CLINICAL GUIDELINES FOR
HWABYUNG

火病

The Korean Society Of Oriental Neuropsychiatry
Hwabyung Research Center
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June 30, 2013

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Author Jong-Woo Kim, In-Chul Jung, Hyung-Won Kang, Seung-Gi Lee, Sun-Yong Chung
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The Korean Society Of Oriental Neuropsychiatry / Hwabyung Research Center
Oriental Medical Center, Kyung-Hee University Hospital at Gangdong, 892, Dongnam-ro, Gangdong-gu, Seoul, Republic of Korea.
Homepage http://www.hwabyung.kr
E-mail aromagi@khu.ac.kr

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Hwabyung is the physical and psychotic complex syndrome that consists of basic principle and concept of disease, after a long-term cumulative unfairness and resentment symptoms with aspects of the fire. Hwabyung is listed in revised Korean Standard Classification of Diseases, second edition, 1995 for Hwabyung(somatoform disorder), and listed in 6th edition, 2009 divided in Ul-syndrome and Hwabyung, well-known disease in oriental Medicine. In western medicine psychiatric field, Diagnostic and Statistical Manual of Mental Disorders-IV(DSM-IV) in American Psychiatric Association listed Hwabyung as anger syndrome related with Korean culture among the syndrome reflected each culture's characteristics, but not listed the standard diagnosis.

To date, the reason that Hwabyung is not classified as a separate mental disorder in the standard psychiatric diagnostic system, is that because anger has not been extended to the concept of the disease just treated as an emotional response. But recently the problem of social anger is getting worse, and the problem of anger personality and trait is raised, separated from the anger of simple emotional respond, so the effort to establish the separate disease group associated with anger is underway. The new separated disease group such as PTED from Europe is the result of this effort, and Hwabyung also has been a renewed interest.

The initial symptom of Hwabyung is explosion of anger and pushing-up in the chest, as time goes respiratory stuffiness, feeling mass in throat or pit of the stomach, Heat-sensation are appeared, and after that various psychotic and physical symptoms like depression, anxiety, hard feelings are appeared. If Hwabyung becomes chronic, it closely relates to depression, as many Hwabyung patients is combined with depression. So Hwabyung becomes important link and model about various Korean mental disorder. Also anger relates to cardiovascular disease such as hypertension, stroke and physical disease like cancer, as the need for early treatment comes to the fore, the systematic study is needed.

Hwabyung especially starts from the concepts of oriental disease so it should be reviewed by oriental aspect. But though Hwabyung is the oriental disease often seen in the medical field, the systematic guidelines has not been set, Academically researched Hwabyung content is not been widely used in clinical practice. Also, it is necessary to develop the guideline of treat and consult in primary clinic and oriental medical psychiatry expert field at oriental medicine system.
Hetero, the korean society of oriental psychiatry recognized the need of development of Hwabyung clinical guideline, in 2008 established Hwabyung research center and started the development work. Hwabyung research center is establish the basic principle of treatment based on the pathophysiological status about Hwabyung, through this developed to improve clinical oriental doctors excellence of treatment and to help performing the standard treatment.

The korean society of oriental psychiatry has progressed the research of Hwabyung. It established the diagnosis system of Hwabyung, has developed the diagnosis tools, and published the various studies of treatment of Hwabyung through journal. Hwabyung clinical guideline made the guide from the studies researched previously. The society established Hwabyung research center, consisted the committee of development the clinical guideline, and research team and the committee collected the evidence, surveyed the status. We derived the key questions and developed the necessary diagnostic and evaluation tools, performed clinical study by using them to establish the basis, and supplemented the evaluation of organized contents through the review committee and public hearing.

This Hwabyung clinical guideline archived by support of Korea Health Industry Development Institute's Traditional Korean Medicine R&D proceeded with Oriental medicine clinical guideline development to object the systemic treatment of disease and the establishment of oriental medicine EBM. This business started with heavy responsibility and thanks for the supports because this is the first supported clinical guideline development in oriental medicine. After 5 years later, we appreciate deeply to the government and the association of Korean Medicine, the society of Korean medicine, and the society of Oriental neuropsychiatry to publish Hwabyung clinical guideline with previous studies.

