Abstract

Objective: Neurasthenia is a disease which consists of increased fatigue or bodily weakness and exhaustion plus pantalgia, dizziness, headache and other symptoms relevant to autonomic nerve dysfunction. There are plenty of studies investigating the history of diagnostic criteria of neurasthenia, which is influenced by diverse cultural(or social) environment. The objective of this study is to provide review of the previous studies on the changes of neurasthenia diagnoses in the context of local area to find meanings of these transition and improve health care for psychiatric patient.

Methods: Literature review was conducted on studies demonstrating diagnostic criteria of neurasthenia with cultural(or social) environment. We investigated the literature reviews or observational studies which described alteration of diagnostic criteria of neurasthenia and assessed its significance. After selecting eligible studies, the authors read the articles and summarized the meaningful contents those were significant in clinical practice.

Results: Transformation of Chinese Classification of Mental Disorder(CCMD) integrated with internationally utilized DSM-IV or ICD-10 is controversial about its significance in that it had limited effect on public health care due to the variables of sociocultural context, but primarily differentiated neurasthenia from other disorders. The latter one can be the directing point of the diagnostic criteria of other culture-bound diseases, which is the traits of not outstanding mood(or affect) than other neurotic disorders.

Conclusion: As diagnostic criteria of neurasthenia varies, the significance of this variation is controversial, but could be the paragon of other culture-bound diseases.

1. Introduction

Neurasthenia was initially introduced in the United States by George Beard in late 19th centuries which led the symptoms of fatigue, anxious mood, headache, impotence, neuralgia, and depression to component of the ambiguous and broad concept of disease ‘neurasthenia’[1, 2]. This disease had reached its peak by early 20th centuries globally, reaching its boundary to the far-east Asian country and gradually narrowed its area in the United States and western world during mid-20th centuries [3], and experienced its period of upheaval among Chinese psychiatrists during late 20th centuries(from early 1980s) [4].

Currently internationally accepted two diagnostic cri-
teria classifies neurasthenia from the different viewpoint. While, 10th edition of the International Classification of Disease (ICD-10) included neurasthenia in the separate classification, which means this diagnostic structure accepted neurasthenia as a separate disorder, on the other hand the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) sorted disease as a subtype of undifferentiated somatoform disorders [5, 6].

The destiny of neurasthenia in Chinese medical sociological environment is reflected on two times of major revision of Chinese Classification of Mental Disorder (CCMD), the point of which is accepting symptom hierarchy, excluding other psychiatric disorder [4]. The impact of this major transition on Chinese medical environment is controversy. It is thought the place medical practice happen (rural or urban area) and the perception of affection of oneself play an important role in the procedure a patient goes to the clinic and appeal for chief complain, to be diagnosed and treated. Young psychiatrists in urban area have tendency to be well-aware of recent diagnostic system and better educated young individual is prone to express one’s dysphoria of mood without hesitation [7]. Unless physician is well-aware of psychiatric diagnostic procedure or patient appeal for the appropriate symptoms, medical decision could go different.

2. Methods

The objective of this article is to provide narrative review of the transition of neurasthenia diagnostic system within the localized sociocultural context. To achieve this, the authors searched published literature including the changes of neurasthenia diagnostic system and cultural findings around disease. 1601 articles in PubMed were searched by the search formula. ("neurasthenia"[MeSH Terms] OR "neurasthenia"[All Fields]). The authors reviewed the titles, abstracts, and article. After the authors read the full-text articles assessed for eligibility (n=16), they summarized significant facts and discussed points which are valuable for the patient with or whithout neurasthenia.

