REVIEW ARTICLE

Exploring Traditional Chinese Medicine for Non-Suicidal Self-Injury: A Narrative Review

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ABSTRACT

Background • Non-suicidal self-injury (NSSI) is both a single syndrome and a manifestation of other mental illnesses. Antidepressant drugs not only have no therapeutic effect but also aggravate or trigger self-injurious behavior in adolescents, making their treatment difficult.

Primary Study Objective • To explore Traditional Chinese Medicine (TCM) based approaches (alone or in combination with Western medicine) to treat and manage NSSI, and evaluate its prospects as an effective alternative treatment.

Methods/Design • The study is a narrative review**.** The Chinese Biomedical Database (CBM), China National Knowledge Infrastructure (CNKI), WANFANG, and Chinese Social Sciences Citation Index (CSSCI) in the Chinese database, and the PubMed database in English were searched for relevant studies. The retrieval words were non-suicidal self-injury and Traditional Chinese Medicine. The retrieval relationship is OR/AND. Studies were selected based on inclusion and exclusion criteria.

Setting • The study was carried out in Zhejiang Provincial Mental Health Center.

Participants • The subjects of the studies included in this narrative review.

Intervention • TCM-based diagnostic and treatment approaches.

Primary Outcome Measures • To assess the etiology, pathogenesis, and clinical syndrome of NSSI within the scope of TCM.

Results • NSSI is considered an emotion-thought disorder. The TCM-based approach encompasses the study of the clinical syndrome of NSSI, including the use of animal models of NSSI, diagnosis of the syndrome using an appropriate evaluation scale, and treatment using TCM-based therapeutics.

Conclusion • The study methods of TCM for NSSI have been proposed. According to the principles of TCM, NSSI belongs to the "Depression" syndrome. The incorporation of TCM in diagnosing and treating NSSI can improve the outcomes. (*Altern Ther Health Med.* 2025;31(5):226-229).

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INTRODUCTION

Background

Non-suicidal self-injury is both a single syndrome and a manifestation of other mental illnesses. It is difficult to treat, mainly because the widely used antidepressant drugs not only have no therapeutic effect but also aggravate or trigger self-injurious behavior in adolescents. Therefore, it is meaningful to explore the view of traditional Chinese medicine in treating non-suicidal self-injury, and to evaluate its prospects as an effective treatment method.

Importance of the Topic

Non-Suicidal Self-Injury (NSSI) refers to deliberate and repeated acts of damaging one's body tissue without suicidal intent, such as cutting, burning, scratching, or hitting oneself. The core features of this behavior are "non-lethality" and "intentionality" (e.g., to alleviate emotional distress). This is a special mental disorder characterized by higher prevalence and harmfulness. Lack of an effective treatment is a problem

faced in clinical psychiatric practice. Reportedly, acts of repetitive NSSI are more common than occasional NSSI.[1,2]

The overall prevalence of NSSI in nonclinical samples of adolescents is similar throughout life (22.0%, 95% CI 17.9-26.6) and within 12 months (23.2%, 95% CI 20.2-26.5). The first three types of NSSI in adolescents are tapping/striking (12.0%, 95% CI 8.9-15.9), pinching (10.0%, 95% confidence interval 6.7-14.8), and pulling hair (9.8%, 95% confidence interval 8.3-11.5), with the least common type being swallowing drugs/toxic substances/chemicals (1.0%, 95% CI 0.5-2.2). Subgroup analysis shows that being female, smoking, drinking, having brothers and sisters, and belonging to single-parent families are linked to the higher prevalence of NSSI.[2]

The key features of NSSI include an absence of suicidal intent, behavior aimed at coping with psychological distress rather than ending life, repetitiveness (typically manifests as a chronic, recurrent behavioral pattern, not isolated incidents), secrecy (individuals often conceal injuries (e.g., covering wounds with clothing), and often an experience accompanying shame.[3,4,5]