Hwabyung clinical guideline is the integraed results of Korea Health Industry Development Institute's support and the effort of the society of Oriental neuropsychiatry and Hwabyung research center, and the evaluations and comments of oriental medicine doctors from clinical field. Though this work, started from 2008, can't explain everything perfectly about Hwabyung's treatment, it is enough that we collected the previous studies, performed the survey of status of Hwabyung patients, enforced the clinical trial for the lacking part to organize the basis of oriental medicine treatment for Hwabyung. This work is not the end but the start of research, so we will try to collect the research data, evaluate, study for performing continuous supplementation, which leads the Hwabyung clinical guideline to position for the model of oriental medicine clinical guideline.
Through this guideline, I wish to improve the excellence of Hwabyung treatment in oriental medicine and the understanding of Hwabyung treatment in oriental medicine to other medical staffs, public, patients.

30th, June, 2013,

The Korean Society of Oriental Neuropsychiatry / Hwabyung Research Center
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1. Overview

1.1. Introduction about Hwabyung

Hwabyung is a broadly used concept of disease in the clinical field, but medical personnel and patients have been confused by its uncertain definition. The concept has gradually become more concrete since medical studies began in earnest in the 1980s. The publication of the Hwabyung Diagnostic Interview Schedule (HBDIS) in 2004, which established the diagnosis criteria, lead to the active study and treatment of Hwabyung in oriental medicine and psychiatry.

1.1.1. The Definition of Hwabyung

① In short UlHwabyung means 'The disease of stagnated fire'. It describes a syndrome caused by pent-up anger or similar emotion, where the sufferer has the appearance of exploding like 'fire'.
② Physical symptoms: chest stuffiness, heat sensation including hot flushes, pushing-up in the chest, the feeling of a lump in the throat or in the pit of the stomach.
③ Psychological symptoms: frequently having feelings of unfairness or resentment, or 'Haan', which is defined as a chronic mixed mood of sadness, suppressed anger, longing and feeling of unfairness.
④ The above mentioned symptoms appear by related to distinct stressful events.

1.1.2. The Hwabyung researchers

① DSM-IV(the Diagnostic and Statistical Manual of Mental Disorders - IV)(1994): Hwabyung is a Korean culture-related syndrome. "A Korean culture syndrome literally translated into English as "anger syndrome", which is attributed to the suppression of anger. The symptoms include insomnia, fatigue, panic, fear of impending death, dysphoric affect, indigestion, anorexia, dyspnea, palpitation, generalized aches and pains, and a feeling of a mass in the epigastrium."2).
② Lee SH was the first member of the medical community to report Hwabyung. He described Hwa-bung as the appearance of somaticized symptoms long after an incendiary event. To emphasize the relationship of Hwabyung and its impact, he described Hwabyung like a 'disease of disaster', which has the same pronunciation as Hwabyung in Korean. He suggested that Hwabyung's features are a clear insight into the causes, the difficulties of environmental change or adjustment, the tendency to easily express emotion during interviews, and the tendency to get a second psychological benefit from physical symptoms3).
③ Min SK explained that the long-time accumulation of resentment, indignation, inappropriately suppressed anger brings Hwabyung, which is a mixture of somatoform disorder, major depressive disorder, dysthymic disorder, and general anxiety disorder4). Recently, he suggested the 'anger disorder' as a kind of emotional disorder, because Hwabyung can be differentiated
from depressive disorders and the similar anger problem that exist in other cultures5)

4 Kim JW compared the concept of Hwabyung to the stagnation of fire and fire syndrome, to
describe the oriental medicine pathogenic mechanism of Hwabyung that the anger emotion changes
to heat after long period and it affects to Heart(心) to form Hwabyung. He defined Hwabyung as
the disease that appears heat-sensation, respiratory stuffiness, pushing-up in the chest, and feeling
mass in throat or pit of the stomach caused by suppression of anger from long-time stress6).

1.1.3. The Understanding of Hwabyung in oriental medicine7)

1. Hwabyung is a disease caused by the accumulation of stress, which results in an explosion
of emotions like anger and resentment: similar to the appearance of fire.

2. Hwabyung’s symptoms comprise not only of physical symptoms such as 'heat-sensation',
'respiratory stuffiness', 'pushing-up in the chest', 'the feeling of a lump in the throat or in
the pit of the stomach', but also of psychological symptoms such as feelings of unfairness
and resentment: It is, therefore, a complex disorder of both the mind and body.

3. Hwabyung is closely related to Korean culture: it is a social disease connected to the
anger of Korean society.

4. Hwabyung can be objectively diagnosed and assessed by using the Hwabyung SCID and
the Hwabyung scale.

5. Hwabyung is a typical stress disease that results from the suppression of induced anger,
and a psychogenic, reactive, chronic nervous disorder caused by accumulation of 'Hwa'.

