Shenzhi Theory: A Clinical Model of the Mind and Mental Illness in Chinese Medicine

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ABSTRACT

The term *shenzhi* means 'spirit-mind' and refers to the five spirits (*shen, hun, po, yi, zhi*) of early Chinese medical theorising. The theory of *shenzhi* provides a conceptual model that helps to explain Chinese medicine's perspective on human consciousness and body-mind physiology. Each of the five spirits (*wushen*) governs certain aspects of mentality and is closely related to sensory faculties, body tissues, visceral systems, and physiological substances. Orderly, integrated *wushen* activities provide the human organism with its distinctive array of mental and sensory abilities including intelligence, insight, attention, and memory. When these physiological activities and relationships are disrupted, a variety of common or more serious disorders may result. Broadly speaking, they are 'mind' or 'mental' disorders – *shenzhi bing*. We discuss some of these to illustrate the diagnostic relevance of *shenzhi* theory for the Chinese medical clinic today. Analysis of their signs and symptoms allows the practitioner to identify disordered *wushen* activities. A brief discussion of psychological classifications, pathomechanisms and treatment examples is included to help link the theory to contemporary clinical presentations.

KEYWORDS Chinese medicine, consciousness, diagnosis, mental disorders, mind, neurosis, perception, physiology, psychology, psychosis.

Introduction

The Chinese medical view of mentality and mental disorders is not a strong feature of its classical discourses, and instances where the Chinese medical perspective does not correspond with contemporary medical and psychiatric nosologies are not uncommon. ¹⁻³ Areas of theoretical disparity between traditional Chinese and contemporary Western medicines provide a point of interest and challenge for clinicians. For example, rather than a Cartesian separation of the physical and mental, Chinese philosophy emphasises the 'one *qi* running through heaven and earth', ⁴ and Chinese medicine assumes an integrated body-mind. Consequently, TCM physiology

emphasises the functional links between its visceral systems and their associated substances, tissues, sense organs, and spirits. In this paper we will demonstrate how the contemporary traditional Chinese medicine (TCM) practitioner can analyse and interpret the signs and symptoms of mental disorder as they appear in the Chinese medical classics, and as they present in their clinics today, using frameworks such as *shenzhi* (神 志) theory.

Until the latter part of the Ming Dynasty (1368–1644), Chinese scholar-physicians were mostly content to elucidate and expand upon the illness categories and pathomechanisms described during the Han Dynasty (206 BCE – 220 CE) by the

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Huangdi Neijing (黄帝内经, Yellow Emperor's Inner Canon, c. 160 BCE) authors and Zhang Zhongjing (张仲景, 150–219 CE). Flaws and Lake³ and Rossi⁵ discuss the contributions of the Jin-Song-Yuan (265–1368) masters such as Huangfu Mi (皇甫谧), Sun Simiao (孙思邈), Li Dongyuan (李东垣) and Zhu Danxi (朱丹溪). But categories with explicit connotations of mental disorders only began to appear in the Chinese medical literature in the late sixteenth century. An influential scholar-physician of that time was Wang Kentang (王肯堂, 1549–1613). His Standards of Patterns and Treatments (Zheng Zhi Zhun Sheng, 证治准绳, 1602) contains a treatise on 'mind category' (shenzhi men, 神志门), which incorporates over a dozen mental illness terms together into a category whose name 'draws attention to the mental character of the disorders'.²

Wang and other writers of the late Ming gathered together previously scattered and miscellaneous references to the mind and emotional disorders to provide a systematic survey of the topic. In his discussion of shenzhi men, Wang includes disorders such as withdrawal (dian 癫), mania (kuang 狂), epilepsy (xian 痫), the seven emotions (qiqing 七情), depletion-vexation (xufan 虚烦), irritation (zao 躁), fright (jing 惊), and heart palpitations (xinji 心悸). Wang quotes extensively from classic texts such as the Suwen (素问), Lingshu (灵枢), Nanjing (难 经), Maijing (脉经), Jingui Yaolue (金匮要略), and Qianjin Yaofang (千金要方), and his writings generally stressed the importance and authority of these ancient classics over the later medical canons. 2,6 Whilst contemporary TCM texts employ a number of terms that refer to the mind (for example, xin 心, shen 神, zhi 志, xinshen 心神, jingshen 精神), from the late Ming, terms such as qingzhi (情志, emotions) and shenzhi (神 志, mind) gained wide acceptance.