The Research Gap

Traditional Chinese Medicine (TCM) emphasizes a holistic approach, analyzing and considering the causes and treatment of NSSI from social, psychological, biological, and environmental perspectives. Although Western medicine also believes that social and psychological factors are involved in the onset of the disease, it is mostly based on addressing symptoms, especially with the widespread use of antidepressants, which are known to have adverse effects.[5]

Research Conducted

TCM has many therapeutic methods, including drug and non-drug treatments, which are based on the principle of differential diagnosis and treatment. In the current standard model that integrates Chinese and Western medicine, diagnosis based on Western medicine is followed by TCM-based differential diagnosis. Thereafter, the appropriate TCM therapeutic method is selected.

The first step in diagnosis and treatment based on Chinese and Western medicine aims to establish a Western medicine-based diagnosis. Diagnostic Criteria (based on DSM-5 Proposed Criteria)[6] include:

(1) Behavioral Presentation: Frequency: Deliberate self-inflicted injury resulting in superficial or mild tissue damage (e.g., bleeding, bruising, etc.) on ≥5 days within the past year. Exclusion: The behavior is not better explained by another mental disorder (e.g., psychotic disorders, intellectual disability, etc.).

(2) Behavioral Intent: Motivations: At least one of the following must be present: (a) Relief of negative emotions/cognitive states (e.g., anxiety, self-criticism, etc.). (b) Resolution of interpersonal difficulties (e.g., eliciting reactions from others). (c) Absence of Suicidal Intent: No intent to die during the act of self-injury.

(3) Associated Psychological/Social Features: Triggers: Interpersonal conflicts or intense negative emotions (e.g., depression, tension, etc.) preceding the self-injury. Preoccupation: Persistent rumination or urges about self-harm (e.g., frequent thoughts about the behavior).

(4) Clinical Significance: Impairment: Causes clinically significant distress or interferes with social, academic, or occupational functioning. Non-Cultural: Not culturally sanctioned (e.g., tattooing, piercings, etc.) or driven by delusions/hallucinations.

(5) Exclusion Criteria: Rule Out: Suicide attempts, substance intoxication, intellectual disability, or direct manifestations of other mental disorders (e.g., BPD, autism spectrum disorder, etc.)

METHODS

The Chinese Biomedical Database (CBM), China National Knowledge Infrastructure (CNKI), WANFANG, and Chinese Social Sciences Citation Index (CSSCI) in the Chinese database, and the PubMed database in English were used to retrieve relevant studies. The retrieval words were non-suicidal self-injury and Traditional Chinese Medicine. The retrieval relationship is OR/AND. The relevant information was selected by careful screening based on inclusion and exclusion criteria.

Inclusion criteria. (1) Article explaining the etiology and pathogenesis of NSSI from the perspective of TCM. (2) Article explaining NSSI syndrome from the perspective of TCM. (3) Articles on NSSI treatment research from the perspective of TCM. (4) Articles on the NSSI concept and diagnostic criteria. (5) Articles on future research directions for NSSI.

Exclusion criteria. At present, there are many articles on NSSI-related research, and articles on general descriptions of NSSI are excluded.

This study included three Chinese articles related to NSSI and traditional Chinese medicine, consisting of articles explaining the etiology, pathogenesis, and syndrome types from the perspective of traditional Chinese medicine. Eleven English articles about NSSI concepts, definitions, diagnostic criteria, and treatment were included. Thus, we conducted a narrative review of 14 studies.

RESULTS

While there is no direct equivalent diagnosis for NSSI in classical TCM, its manifestations can be interpreted through holistic theory and "syndrome differentiation and treatment", integrating analyses of emotional states, organ systems, and Qi-Blood dynamics. Below are key TCM interpretations.