6. 'Hwa', from Hwabyung, originally means 'energy' in oriental medicine. 'Hwa' raises the
vitality of the body and supplies energy to the whole body. The heart(心) regulates 'Hwa',
because, according to oriental medicine, the heart(心) controls the other organs.

7. In oriental medicine, an emphasis is placed on the mind control because 'Hwa' can lead to
excess of energy.

8. 'Hwa' is a feature of disease, as well as a cause of disease.

9. 'Hwa' makes things disappear pathologically. It dissolves ‘iron(金)’, destroys 'clay(土)', burns
'wood(木)', and dries up ‘water(水)’. Its damage is severe and it changes so rapidly that it
is difficult to predict.

10. It is said that, ‘Hwa' affects every organ, and it rises from 'the liver(肝)' when we are really
angry, from 'the stomach(胃)' when we are drunk or full, from 'the kidney(腎)' when we have
sexual desire, and from 'the lungs(肺)' when we feel sorrow’. It is also said that “If it rises
from the mind to affect 'the heart(心)', then it rises from 'the heart' by itself and we die.”

11. 'Hwa', therefore, affects the body and cultivates symptoms and diseases

1.2. Patho-physiological Model of Hwabyung

A psychodynamic approach, which incorporates anger related emotional disorders, aspects of
the Korean culture, and individual personal character traits, was used to describe Hwabyung. As an integrated pathologic physiological model is needed to encompass all the elements of Hwabyung, the Hwabyung Research Center recommends an integrated pathologic physiological Hwabyung model be used to extend the understanding of Hwabyung.”

1.2.1. The Property considered in integrated Hwabyung Model

① The preceding factors are unfairness and negative events, or shock.
② There is the adjustment process for a certain period after the immediate response to psychological trauma.
③ In the short term, the acute stress reaction or the embitterment syndrome appears.
④ In the long term, Hwabyung is classified into physical symptoms or emotional symptoms according to the sufferer’s coping behavior, temperament and character. Comorbidity with depressive disorder occurs frequently in the chronic process.

1.2.2. The Integrated Model of Hwabyung

<table>
<thead>
<tr>
<th>Time</th>
<th>Traumatic event</th>
<th>Response</th>
<th>Adjustment process</th>
<th>Result</th>
<th>Consistent factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unfairness negative event shock</td>
<td>(Recognition) Loss of value, undermined self-esteem, sense of inferiority</td>
<td>Coping behavior, temperament, character</td>
<td>Success of strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Body) Paralysis, pain, feeling of surging</td>
<td>Active response, acceptance</td>
<td>Failure of strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Emotion) Anger, depression, anxiety</td>
<td>Passive response, avoidance</td>
<td>Hwabyung (Symptoms)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Hwabyung PTEG*</td>
<td>Frustration, abandonment</td>
<td>Hwabyung (Mentality) reactive depression</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other psychiatric disorders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Integrated model of Hwabyung</td>
<td></td>
<td>Environment, physical condition, unfairness, anger, memory, suppression</td>
<td></td>
</tr>
</tbody>
</table>

What is the stress? | How does the patient respond to his/her stress? | How does he/she cope with the stress? | How do you describe his/her temperament and character? | What symptoms does he/she have? | Which factor makes Hwabyung continuously?
1.2.3. Explanation about the Integrated Model

(1) Axis

① Axis X is the time axis, and it is formed with 'Traumatic event', 'Response', 'Adjustment Process', 'Result', 'Consistent factor'.

② Axis Y is formed with 'Success or Failure of strategy', 'Tendency of somatization', 'Shift to disease'

(2) Step

① Step 1 : What kind of stress is?
Unfairness, negative event, shock make Hwa (anger).

② Step 2 : The response against stress - after suffering 'Hwa'.
Cognitively, undermined self-esteem and loss of value lead to sense of inferiority. Physically, paralysis, pain, feeling of surging, and heat-sensitivity occur. Emotionally, the negative emotion such as anger, depression, and anxiety occur. When an emotional explosion occurs, it shifts to 'acute Hwabyung' or 'PTED (Post-traumatic Embitterment Disorder)'

③ Step 3 : The adjustment process according to coping behavior, temperament, and character.
The adjustment process differs according to individual temperament and character. Partly shows active response or proper acceptance, and partly shows passive response or avoidance. Some show frustration or abandonment.