The basis of *shenzhi* theory discussed here is the five visceral systems and their associated spirits, which can be found in the *Huangdi Neijing*, especially the eighth chapters of the *Suwen* and *Lingshu*. The reception and interpretation of sensory information relies on these systems and is an important feature of spirit activities and Chinese medicine's perspective on human consciousness.

In the next section, which is on the 'Body-Mind', we use the *Neijing*'s 'five spirits' (wushen 五神) model to briefly summarise shenzhi theory and the wushen associations. The following sections then examine Shenzhi Bing (神志病 mind disorders) and their pathomechanisms, and, finally, treatment examples are given to link one of the more common pathomechanisms with appropriate therapeutic strategies. The examples of shenzhi disorders, disease names, signs, symptoms, and pathomechanisms, illustrate the discussion, identify key factors for diagnostic differentiation, and anchor the wushen model within the Chinese clinical tradition.

Body-Mind

For TCM, shen incorporates both physical and mental activities because, in the same way that gi links our ideas of energy and matter, shen links our accustomed notions of mind and body.⁷ Healthy physiological and mental activities of the shen therefore can be observed in external manifestations such as healthy complexion, bright eyes, physical agility, and coherent speech. Here we are using 'shen' in its global sense, as a catch-all term for human mental-emotional functions. Shenzhi (spiritmind, human consciousness) is another name for the global shen, and both terms imply the wushen: the shen, hun, po, yi and zhi - the 'spirit', 'ethereal soul', 'animal soul', 'ideation', and 'mind' respectively.8 The wushen model offers a differentiated portrayal of mental activities indicating some of the complexity and variety of human mentality.2 Orderly, integrated wushen activities perceive, process, and analyse sensory information; their interdependent functions create human consciousness, intelligence, and cognitive ability.1

The number five signals that a five phase (wuxing \pm 行) systematic correspondence provides the theoretical underpinning, and that all its relational qualities apply. The normal course of shenzhi activities therefore includes and depends upon the close relationships between the wushen and with their respective five viscera (wuzang 五脏), five sense organs (wuguan 五官), and five body tissues (wuti 五体). As we know, physicality and mentality are not just closely linked in Chinese medical thinking: the body form (xing 形) is the house of the shen and shen governs the body form. When xingshen (形神) are unified the functional activities of the wushen manifest externally through the wuzang, wuguan and wuti. Dis-integration occurring in any of the relationships between the wushen, and with their respective zang, guan and ti will manifest according to their physiological, mental and sensory associations. These relationships are essential for understanding the pathogenic mechanisms and interpreting the signs and symptoms of mind disorder.

All five systems provide specific ways for understanding sensory information. For example, the heart-shen governs the tongue and transmits language information. Thus, social, behavioural and communication skills provide a clear indication of the healthy heart-shen maintaining orderly spirit and mental faculties. Heart-shen disorder is observable in the complexion and eyes, and the person may experience disturbances involving speech, consciousness, inappropriate moods and laughter. Clinical manifestations indicating shen disturbance include dyslogia, aphasia, or incoherent speech, coma, psychosis, mania, or delirium.

The spleen stores the yi (意, ideation), which governs thinking, attention, and recollection. Spleen-yi is the mental faculty that

deals with the products of sensation and perception, focusing and forming ideas. Essential to heart-shen processing of sensory and perceived information is its relationship with spleen-yi's focused attention, recalled experience and knowledge. Their harmonious interaction produces immediate, first-stage analysis and assessment.

The kidney stores the zhi (志, mind), opens to the ear, and governs 'seal and store' (fengcang 封藏). This means that on the level of spirit-mentality, the kidney-zhi enables the perception of auditory information, and participates in and completes the storage of information. Kidney jing (精) vacuity can disrupt the heart-shen/kidney-zhi relationship and patients may encounter problems with memory or auditory function. Many elderly people experience some degree of memory failure and/ or auditory deficit corresponding to the decline of jing that normally occurs with age. Age-related cognitive decline is a recognised disorder where deterioration in mental function is related to the ageing process. Solving complex problems, or remembering names and appointments becomes more and more difficult with this condition. The impaired memory function and multiple cognitive deficits of dementia patients correspond to disordered kidney-zhi activity.9

The liver governs the sinews, opens to the eyes, stores the blood, and liver blood holds the hun (遠, ethereal soul); so the liver-hun participates in the perception of visual information and in the movement and function of the joints. According to the Neijing, the shen and hun must always follow each other, and if the hun fails to follow the shen, a person's xing-shen is no longer unified. Their eyes are blank because the liver-hun cannot correctly transmit what it is seeing to the heart-shen, or the heart-shen cannot assess the matters being perceived by the hun-eyes.

