, Li SD. Advances in treatment methods for refractory depression. Chin J Min Kang Med, 2017, 29(13): 53–55, 90.

DOI: 10.54254/2753-8818/2025.AU27583

[4] Li QJ, Huang XY, Ke LS, et al. Overview of treatment methods for depression. Sichuan Ment Health, 2014, 27(04): 6–8.
[5] Zhou SH, Sun LM, Sun Q, et al. Progress in psychotherapy for postpartum depression. J Clin Psychosom Dis, 2024, 30(06): 123–125.
[6] Chen LZ, Wang LL. Analysis of the advantages of acupuncture combined with pharmacotherapy in treating depression. J Clin Acupunct Moxibustion, 2011, 27(06): 55–58.
[7] Pu ZY, Gu Y, Dong Q, et al. Analysis of immune regulatory mechanisms of acupuncture for depression. Henan Tradit Chin Med, 2016, 36(09): 1631–1633.
[8] Zhang XD. Effects of acupuncture combined with medicine on peri-menopausal depression and neurotransmitters. Mod Med Health Res Electron J, 2019, 3(12): 45–46.
[9] Zhang J, Wang W, Wu HH, et al. Clinical observation of 60 cases of post-stroke depression treated with Jieyu Tongluo Decoction combined with electroacupuncture. World Latest Med Inf, 2015, 15(94): 52–53, 59.
[10] Luo Q, Xie HW, Xu FM, et al. Clinical efficacy of acupuncture bleeding combined with fluoxetine in depression and its effect on serum cytokines. Chin J Gerontol, 2013, 33(03): 526–528.
[11] Feng H, Liu Y, Yu ZH, et al. Enhancing effect of Shugan Yangxin acupuncture combined with SSRIs in depression and influence on inflammatory cytokines. Chin Gen Pract, 2015, 18(30): 3722–3726.
[12] Liu Y, Feng H, Mo YL, et al. Acupuncture enhances SSRI antidepressant therapy by regulating Th1/Th2 balance. J Chin Med Pharm, 2014, 32(08): 1927–1929.
[13] Lin H, Yu ZF, Kang FH. Study on acupuncture–drug combination in regulating Th1/Th2 balance in depression patients. J Clin Acupunct Moxibustion, 2014, 30(07): 1–3.
[14] Jing ZX, Liang PX, Han XM, et al. Postbiotic Lactobacillus plantarum IOB602 regulates neuroendocrine and intestinal microecology to improve depressive-like behavior in mice. Food Sci, 2025: 1–16.
[15] Wang WL, Gu JH, Wang J, et al. Clinical study of “Yiqi Zhouliu” acupuncture combined with levothyroxine in hypothyroidism with liver qi stagnation. Chin Med Herald, 2023, 29(12): 57–61.
[16] Zhou J, Dong YQ, Wang YN, et al. Observation of efficacy of acupuncture combined with pharmacotherapy in mild-to-moderate depression. Shanghai J Acupunct Moxibustion, 2021, 40(11): 1312–1317.
[17] Lei BL, Xie ZY, Yuan FG. Progress in acupuncture for depression. World Complex Med, 2022, 8(08): 192–194, 198.
[18] You YJ, Han XL, Zheng XJ, et al. Progress in bidirectional interaction research between gut microbiota and brain. J Shanghai Jiaotong Univ (Med Ed), 2017, 37(02): 253–257.
[19] Li LQ, Tan JJ, Liu YY, et al. Exploring “Yishu Tiaoshu” for GERD comorbid depression based on the microbiota–gut–brain axis. Chin J Integr Digestion, 2025, 33(03): 281–286.
[20] Zhang XQ, Chen WL, Yang B, et al. Effect of Buxin Yipi therapy on postpartum depression with heart–spleen deficiency based on gut–neurotransmitter–brain axis. J Guangzhou Univ Tradit Chin Med, 2025, 42(01): 124–131.
[21] Jiang YF, Pan JH, Wu JX, et al. Clinical efficacy of acupuncture for post-stroke depression based on brain–gut axis theory. Shanghai J Acupunct Moxibustion, 2024, 43(10): 1105–1111.
[22] Lu JW. Clinical study of acupuncture for depression based on brain–gut axis theory. Bright Chin Med, 2021, 36(01): 108–112.
[23] Ma YX, Zhu YX, Ning Y, et al. Progress in acupuncture treatment of depression. J Clin Acupunct Moxibustion, 2023, 39(03): 106–109.
[24] Hong L, Yang YF, Fang WJ, et al. Effect of Yiqi Huayu Xingnao Decoction on acute post-stroke depression and neurotransmitter imbalance. J Chin Med Pharm, 2021, 39(11): 178–181.
[25] Xie B, Huang ZY, Lin DD, et al. Effect of acupuncture–drug combination on depression symptoms in Alzheimer’s disease. Acta Neuropharmacol, 2020, 10(05): 5–8.
[26] Peng HY, Ma MY, Gong XH, et al. Systematic review and meta-analysis of acupuncture–drug combination for geriatric depression. Shanghai J Acupunct Moxibustion, 2022, 41(03): 297–308.
[27] Chen Q, Liao Y. Comparison of acupuncture–drug combination versus drug therapy in depression. Chin Pract Med, 2020, 15(06): 175–177.
[28] Pan L, Tang WL, Yun XQ, et al. Clinical study of acupuncture–drug intervention for peri-menopausal women with mood disorders. Ningxia Med J, 2021, 43(11): 1026–1028.
[29] Wu Y, Ainiwa S, Gao SS, et al. Clinical efficacy of acupuncture combined with Xiaoyao Powder and Banxia Houpu Decoction for depression with liver qi stagnation and spleen deficiency accompanied by gastrointestinal dysfunction. Mod Biomed Progress, 2024, 24(05): 873–877, 909.
[30] Wang LJ. Clinical observation on Xingnao Kaiqiao and Shugan Jianpi therapy for post-stroke depression. World Latest Med Inf, 2019, 19(40): 13–14.