④ Step 4 : The Result
Success of active response or proper acceptance leads to no disease. Failure of strategy leads to disease.
- Passive response or avoidance engenders the symptom-oriented Hwabyung.
- Frustration or abandonment engenders the mental-oriented Hwabyung or reactive depression.
- Continuous Hwabyung may engender other various psychiatric disorders at the same time.

⑤ Step 5 : The Consistency of Hwabyung.
The consistent factors are environment, physical condition, unfairness or regrettable memories.

1.3. The Purpose of Clinical Guideline for Hwabyung(CGH)

The Korean Society of Oriental Neuropsychiatry established the Hwabyung Research Center to perform a comprehensive study of Hwabyung and to develop clinical guidelines.

1.3.1. The Purpose of Establishment of Hwabyung Research Center

To develop clinical guidelines through the epidemiologic study of Hwabyung patients, conducting a state survey of treatment of Hwabyung, and performing a clinical study of Hwabyung treatment.
② To build an expert group through the process of development, suggest the method of Hwabyung clinical study and train specialized professional people.
③ To develop and disseminate the Hwabyung clinical guidelines, diagnosis criteria, scale, guidelines for treatment.
④ Ultimately, to improve the population’s health by sharing oriental medical treatment, which result in enhanced national competitiveness and reduced medical cost.

The purpose of the Hwabyung research center for the development of clinical guidelines for Hwabyung is to make evidence-based, easier to target and objective clinical decisions for outpatients and inpatients. It is also responsible for making guidelines for consultations between general practitioners and specialists and optimizing management and prevention.

1.3.2. The Purpose of Development of clinical guidelines for Hwabyung
① It suggests effective, economical and standardized clinical guidelines for Hwabyung treatment
② It suggests the diagnostic criteria as well as the criteria for transference to the secondary medical institutions and consultation with other medical systems.
③ Due to the nature of Hwabyung, it suggests guidelines for the various instructional methods besides treatment.
④ CGH investigates the relationship between Hwabyung and the other physical and mental diseases through investigation in Hwabyung.
⑤ CGH abolishes prejudices of public and patients against Hwabyung as a mental disorder to eliminate the possibility of bias and to broaden their understanding of the disease.

1.4. Development Process and contents of Hwabyung clinical guidelines

1.4.1. Development Model
① It has proceeded since 1st Jun 2008 under the supervision of the Hwabyung Research Center of the Korean Society of Oriental Neuropsychiatry, as a part of the Research and Development of Korean Medicine, Project of R&D of Clinical Guidelines of Korean Medicine granted from Korea Health Industry Development Institute.
② Objective : To determine the pathophysiology of Hwabyung by performing an epidemiological study and several clinical trials of Hwabyung patients and to develop clinical guidelines for diagnosis and treatment.
③ Method of Hwabyung Clinical Guidelines Development : Proceed based on the method of clinical guidelines development from the NICE (National Institute for Clinical Excellence) which is a NHS(National Health Service)-affiliated organization.
④ The Model of Hwabyung Clinical Guidelines Development
### 1.4.2. Development process

| Gathering the academic opinions and the composition of a committee | Forming the Committee of Researchers and Academy  
|                                                               | The Development Committee and Review Committee  
|                                                               | Selection of subjects of Clinical Study  |
| Data collection | Collection of past literature and current publishers  
|                                                               | Medical Utility and Adequacy Assessment  
|                                                               | Investigate and Analyze by Standardized Research tools  
|                                                               | Collect and Review Clinical Specialists' treatment  |
| Actual state survey | Survey the Existing Clinical Trials and Treatment  
|                                                               | Development of the Standard Items and Method of Survey  
|                                                               | The Hwabyung Cohort construction  |
| Clinical Trial | Prove Scientifically the Efficacy of Herbal Medicine and Acupuncture  
|                                                               | Choose Treatment Method Suitable for the Diagnostic and Periodic State of Hwabyung  
|                                                               | Development and Training of Clinical Trial Protocol for Multicenter.  |
| Development and assessment of the practical guidelines | Make Practical Guidelines Based on the Collection of Literature Evidence, Actual State Survey and Clinical Trial  
|                                                               | Assessment of Review Committee, Public Hearing  |
| Dissemination of Clinical Guidelines | Carry out Promotion and Education of Hwabyung Clinical Guidelines  |

### 1.4.3. Contents of Study

The clinical guidelines developed in the Hwabyung Research Center reflected the studies conducted in existing research institutions and the investigated and reviewed case studies in the oriental medical field.
1. Overview

(1) The study of clinical guidelines development

① The study of the purpose, development strategy and process of clinical guidelines\(^9\).
② The study of tools useful to develop clinical guidelines\(^{10}\).