The lung stores the *po* (!!!, corporeal soul), and healthy lung-*po* activity is closely associated with *jing*-essence. The lung-*po* opens to the nose, and corresponds to the skin and body hair, and thereby participates in perceiving sensations and information via the nose and skin. The *po* is sensitive to the environment around the body, registering cold and heat, and helping us to avoid danger. As well as sensitising the body, the *po* enables physical movement, especially involuntary and instinctual movements and reactions. Disordered or abnormal sensations are typical of *shen-po* disharmony – for example, anosmia, olfactory or tactile hypersensitivity, dysaesthesia, skin paraesthesia, or olfactory hallucinations.

Shenzhi theory describes how the five spirits participate in the experience and analysis of sensory perceptions and the cognitive processes of human consciousness. Shenzhi processes depend on close and harmonious relationships between the wushen, and with their respective zang-viscera, ti-tissues, and guan-senses.

Various aetiological and pathogenic factors can disrupt these relationships and their functional activities. Then, when the wushen are disordered, the body-mind (xingshen) relationships disintegrate and separate, causing 'somatopsychic' (xingshen)¹⁰ disorder, or 'mind disorder' (shenzhi bing).

'Spirit-mind disorder' (shenzhi bing) is a broad category encompassing many kinds of mental illness, both severe and less severe. In a general sense it occurs when the heart-shen cannot govern 'spirit brightness' (shenming 神明). Ming means bright, radiant, clear, and shenming signifies correct, healthy or spirited mentality and the power of human consciousness. If ming-brightness is lost, the mind is disordered and the shen cannot process, co-ordinate or complete the information transmitted from the five sense organs.

Less severe types of *shenzhi bing* roughly correspond to psychiatry's neurotic, depressive, or anxiety disorders. The more severe illnesses present with grossly disorganised speech and behaviour, auditory, visual, olfactory, gustatory, and tactile hallucinations, catatonic stupor or excitement. These kinds of signs and symptoms indicate the *shen* is severely disordered as, for example, with schizophrenia and psychosis. Visual hallucinations, hysterical paralysis, trance, or catatonic stupor reveal that the *hun* and its functions are also disordered; if there are auditory hallucinations, *zhi* activities are disordered; the patient's feelings of physical discomfort are due to *xing-shen* disharmony.

Shenzhi Bing: Pathomechanisms

Healthy *shenzhi* activities can be disrupted by factors from within or outside the body. The depletion of vital substances, yin-yang imbalance, emotional or psychic trauma, 11 summer heat, phlegm-fire, blood stasis, and so on, can disturb *shenzhi* physiology. In the later Han Dynasty, Zhang Zhongjing wrote that the *hun-po* (魂魄) disorder (where 'the patient cries out as if haunted') is due to 'depleted *qi* and blood' (*xue qi shao ye* 血气少也). 12 This is a broad physiological situation whereby depleted vital substances cannot nourish the *zang*-visceral systems, and Zhang describes the ramifications for their associated tissues, senses, and spirits, to identify the key diagnostic features.

Similarly, 'lily disease' (baihe bing 百合病)¹² illustrates shen-po (神魄) disorder. TCM texts interpret Zhang's baihe bing formulae for the treatment of lung and heart yin vacuity patterns, but the features he documents clearly identify the concomitant shen-po disharmony. The patient's experience of hot and cold sensations are unrelated to fever, chills or environment; s/he may want to walk about, but soon becomes

tired; although the food is delicious this person finds its smell repugnant. The desire to eat with dysphagia and the need for rest with restlessness is also typical of *xing-shen* disharmony whereby bodily responses are discordant with heart-*shen* inclinations.

Analysis of Zhang's formulae for *baihe bing* reveals that their mechanisms (to nourish lung and heart yin) serve to harmonise yin and yang, and settle the *shen* and *po*. In TCM practice today, and with appropriate clinical presentations, Zhang's formulae for *baihe bing* are still used for cases involving clinical depression or anxiety disorders, and for neuroses such as somatisation disorder or histrionic personality disorder.^{3,13}

Zhang introduced pathological terms such as depletion vexation (xufan 虚烦) and depletion taxation (xulao 虚痨) for conditions where there is severe depletion of qi, blood, yin-qi, organ function, and so on. In the Shang Han Lun (伤寒论) this is applied in cases of weakness and debility after febrile disease. The leading medical figure of the Tang Dynasty, Sun Simiao (c. 581–682 CE), also uses Zhang's terms and sometimes applies them to other areas of clinical practice. One of Sun's major contributions to the Chinese medical tradition is his discussion of gynaecological and obstetric disorders. Interestingly, he develops the theoretical parameters for xulao by applying it to cases of weakness and depletion experienced by women after childbirth.

