

Diagnosis and assessment of non-suicidal self-injury in the background of integrated Traditional Chinese Medicine and Western Medicine

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Introduction

Non-Suicidal Self-Injury (NSSI) is a behavior characterized by intentional physical harm to one's body (e.g., cutting, burning, or hitting) as a means of alleviating psychological distress, or/and attracting others' attention, or/and seeking help from others, without the real intent of suicide [1]. Due to its special existence, it has a negative impact on both psychology and physiology, and intervention and treatment are obviously necessary, appropriate, and timely [2]. In the context of integrated Traditional Chinese Medicine (TCM) and Western Medicine (WM) treatment should be centered on psychological intervention, complemented by pharmacological treatments and holistic TCM modalities, forming a multidimensional intervention strategy.

Under the framework of combined TCM and WM diagnosis and treatment, the diagnosis and assessment of NSSI serve as prerequisites for effective therapeutic intervention. This requires integrating perspectives from modern medicine, including psychology, psychiatry, sociology, and biology, with the holistic view and syndrome differentiation-based treatment principles of TCM. Such integration forms a comprehensive, multidimensional diagnostic and assessment framework to support therapeutic efforts.

Diagnosis and assessment from the perspective of Western Medicine

The DSM-5 classifies NSSI as a "Condition Requiring Further Study" with the following diagnostic guidelines [3].

Behavioral presentation

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

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Behavioral intent

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

Associated psychological/social features

- **Triggers:** Interpersonal conflicts or intense negative emotions (e.g., depression, tension) preceding the self-injury.
- **Preoccupation:** Persistent rumination or urges about self-harm (e.g., frequent thoughts about the behavior).

Clinical significance

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

Exclusion criteria

- **Rule out:** Suicide attempts, substance intoxication, intellectual disability, or direct manifestations of other mental disorders (e.g., BPD, autism spectrum disorder).

Assessment tools

Psychological assessment

Utilization of standardized scales to quantify the frequency, motivation, and emotional states of behaviors. These scales conclude Non-Suicidal Self-Injury Assessment Questionnaire [4], Adolescent Self-Injury Behavior Scale and the Ottawa Self-injury Inventory (OSI) [5], Alexian Brothers Urge to Self-Injure Scale (ABUSI) and the Impulse, Self-harm, and Suicide Ideation Questionnaire for Adolescents (ISSIQ-A) [6]. The Transtheoretical Model of change (TTM) has been useful in predicting behavior change [7]. At this basis, three scales were established, which are NSSI-Decisional Balance (NSSI-DB), NSSI-Processes of Change (NSSI-POC), and NSSI-Self-Efficacy (NSSI-SE) [7].

Psychiatric assessment

Comorbidity Screening, Assessment, and Diagnosis: NSSI (nonsuicidal self-injury) is often not an isolated condition but frequently coexists with other mental disorders and may even be a significant manifestation of other psychiatric conditions, such as depression, bipolar disorder, and Post-Traumatic Stress Disorder (PTSD). Clearly, these conditions not only require primary diagnosis but also necessitate assessment using relevant scales to assist in diagnosis or evaluate severity. HCL-32 and MDQ are diagnostic scale for bipolar disorder [8]. There's common scale of HAMA and HAMD for severity assessment of anxiety and depression.

Functional assessment

Functional assessment mainly focuses on the impact of NSSI and the disease it belongs to on interpersonal relationships, social function, occupational level, and family function, which to some extent reflects the severity of NSSI and the disease to which it belongs. In the process of psychological intervention or

drug treatment, the restoration of these damaged functions is an important indicator of successful treatment [9]. In addition to the evaluation of the family function of the patient, the family structure and family function of the patient's relatives, especially father and mother should also be evaluated [10].

Biological examination

Just as when a patient is admitted to the hospital, a comprehensive physical examination and laboratory examination should be conducted. In particular, hormones, indicators of oxidative stress, and imaging of the brain related to mental illness should be the focus of attention. It also includes descriptions of self-harm injuries.