DOI: 10.54254/2753-8818/2025.AU27583

[31] Xue J, Ma WB, Tu H, et al. Progress on characteristics of depression in different populations and folic acid intervention. Chin Contemp Med, 2022, 29(16): 53–56.
[32] Liu H, Luo QH. Pathogenesis and treatment progress of adolescent depression. Great Doctor, 2024, 9(03): 141–144.
[33] Wang YZ, Lu H, Gao XY, et al. Comparative study of clinical efficacy of acupuncture and medication for primary depression. West Chin Med, 2020, 33(05): 145–148.
[34] Wen SQ, Li ZK, Amina SJH, et al. Progress in TCM treatment of adolescent depression. Bright Chin Med, 2024, 39(20): 4231–4234.
[35] Feng GY, Lin JJ, Xu ZW, et al. Progress in TCM treatment of geriatric depression. Pop Sci Tech, 2022, 24(02): 89–92.
[36] Zhang J, Li J, Huang XZ, et al. Community-based study on efficacy and influencing factors of acupuncture–drug combination for geriatric depression. Chin Foreign Med Care, 2017, 36(04): 1–2, 5.
[37] Wang JX, Zhai ZG, Lu Y. Progress in TCM treatment of peri-menopausal depression. Chin J Basic Med Tradit Chin Med, 2023, 29(04): 675–678.
[38] Wang XL, Li ZH, Ma XM. Progress in acupuncture–drug combination for peri-menopausal depression. Mod Tradit Chin Med, 2021, 41(06): 1–5.
[39] Duan DM, Tuya, Chen LP. Evaluation of electroacupuncture combined with paroxetine for depression with somatic symptoms. Chin Acupunct Moxibustion, 2008, (03): 167–170.
[40] Ling MX, Chen F, Zhang R. Effect of acupuncture at “Seven Acupoints at the Skull Base” on IL-6, Hcy, BDNF and neurotransmitters in post-stroke depression patients with liver qi stagnation. Shandong J Tradit Chin Med, 2024, 43(11): 1255–1260.
[41] Yu JQ, Mei C. Clinical observation of acceptance and commitment therapy combined with acupuncture warming-supplementing method in liver qi stagnation depression. Shanxi J Tradit Chin Med, 2023, 39(07): 35–37.
[42] Zheng W, Ye ZD, Ye XW, et al. Clinical study of umbilical acupuncture combined with paroxetine for depression with liver qi stagnation and spleen deficiency. New Chin Med, 2024, 56(22): 120–123.
[43] Bai SY, Wang RQ, Song ML, et al. Clinical observation on Mongolian medicine acupuncture–drug combination for depression. Chin J Ethnomed, 2021, 27(03): 1–4.
[44] Lin F, Wang Z, Xiang L, et al. Transporting hydrogel via Chinese acupuncture needles for lesion positioning therapy. Adv Sci, 2022, 9(17): 2200079.