Whilst post-febrile and post-partum patients would seem to require very different treatment and care, pathomechanism(s) linked to individual clinical presentations is a key element of Chinese medicine's diagnostic perspective. In *xulao*—depletion taxation, the severe depletion of qi and blood means that the heart and liver are unable to provide quiet lodging and nourishment for the *shen* and *hun*. Signs and symptoms can range from fatigue, to agitation and general malaise, to anxiety, psychosis with hallucinations, and even convulsions. In Zhang and Sun's texts, the clinical features for these disorders include physical, sensory and mental signs and symptoms, for example: dimmed eyesight, nasal congestion, instability of the *hun* and *po*, convulsions, heart discomfort, post-partum discomfort, numbness and muscle spasm, unsettled will, confusion, disorientation, and deranged speech. 14,15

Treatment

In this section we discuss one formula and two examples of its application for mental disorder to help illustrate some important features of the Chinese medical tradition. TCM practitioners will be familiar with these features in other areas of their clinical practice: the Western separation between physical and mental resources is artificial and unhelpful for Chinese therapeutic strategies; accurate diagnosis relies on

the correct identification of the aetiological circumstances, pathomechanisms, and the patterned associations between organs, tissues, substances, senses and spirits; and, classical formulae can be understood, adjusted and applied in different ways.

Zhang Zhongjing and Sun Simiao's treatments target the affected vital substances, visceral systems and wushen, and their formulae are modified to match variants in clinical presentations. Occasionally, Sun utilises and modifies prescriptions devised by Zhang. For example, the key pathomechanism for Zhang's Minor construct the middle decoction (Xiao jian zhong tang 小建中汤) is xulao—depletion taxation where spleen and stomach weakness lead to the dissipation of qi and blood. The spleen vacuity drains its mother, the heart, affecting the shen. Clinical features include abdominal pain alleviated by warmth, with fatigue, poor appetite, vexation, and palpitations.

The *xulao* pattern can occur due to a number of causative circumstances (such as overwork or poor diet) causing the abdomen to lose the warmth of the yang qi. In the *Treatise on Cold Damage* (*Shang Han Lun*), Zhang applies *Xiao jian zhong tang* to his discussion of febrile illness in cases where there is external wind cold with spleen and stomach vacuity. *Xiao jian zhong tang* warms and strengthens the spleen and stomach, relieves abdominal pain, nourishes qi and blood, and harmonises yin and yang. ¹⁵

Dang gui construct the middle decoction (Dang gui jian zhong tang 当归建中汤) is from Sun Simiao's A Thousand Golden Prescriptions (Qianjin Yaofang). Sun's famous formula for post-partum emaciation and weakness is a simple but elegant modification of Zhang's original. He adds dang gui (当归) to subtly shift the formula's emphasis towards nourishing and harmonising the blood — a key therapeutic strategy for female patients after delivery. ¹⁶⁻¹⁸ Both formulae target the spleen and stomach ('construct the middle') because in Chinese medicine, healthy spleen and stomach function produces qi and blood, and blood achieves numerous essential physiological tasks including that of nourishing and holding the wushen. Of all the wushen, the shen and hun in particular rely on heart and liver blood for their part in mental activities.

Treatments and prescriptions for women experiencing postpartum mood disorders (such as post-natal depression) will vary to address the presenting signs and symptoms and relevant pathomechanism(s). *Dang gui jian zhong tang* may be applied in cases where there is abdominal pain relieved by warmth, fatigue, palpitations, agitation, depression, and insomnia. For this kind of clinical presentation, Sun's formula addresses the key pathomechanisms by warming and strengthening the middle qi, harmonising yin and yang, and nourishing the blood.

Clinical Commentary

Many clients visiting TCM clinics today present with some form of 'mind' disorder as a chief or accompanying complaint, and the relevance of *shenzhi* theory for contemporary practitioners is diagnostic in the first instance. Information about the *wushen* is drawn mainly from the *Huangdi Neijing*: understanding their activities and associations allows the practitioner to identify and differentiate 'mind' illnesses within the traditional Chinese medical framework. We have extended the model's diagnostic information here to include examples of 'mind' disorder and suggest psychiatric classifications where appropriate. This information is linked to the discussion of pathomechanisms and treatment approaches to assist practitioners to utilise *shenzhi* theory in their therapeutic decision-making.