3. Results and Discussion

There were three diagnostic criteria of neurasthenia, the International Classification of Disease (ICD), the Diagnostic and Statistical Manual of Mental Disorders (DSM), Chinese Classification of Mental Disorder (CCMD)

3.1. Neurasthenia in ICD Criteria

Neurasthenia survived through its long life to our time as a category in ICD-10 [8]. While Beard defined neurasthenia as a broad description in 1869, it remained its boundary excluding generalized anxiety disorder (GAD) in the ICD-10 [9]. Furthermore, it doesn’t belongs to any classification systems in ICD-10 diagnostic criteria, but comprises the separate disorder system. In this context, clinical symptoms of neurasthenia doesn’t always manifest the characteristics of specific depressive or anxiety mood disorder. [6] In ICD-10 diagnostic criteria, neurasthenia is described as the type of aggravating fatigue after mental effort often accompanied by decrease of performance ability in career or daily living or the other type focusing on physical de-

Table 1 Search Method Flow chart

| Articles after duplicates removed (n=1501) | Articles excluded (n=0) |
|------------------------------------------|------------------------|
| Full text articles assessed for eligibility (n=1585) | Articles excluded (n=0) |
| Studies included in qualitative review (n=16) |

Table 2 The ICD-10 diagnostic criteria of neurasthenia [6]

| The ICD-10 diagnostic criteria |
|---------------------------------|
| (a) either persistent and distressing complaints of increased fatigue after mental effort, or persistent and distressing complaints of bodily weakness and exhaustion after minimal effort; |
| (b) at least two of the following: |
| - feelings of muscular aches and pains |
| - dizziness |
| - tension headaches |
| - sleep disturbance |
| - inability to relax |
| - irritability |
| - dyspepsia; |
| (c) any autonomic or depressive symptoms present are not sufficiently persistent and severe to fulfil the criteria for any of the more specific disorders in this classification. |
bility or exhaustion after little effort [6]. ICD-10 remains ‘neurasthenia’ as a separate diagnostic criteria structure [10].

### 3.2. Neurasthenia in Diagnostic Criteria: DSM

Neurasthenia diagnosis disappeared from the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders [11]. Neurasthenia was mentioned in the appendix section in the DSM-III(1980), which means this culturally well-understood disease was demonstrated as a somatoform disorder, which can be diagnosed when mood disorders are excluded [12]. Kleinman’s study suggests 87% of Chinese patients could be reassessed as depression category of DSM-III-R and have a response to the tricyclic medication [13].

### 3.3. Neurasthenia in Diagnostic Criteria: CCMD

Subsequent Chinese studies also approved that considerable proportion of patients diagnosed with neurasthenia suffer from depressive mood [14], which led to the major transformation of CCMD. Thus CCMD-2, the second edition of CCMD published in 1989 refers to the following: Neurasthenia “has aroused international disputes, and there was previous tendency for overdiagnosis to occur in China. Therefore, other forms of neurotic and psychophysiological disorders should be prudently excluded before the diagnosis is made” [15].

As 3rd edition of CCMD(CCMD-3) published in 2001, has structurized a symptom hierarchy for the first time. The characteristics of DSM, which means it started to exclude neurotic disorder. From 1950s to 1980, 80% of Chinese psychiatric outpatients were diagnosed with neurasthenia not regarding other neurotic disorder. As a result, neurasthenia is expected not to be diagnosed frequently by Chinese psychiatrists aware of CCMD [4].

In spite of these large transition in global neuropsychiatry, somatoform disorder depicted by DSM-III was not identical to the ‘neurasthenia’ recognized by Chinese people (including general physicians) [4], nor was undifferentiated somatoform disorder of DSM-IV [16].

In this context, variety of attempts have been made to approach ‘neurasthenia’ recognized by patients and physicians (or psychiatrist), even in the hospital grade. Table 2 is the diagnostic criteria utilized by Korean neuropsychiatrist.