Prospects of TCM for NSSI

Etiology and Pathogenesis: Emotional Disturbances Leading to Qi Stagnation: TCM identifies "excessive emotions" as a core etiology, particularly emphasizing "worry, suppressed anger, sorrow, and fear". Chronic emotional distress impairs the liver's function of free flow, causing qi stagnation. This stagnation can transform into heat or lead to

blood stasis, resulting in symptoms such as irritability and self-harming behaviors.[7,8]

The Huangdi Neijing states: "All diseases arise from the disruption of qi". Emotional suppression leads to qi stagnation, which may manifest as self-harming behaviors as a maladaptive attempt to release pent-up pressure.

Organ Dysfunction and Imbalance: Heart: The heart governs the mind and spirit. Excessive heart fire or insufficient heart blood can lead to restlessness of the spirit and uncontrolled anxiety.

Liver: Liver qi stagnation and impaired regulation of qi flow can generate stagnant heat, manifesting as impulsive and irritable behavior.

Spleen: Spleen deficiency leads to insufficient production of qi and blood, failing to nourish the spirit. It may also result in internal phlegm-dampness, which can obstruct the clear orifices.

Kidney: Kidney essence deficiency causes insufficient marrow, affecting brain function and exacerbating emotional instability.[7,8,9]

Interconnection of Qi, Blood, Phlegm, and Stasis: Qi stagnation and blood stasis, phlegm-fire disturbing the spirit, or deficiency of both qi and blood can lead to physical pain or numbness. Patients may resort to self-harming behaviors to distract themselves, thereby creating a vicious cycle.[7,8,9]

Study Methods and Strategies for TCM in NSSI

Study of Syndromes Using TCM Approach. Studying syndromes is the foundation of clinical therapeutics and embodies the principle of "pattern differentiation and treatment" in TCM. However, as a condition without specific nomenclature in TCM, the study of NSSI syndromes may present certain challenges. In the research process transitioning from disease to syndrome, the integration of TCM and Western medicine has consistently followed a disease-oriented approach, implying that Western medical diagnoses are established first, followed by the study of common syndromes using the TCM approach. This method allows for a more accurate identification of common syndromes associated with NSSI, providing a basis for TCM interventions, including herbal medicine, acupuncture, and other non-pharmacological therapies.

Study of syndromes using the principles of TCM facilitates theoretical research on the etiology and pathogenesis of NSSI. Since NSSI lacks diagnostic terminology and concepts in TCM, its classification into depressive disorders, epileptic disorders, or manic disorders requires a comprehensive analysis of symptoms, tongue manifestations, and pulse conditions. Preliminary research findings suggest that NSSI is predominantly associated with depressive disorders, with a smaller proportion linked to epileptic or manic disorders.

Study on TCM Therapeutics. TCM therapeutics encompasses both pharmacological and non-pharmacological interventions. Pharmacological treatments primarily involve herbal decoctions, while non-pharmacological approaches include acupuncture, massage therapy, psychological counseling, and dietary therapy. Pharmacological interventions play a central role. The formulation of an herbal decoction is based on syndrome differentiation, suitably tailored to individual patient characteristics through the addition or subtraction of specific herbs, resulting in a targeted and effective therapeutic prescription. Research can be conducted on the components of published or unpublished herbal formulas to optimize pharmacy compositions, thereby better reflecting the TCM principle of "pattern differentiation and treatment" and improving patient outcomes.

Non-pharmacological interventions such as acupuncture, massage therapy, and psychological counseling are often more readily accepted by patients. These methods can be selected individually or combined to address emotional, cognitive, behavioral, sleep problems, and dietary issues in NSSI patients. Additionally, non-pharmacological therapies can be integrated with herbal or conventional Western medications for comprehensive treatment strategies.

