

## Development of a valid and reliable seven emotions impairment questionnaire and assessment of its predictability for phlegm and blood stasis

Byoung-Hee Lee, Min-Yong Kim, Young-Bae Park, Young-Jae Park

**Byoung-Hee Lee, Young-Bae Park**, Department of Diagnosis and Biofunctional Medicine, College of Korean Medicine, Kyung Hee University, Seoul 02447, Korea

**Min-Yong Kim**, Business School, Kyung Hee University, Seoul 02447, Korea

**Young-Jae Park**, Department of Diagnosis and Biofunctional Medicine, College of Korean Medicine, Kyung Hee University, Seoul 02447, Korea; Department of Diagnosis and Biofunctional Medicine, Kyung Hee University Hospital at Gangdong, Seoul 05278, Korea

**Correspondence to: Young-Jae Park**, Department of Diagnosis and Biofunctional Medicine, Kyung Hee University Hospital at Gangdong, Seoul 05278, Korea. [bmpomd@khu.ac.kr](mailto:bmpomd@khu.ac.kr)

**Telephone:** +82-2-440-7229

**Accepted:** May 15, 2015

### Abstract

**OBJECTIVE:** To develop and validate a Seven Emotions Impairment questionnaire (SEIQ), to define an optimum cut-off point for the SEIQ, and to examine whether SEI was predictive of Phlegm and Blood Stasis (BS).

**METHODS:** Two hundred outpatients and 75 college students were asked to complete the SEIQ, the Profile of Mood States (POMS), Phlegm Pattern Questionnaire (PPQ), and BS Questionnaire (BSQ). Twelve clinicians determined whether the outpatients exhibited SEI. SEIQ data were used to examine the internal consistency and determine validity for the outpatients. SEIQ, POMS, PPQ, and BSQ data were used to examine concurrent validity and predictability of SEI for Phlegm and BS in the college students. Total SEIQ scores and the clinicians' diag-

noses of the outpatients were considered to define an optimum cut-off score for the SEIQ.

**RESULTS:** The 18-item SEIQ had satisfactory internal consistency ( $\alpha = 0.905$ ) and concurrent validity. In the construct validity test, four factors (chest-anxiety, fatigue-depression, working-family-troubles, and sleep-memory) were identified. In the receiver operator characteristic curve analysis, the sensitivity, specificity, and area under the curve of the SEIQ were 67.2%, 72.1%, and 73%, respectively. The optimum cut-off score was defined as nine points. SEIQ scores were strongly predictive of Phlegm and BS ( $\beta = 0.862$  and  $0.673$ , respectively).

**CONCLUSION:** Based on our results, we concluded that the SEIQ is a reliable and valid instrument for evaluating SEI, and is strongly predictive of Phlegm and BS.

© 2016 JTCM. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

**Key words:** Seven emotions; Intermingled phlegm and blood-stasis; Surveys and questionnaires; Diagnosis; Reference standards; Mental health

### INTRODUCTION

In East Asian Medicine (EAM), diseases are considered to be the result of disharmony between the internal organs. As disharmony between the internal organs results from the localization of pathogenic factors to meridians or internal organs, examining the origin of a pathogenic factor and its present location has been a focus of disease treatments. When examining pathogenic factors, it is beneficial for EAM practitioners to classify

the pathogenic factors into categories. Among these classifying methods, the Trisectional Classifying Method (TCM), which was suggested by Chen Yan, a famous theoretician and clinician of the Song dynasty (AD 960-1279), categorizes pathogenic factors into three etiologies: exterior, interior, and non-exterior-non-interior factors.<sup>1</sup>

TCM is still widely used in the EAM fields because it is simple and covers almost all pathogenic factors. Among the three etiologies of the TCM, the Seven Emotions Impairment (SEI) is an interior pathogenic factor referring to the immoderate seven emotions: joy, anger, anxiety, deliberation, grief, fear, and startle.<sup>1</sup> In physiological conditions, each emotion is moderated by Qi, Blood, or the Essence of the corresponding internal organs.<sup>2</sup> However, in pathological conditions, excessive emotions not only result in the neuropsychological symptoms of dizziness, palpitations, insomnia, amnesia, anxiety, depression, or anger, but also result in bodily symptoms, including chest discomfort, flank pain, fatigue, indigestion, alternating chills and fever.<sup>3</sup>