#### Table 3 The CCMD-III & manual of oriental neuropsychiatry department of Kyung Hee University Medical Center of neurasthenia [23]

| The CCMD-III diagnostic criteria | Kyung Hee University Medical Center Manual |
|----------------------------------|------------------------------------------|
| Requires any three of five groups of persistent symptoms: | Requires both of these |
| (i) fatigue or weakness (physical or mental) | (i) Aggravating fatigue after mental effort |
| (ii) irritability or worry | (ii) Physical fatigue and weakness after minimal effort |
| (iii) excitability | (iii) Can not recover upper symptoms after taking a normal rest or hobby |
| (iv) nervous pain and | At least one of these symptoms |
| (v) sleep disturbances. | (i) Myalgia and reflex disorder |
| and requires the exclusion of all mood and anxiety disorders | accompanied by physical fatigue and weakness |
| | (ii) Dizziness |
| | (iii) Tension headache |
| | (iv) Mainly excessive sleep or |
| | Disorders of initiating and maintaining sleep |
| | (v) Unpleasant awareness such as mental instability |
| | (vi) Mental, physical health concerns, lack of pleasure, a little anxiety |
3.4. What Difference Has DSMization of Neurasthenia Made to Treatment? Perspectives of Chinese and Asian people on Disease

DSMization, the term used in the review of Kleinman, which means CCMD criteria integrated with internationally utilized DSM-IV or ICD-10, has made depressive disorder diagnosed more often, but it didn’t led public psychiatry health care to superior level of quality as expected [10]. Main issue was that patient with mental disorder might not have received proper treatment. In 2006, one survey reported considerable percent of 12-month DSM-IV disorder group and moderate and severe disorder group even in the metropolitan area had not been treated past 1 year (two group respectively 96.6%, 80.2%) [17]. It is thought that this inefficiency of intervention in the national clinical practice system, originates from the perspective of Chinese people on disease. Chinese people manifest their distress as physical form than psychic expressions [18]. Moreover, these people and traditional Chinese medicine have recognized human disease in the context of monism (or holism) for thousands of years, not the dualistic sight reflected on DSM criteria. When nondualistic approach to the human disease is applied to the clinical practice, every individual symptoms are “peripheral”, just affecting a person simultaneously, which makes it hard for physicians or patients to sort out “core” symptom(e.g. mood discomfort) located within the high level of symptom hierarchy, the structure often utilized by DSM criteria. One study found the trait of Chinese patient that their affects and physical manifestations are not easily separated [19].

Even if stigma seems to be shrinking among well-educated, middle-class and younger group [7], it plays a important role in general medical setting. On the other hand, poorly-educated, weakly supported older group can be reluctant to reveal mood discomfort, and have tendency not to be diagnosed with mood disorder, especially by general physician who are not well-aware of DSM-IV or CCMD-III.

In addition to these social environment, although Asian people are found to be prone to refrain themselves from expressing positive affect [20], transcultural study about Shenjing Shuairuo (Chinese term of neurasthenia diagnosed with CCMD-III) and mood disorders & somatoform disorder group(diagnosed with DSM-IV) suggest Shenjing Shuairuo has specific characteristics other than mood disorders & somatoform disorder group. Shenjing Shuairuo turned out to have significantly lower score on depression, phobic anxiety, paranoid ideation, psychoticism subscales than Mood disorder, and to have less somatic pain than somatoform disorders group [16]. After all, DSMization of neurasthenia had unclear public health implication. This is why Shenjing Shuairuo has to confront local distinct characteristics (especially perspective on diseases) but it has symptomatic specificity differentiated from other disease and needs further researching. The focus of differentiation of neurasthenia is distortion of mood expression and phobia on stigma in social con-

4. Conclusion

The individual symptoms of neurasthenia are very common in other neurotic disorders and can ruin the quality of life, but in the current diagnostic criteria the distinction between neurasthenia and neurotic disorders, is ambiguous, as it turns out from the existing case, in which patients are diagnosed with neurotic disorder but not treated properly [17].

For this reason, we need diagnostic criteria of neurasthenia well-differentiating neurasthenia with other mood this order. Existing Shenjing Shuairuo (neurasthenia diagnosed with CCMD-III) criteria seems to fulfill this role in that it differentiates neurasthenia from other disorder in the context of manifestation of mood or somatic symptoms. [16]. The diagnostic criteria of the other culture-bound diseases like Hwa-byung, should be directed in this pathway.

Conflict of interest

The authors declare that they have no conflict of interests

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