TCM Evaluation Scale for NSSI. Establishing evaluation scales is a key step in diagnosing and assessing the severity of psychological disorders. Some of the evaluation scales for NSSI include NSSI Decisional Balance (NSSI-DB), Processes of Change (NSSI-POC), Self-Efficacy (NSSI-SE), and the Ottawa Self-injury Inventory (OSI). However, none of them contain TCM characteristics or TCM indicators. So, these scales only assess the non-TCM part. Ideally, the TCM evaluation scale for NSSI should fulfill at least the following criteria:[10,11] (1) It should comprehensively reflect the TCM syndrome diagnosis, which requires the assessment of symptoms, tongue appearance, and pulse conditions. (2) It should reflect the severity of NSSI, which is determined by the patient's subjective experience and behavior. (3) It should have the function of TCM syndrome diagnosis. After the evaluation is completed using the scale, one should be able to diagnose the type of syndrome as per TCM principles. However, this would require the support of artificial intelligence. (4) The scale should have the basic characteristics, including good reliability and validity.

Study of Animal Models of NSSI Using TCM Approach. The establishment of animal models is conducive to elucidating the etiology and pathogenesis, and provides supporting data for treatment. Although self-injurious behavior is a common comorbid behavioral problem among individuals with neurodevelopmental disorders, little is known about its etiology and underlying neurobiology. Interestingly, it shows up in various forms across patient groups with distinct genetic errors and diagnostic categories. This suggests that there may be shared neuropathology that confers vulnerability in these disparate groups. Convergent evidence from clinical pharmacotherapy, brain imaging studies, postmortem neurochemical analyses, and animal models indicates that dopaminergic insufficiency is a key contributing factor. Devine (2019) provided an overview of studies using animal models to investigate the biochemical basis of self-injury. The study highlighted the convergence in

findings between these models and the expression of self-injury in humans.[12]

DISCUSSION

NSSI was considered as Yubing (Depression, one of the emotion-thought disorders). The study methods in TCM were laid out in clinical syndrome, suitable therapeutics, an evaluation scale, as well as an animal model of non-suicide self-injury, of which the NSSI syndrome in TCM is very important. In clinical practice, pharmacological and non-pharmacological methods in TCM are usually integrated based on the improvement of NSSI symptoms.

Clinical psychiatric practice integrates Chinese and Western medicine. One of the key objectives of this is to stabilize emotions in a relatively short period, which is conducive to controlling repetitive self-injury quickly. In this case, Western drugs such as lithium carbonate may stabilize emotions and reduce self-injury. Other drugs commonly used include mood stabilizers and certain atypical antipsychotic drugs.[13] However, not all drugs are beneficial in improving non-suicidal self-injury. Examples include antidepressants that can be counterproductive.[14]

CONCLUSION

The methods of studying NSSI using TCM-based approaches have been discussed. The non-suicidal self-injury belongs to "Yubing" (Depression) in TCM. TCM may serve as an effective, alternative, and complementary therapy in NSSI, especially when integrated with Western medicine. In China, TCM therapy is increasingly used in the treatment of NSSI, and satisfactory therapeutic outcomes have been achieved. We recommend the use of TCM-based approaches for clinical diagnosis and treatment of NSSI by psychiatrists and psychologists.

FUNDING

This study was supported by the Peak Subject of Psychiatry, Tongde Hospital of Zhejiang Province (PSP2025-009).

CONSENT TO PUBLICATION

All authors agree to publish the manuscript.

COMPETING INTERESTS

There are no financial or non-financial competing interests.

AUTHOR'S CONTRIBUTION

Our authors have different contributions to this article and study. Dr. Chen Zhehao and Dr. Jin Weidong participated in the collection of references and wrote the draft. Other authors participated in reference review work. Prof. SFL and Prof. JWD participated in the design and final review of the article.

ACKNOWLEDGMENT

We thank Prof. Li Guorong and Lin Yong (Jiaxing University) for sharing with us the study idea and Mr. Wang Zhiqiang (Tsinghua University) help us in literature retrieval and review. We thank Prof Ma Yongchun (Zhejiang Province Mental Health Center) for the final revision of the article.

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