According to the holistic point of view, parts of the human body and emotions are interconnected and inseparable from each other.<sup>4</sup> Therefore, simultaneous examinations of physical and mental dysfunctions are emphasized when identifying the patterns of diseases or treating disease.<sup>2</sup> It is interesting that in terms of SEI problems, the interconnection between bodily and emotional dysfunctions is problematic, not only in the first disease stage, but also in almost all stages of a disease or syndrome.<sup>5</sup> For example, sudden or irregular changes in disease or symptoms provide clues to emotional states underlying the disease or syndrome.<sup>5</sup> From the therapeutic point-of-view, many studies have reported that complementary and alternative therapies, including acupuncture, herbs, and Mind-Body Therapies (MBT), are effective for psychiatric disorders, such as depression and anxiety.<sup>6-9</sup> Yang<sup>10</sup> suggested a 119-item questionnaire for SEI. However, this questionnaire was developed for perimenopausal women, and reliability and validity levels were not examined.<sup>10</sup> Therefore, the first purpose of our study was to develop a valid and reliable Seven Emotions Impairment Questionnaire (SEIQ) and to define its optimum cut-off point using receiver operating characteristics (ROC) curve analysis. Another purpose of our study was to examine the relationship between SEI, Phlegm, and Blood Stasis (BS) patterns. Phlegm is defined as a viscous, turbid pathological product that manifests as indigestion, poor appetite, fatigue, dizziness, palpitation, headache, cough, sputum, and other symptoms.<sup>11</sup> BS is a pathological product associated with lowered blood circulation or blood clot and manifests as pain, bleeding, chills and fever, abdominal or flank discomfort, and some dark blue signs, including a dark blue tongue, a dark complexion, dark circles under the eyes, and other related symptoms.<sup>12</sup> As Phlegm and BS have wide clinical spectra, it is important to determine the presence of

Phlegm or BS when treating diseases in the EAM fields. Park *et al.*<sup>11,12</sup> developed and validated a 25-item Phlegm Pattern Questionnaire (PPQ), and a 12-item Blood Stasis Questionnaire (BSQ), respectively. It is interesting that among the many etiological factors of Phlegm and BS, SEI is considered to be a main factor resulting in Phlegm and BS. Therefore, it is possible that SEI will be partly predictive of the occurrence of Phlegm or BS pattern. However, few studies have addressed methods for correlating SEI and phlegm or BS patterns.

In summary, we examined the reliability and validity of the SEIQ and defined an optimum cut-off score of the SEIQ using ROC curve analysis. Finally, we examined whether SEI pattern estimated by SEIQ was predictive of Phlegm and BS patterns, as estimated by PPQ and BSQ scores, respectively.

## MATERIALS AND METHODS

### *Participants and data collection*

Two hundred outpatients who visited one of 12 Oriental medical clinics because of musculoskeletal, gastrointestinal, gynecological, and fatigue-related problems (Group A) were asked to complete the SEIQ. As musculoskeletal, gastrointestinal, gynecological, and fatigue-related problems are known to be related to SEI,<sup>13</sup> the inclusion criteria for this study broadly included these four disease categories. To examine the concurrent validity of the SEIQ and to examine the relationship between SEI, Phlegm, and BS patterns, a separate group of 75 college students (Group B) was asked to complete the Profile of Mood States (POMS), PPQ, and BSQ together with the SEIQ.<sup>11,12,14</sup> Table 1 lists the age and sex distributions of Groups A and B. Twelve clinicians who were all members of the Association of Korean Medical Etiology (AKME) and had more than eight years of clinical experience determined the presence or absence of SEI for each outpatient in Group A in their clinics. As with the development process of the Food Retention Questionnaire (FRQ),<sup>15</sup> the outpatients (Group A) completed the SEIQ before the clinicians' determinations of SEI. Blinded to the SEIQ scores, the clinicians were asked to determine the presence of SEI for each outpatient according to the diagnostic criteria suggested by the AKME.<sup>13</sup> The contents

Table 1 Age and gender distributions of the participants ( $\bar{x} \pm s$ )

Group	<i>n</i>	Males/females ( <i>n</i> )	Age (years) males/females
A	200	45/155	43.2±16.7/43.5±15.1
B	75	53/22	20.3±0.9/20.1±1.0

Notes: Group A: outpatients who visited one of 12 Oriental medical clinics because of musculoskeletal, gastrointestinal, gynecological, and fatigue-related problems; Group B: normal college students.

Download English Version:

<https://daneshyari.com/en/article/4200918>

Download Persian Version:

<https://daneshyari.com/article/4200918>

[Daneshyari.com](https://daneshyari.com)