(2) Study of Epidemiology and Observation

① The results of epidemiological study were collected from 9 university oriental hospitals: epidemiological information\(^{11}\), demographic characteristics, past history, symptoms, types of Pattern Identifications, and the results of study about correlation between constitution and Hwabyung\(^{12}\).
② The collected study of Hwabyung in Gang-won province: prevalence rates of Hwabyung\(^{13}\) and the pathogenic factor performed according to the Sasang constitution\(^{14}\).

(3) The study for the character of Hwabyung patients.

① Personality Characteristics: characteristics shown from MMPI\(^{15}\)\(^{16}\), TCI\(^{17}\), and SCL-90-R\(^{18}\).
② Study of the relationship between Heart Rate Variability (HRV) and Hwabyung\(^{19}\).
③ Study relationship between cardiovascular disease and Hwabyung: community study\(^{20}\), relation with coping mechanism\(^{21}\) and A-type behavior\(^{22}\), prediction examination by Framingham Coronary Risk Score\(^{23}\).
④ Study for the tendency of Hwabyung patients by DITI(Digital Infrared Thermographic Imaging)\(^{24}\)

(4) The study for methodology of clinical trial

① Provide the correct Hwabyung method of herbal medicine clinical trial: report systematic review of both domestic and foreign herbal medicine clinical trial papers\(^{25}\).
② Suggest the protocol for music therapy clinical trials for Hwabyung patients\(^{26}\).

(5) Development and application of diagnosis and assessment tools

① The study related to Hwabyung SCID\(^{27}\) and Hwabyung scale\(^{28}\).
② The study of Hwabyung Pattern Identification tools development\(^{29}\), \(^{30}\), \(^{31}\)
③ The study of oriental medicine assessment tool development\(^{32}\).

(6) The clinical trial to identify the treatment effect

① Herbal medicine: the clinical trial reports of effect identification for Sihogayonggolmoryeo-tang\(^{33}\), Bunsimgi-eum\(^{34}\), \(^{35}\), Yuldahansotang\(^{36}\).
② Acupuncture: the clinical trial reports of effect identification for Saam acupuncture\(^{37}\), Simjeongkyeok Treatment\(^{38}\), Simpojeongkyeok Treatment\(^{39}\), acupuncture treatment for insomnia\(^{40}\) symptoms and anxiety symptoms\(^{41}\).
③ Nonpharmacological therapy: Study of expert group survey about nonpharmacological therapy\(^{42}\), the clinical trial reports of effect identification for meditation\(^{43}\), intervention of music listening\(^{44}\), and forest healing\(^{45}\). Study for music therapy and loving kindness meditation.
(7) Clinical case report

① Case report to applied tools for Hwabyung Pattern Identification and oriental medicine assessment\(^{(46)}\).

② Case report according to accompanied symptom: Case report about patients with symptoms similar to stroke\(^{(47)}\), chronic headache\(^{(48)}\), ALS (Amyotrophic Lateral Sclerosis)\(^{(49)}\), flushed face\(^{(50)}\), symptoms similar to schizophrenia\(^{(51)}\), Menopausal Symptoms\(^{(52)}\), blepharoptosis\(^{(53)}\), binge eating\(^{(54)}\), and essential tremors\(^{(55)}\).

③ Case report according to treatment methods: Case report about patients with applied Saam acupuncture Simseunggyok\(^{(56)}\), Jahageo Herbal Acupuncture Therapy\(^{(57)}\), Mindfullness meditation\(^{(58)}\), Autogen Training\(^{(59)}\), and Melonis Calyx Vomiting Therapy\(^{(60)}\).

④ Case report according to Sasang constitution: Case report about Soeumin\(^{(61)}\),\(^{(62)}\) and Taeun\(^{(63)}\) Hwabyung.

The Hwabyung clinical guidelines based on the above data intend to improve and standardize the treatment of Hwabyung patients in primary oriental medicine institutions.

1.4.4. Level of Evidence and Strength of Recommendation

Hwabyung clinical guidelines suggest the level of evidence and the strength of recommendation according to the criteria from the Depressive disorder clinical guideline (2011) of University of Michigan Health System (UMHS)\(^{(64)}\). We also recommend the treatment process and application of diagnosis tools through synthesizing the proceeding study and experts opinion.