Identification of high-risk factors

The main judgment is the possibility of transition from self-injury to suicide. Some patients swallow a large amount of drugs or foreign objects, which need to be removed or washed out. This judgment needs to be accurate.

Diagnosis and assessment from the perspective of TCM [11-13].

Holistic view and constitution identification

Constitution classification: TCM believes that traditional body constitution is one of the important foundations for the occurrence and development of diseases. Focus on identifying constitutions prone to emotional imbalance, such as Qi stagnation, Blood stasis, and phlegm-dampness types.

Emotional pathogenesis theory: Analyze the pathogenesis of self-injurious behaviors by integrating the "Seven Emotions Internal Injury" (e.g., liver Qi stagnation, excessive heart fire).

Disease identification and TCM syndrome type

Disease identification

Disease Identification is first steps of clinical diagnosis in TCM, which means that the disease belongs to which classification. Although NSSI belongs to psychosomatic diseases in TCM, it has some characteristics of diseases of the spleen and stomach and the heart, which need to be carefully identified.

Differentiation of syndromes in TCM

- Differentiation of syndromes is basis of TCM therapy. This is the famous dialectical treatment of TCM. In general, NSSI may have the following TCM syndromes.
- Liver Qi stagnation syndrome: Emotional suppression, chest oppression and hypochondriac pain, dark red tongue, wiry pulse.
- Heart-spleen deficiency syndrome: Palpitations, forgetfulness, fatigue, pale tongue with white coating, thin and weak pulse.
- Phlegm-fire harassing shen syndrome: Irritability, insomnia with many dreams, red tongue with yellow and greasy coating, slippery and rapid pulse.
- Qi and blood stasis syndrome: Local pain, purplish skin, dark purple tongue or with stasis spots.

Integration of the four diagnostic methods in TCM

- **Inquiry:** Focus on emotional fluctuations, family relationships, and triggering events.

- **Tongue/Pulse diagnosis:** Combine tongue appearance (e.g., redness on the tongue edges and tip indicates liver stagnation transforming into fire) and pulse conditions (e.g., a wiry pulse suggests liver stagnation) to aid in pattern differentiation.
- **Meridian examination:** Check for tenderness or nodules in specific acupoints (e.g., Taichong, Neiguan), which reflect organ imbalance.

Diagnosis and assessment from the perspective of integrity of TCM and WM

Multidimensional integration model

Biopsychosocial model: Western medicine evaluates behavioral characteristics and psychological state, TCM analyzes constitution and organ dysfunction, combined with social and family environmental factors.

Dynamic assessment: Monitor intervention effects dynamically via scales (Western medicine) and the four diagnostic methods (TCM), and adjust treatment plans accordingly.

Comorbidity and risk stratification

- **Suicide risk identification:** Western medicine uses the Columbia-Suicide Severity Rating Scale (C-SSRS), while TCM judges the loss of mental vitality through the state of “spirit” (e.g., dull gaze, incoherent speech).
- **Somatic comorbidity management:** For self-injury-induced infection, Western medicine treats the wound, and TCM aids anti-inflammation with heat-clearing and detoxifying therapy (e.g., Coptis, Honeysuckle).

Cultural sensitivity assessment

- Combine the patient’s acceptance of TCM and Western medicine, and avoid assessment deviations caused by cultural differences (such as the stigmatization of emotional issues).

Notes

Building a doctor-patient trusting relationship

NSSI patients often have shame, need to build a therapeutic alliance through empathetic communication (Western medicine) and “treat Shen” (TCM).

Family system evaluation

This evaluation system Include family function evaluation (Western medicine) and “family-liver-emotional” correlation analysis (TCM) to identify family dynamics influences.

Long-term follow-up: Develop a follow-up plan with integrated TCM and Western medicine, and monitor relapse risks (e.g., the impact of seasonal changes on emotions).

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