Conclusion

Shenzhi theory provides a perspective on the mind that elucidates important distinctions, interrelationships and features of xingshen physiology and disorder. Shenzhi theory is derived from the Neijing's discussion of the wushen, and therefore draws upon wuxing systems of correspondence. To produce human consciousness, the wushen, their associated viscera, sense organs, tissues, and their harmonious interactions process a complex stream of visual, olfactory, taste, tactile, auditory and other perceived information. Careful observation and correct understanding of signs and symptoms allow today's practitioners to identify disease patterns, differentiate shenzhi disorder, and recognise pathogenic mechanisms.

Zhang Zhongjing and Sun Simiao match key clinical presentations and pathomechansims with representative herbal formulae. Signs and symptoms are evaluated against the theoretical backdrop of healthy physiology (vital substances, visceral systems, body tissues, sense organs and spirit activities), aetiology (how orderly systems become disrupted), and pathomechanism (the effects of disturbance). Prescriptions address the presenting patterns of disruption, and are rationally connected to Chinese medicine's concepts of human physiology and the mechanisms of disorder. From this very small snapshot of Chinese medical history, we see how early theoretical models develop and respond to the masterful application of clinical observation and reasoning.

The West's separation of mind and body has never been a feature of Chinese medical theorising, and surviving texts show that it was not until the late Ming Dynasty that Chinese medicine began to document information about the 'mind' and its disorders as a distinct category. While Western psychiatry

has investigated and categorised mental illness according to its analysis of statistical and biological data, TCM clinical practice still utilises the manifestation patterns, illness categories and treatment methods that have been drawn from its classical literature. Consequently, TCM categories may overlap but do not always directly correlate with contemporary psychiatric classifications. In its narrow sense *shenzhi bing* refers to serious mental and neurological disorders such as schizophrenia and epilepsy. More broadly it refers to any functional disturbance causing spirit-consciousness, body-mind, and cognitive-sensory disorders.

References

- Qu LF, Garvey M. Shen-zhi theory: analysis of the signs and symptoms of mental disorder. Eur J Orient Med 2006;5(2):4–16.
- Chiu ML. Mind, body, and illness in a Chinese medical tradition [PhD thesis]. Cambridge, MA: Harvard University; 1986.
- Flaws B, Lake J. Chinese medical psychiatry: a textbook and clinical manual. Boulder, CO: Blue Poppy; 2001.
- Zhang D. Key concepts in Chinese philosophy. Beijing: Foreign Languages Press; 2002.
- Rossi E. Shen: psycho-emotional aspects of Chinese medicine. London: Churchill Livingstone; 2007.
- 6. Chen H. Medicine, society, and the making of madness in imperial China [PhD thesis]. London: University of London; 2002.
- Hsu E. Spirit (shen), styles of knowing, and authority in contemporary Chinese medicine. Cult Med Psychiatry 2000;24(2):197–229.
- 8. Wiseman N, Feng Y. A practical dictionary of Chinese medicine. Brookline, MA: Paradigm Publications; 1998.
- APA. Diagnostic and statistical manual of mental disorders (DSM-IV). Washington, DC: American Psychiatric Association; 1995.
- Unschuld PU. Huang Di Nei Jing Su Wen: nature, knowledge, imagery in an ancient Chinese medical text. Berkeley, CA: University of California Press; 2003.
- 11. Garvey M. Hysteria. Clin Acupunct Orient Med 2001;2(4):221–7.
- Zhang Z. Synopsis of prescriptions of the golden chamber: a classic of traditional Chinese medicine. Beijing: New World Press; 1987.
- 13. Liu G. Fundamentals of formulas of Chinese medicine. Beijing: Hua Xia Publishing House; 2002.
- 14. Wilms S. The female body in medieval China: a translation and interpretation of the 'Women's Recipes' in Sun Simiao's *Beiji Qianjin Yaofang* [PhD thesis]. Tucson: University of Arizona; 2002.
- Zhang Z. Shang Han Lun: on cold damage. Translation and commentaries by Mitchell C, Feng Y, Wiseman N. Brookline, MA: Paradigm Publications; 1999.
- Furth C. Blood, body and gender: medical images of the female condition in China, 1600–1850. Chin Sci 1986(7):43–66.
- 17. Bensky D, Barolet R. Chinese herbal medicine: formulas and strategies. Seattle: Eastland Press; 1990.
- Yeung H. Handbook of Chinese herbal formulas. Rosemead, CA: Institute of Chinese Medicine; 1995.