(1) Level of Evidence

<table>
<thead>
<tr>
<th>Level</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>randomized controlled trial : RCT</td>
</tr>
<tr>
<td>B</td>
<td>controlled trials, no randomization</td>
</tr>
<tr>
<td>C</td>
<td>observational trials</td>
</tr>
<tr>
<td>D</td>
<td>opinion of expert panel</td>
</tr>
</tbody>
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(2) Strength of Recommendation

<table>
<thead>
<tr>
<th>Class</th>
<th>Strength of Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>generally should be performed</td>
</tr>
<tr>
<td>II</td>
<td>may be reasonable to perform</td>
</tr>
<tr>
<td>III</td>
<td>generally should not be performed</td>
</tr>
</tbody>
</table>
1.5. Standard treatment process of Hwabyung

Table 1-1. Standard treatment process of Hwabyung

<table>
<thead>
<tr>
<th>Step</th>
<th>Process</th>
<th>Hwabyung</th>
<th>Tools</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Diagnosis of Hwabyung</td>
<td></td>
<td>• Hwabyung SCID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Hwabyung scale</td>
</tr>
<tr>
<td>2</td>
<td>Differential diagnosis</td>
<td></td>
<td>• Screening : SCL-90-R, MMPI - 2</td>
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<td></td>
<td>• Anger : STAXI</td>
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<td>• Depression : CES-D HAM-D BDI SDS</td>
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<td></td>
<td>• Anxiety : STAI SAS</td>
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<td></td>
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<td></td>
<td>• Insomnia : ISI</td>
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<tr>
<td>3</td>
<td>Consult decision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pattern Identification of Hwabyung</td>
<td></td>
<td>• Hwabyung Pattern Identification tools</td>
</tr>
<tr>
<td></td>
<td>• Medication (Herb formula)</td>
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<td>• Acupuncture</td>
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<td></td>
<td>• Psychotherapy</td>
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<tr>
<td></td>
<td>• Other therapies</td>
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<tr>
<td>5</td>
<td>Assessment of treatment</td>
<td></td>
<td>• Hwabyung scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Hwabyung oriental medicine evaluation tool</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Other diagnosis tools</td>
</tr>
<tr>
<td>6</td>
<td>Treatment continuing and therapy</td>
<td></td>
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<tr>
<td></td>
<td>response assessment</td>
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<tr>
<td>7</td>
<td>Management and prevention</td>
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<td></td>
<td>• Life habit training</td>
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<tr>
<td></td>
<td>• Anger management</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Stress management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We recommend to treat according to "Hwabyung standard clinical guidelines" for the effective treatment in primary clinic.
1.6. References

8) Kim JW, Chung SY, Suh HU. Comparison between Hwabyung and Major Depressive Disorder. ICPM 2001 : 145.
1. Overview


64) Depression Guideline Team. UMHs Depression Guideline Update, August 2011. Available at ‘http://www.med.umich.edu/1info/fhp/practiceguides’
2. Research on the Status

2.1. The Method of status survey

The Hwabyung epidemiologic study was undertaken to determine the pathophysiology of Hwabyung and investigate the characteristics of Hwabyung needed to develop the Hwabyung clinical guidelines.

The Hwabyung Research center (http://www.hwabyung.kr) of the Korean Society of Oriental Neuropsychiatry supervised the Hwabyung epidemiologic study, using equivalent protocol across all institutions, surveyed Hwabyung patients using one-on-one interviews. In order to investigate characteristics such as accompanied diseases, appearance of symptoms, the importance of symptoms, accompanied various emotional status, predictable disease risk and Pattern Identification.

2.1.1. Subjects

① The subjects are people either suffering from Hwabyung or those around Hwabyung sufferers ages from 20 to 65 who have agreed to a follow up in 4 years time.

② People with personality disorder, mental retardation or psychiatric issues were excluded from the survey. Similarly, people who found it difficult to interview or survey were also taken out.

③ During the Hwabyung epidemiologic study, a total of 151 people who thought they suffered from Hwabyung were recruited. After a basic demographical characteristics investigation, 93 people (61.6%) were diagnosed as Hwabyung sufferers and were suitable for the Hwabyung epidemiologic study.

2.1.2. Process to Preparing the study

① The development committee of the Korean Society of Oriental Neuropsychiatry selected the contents of survey for the Hwabyung epidemiologic study that was further approved after evaluation from IRB(Institutional Review Board) KyungHee University Hospital at Gangdong.

② A standard operation procedure, which was based on the approved clinical trial protocol, was established to educate oriental psychiatry clinical researchers at national oriental medicine hospitals in order to minimize bias between researchers, which can be a problem for multi-center studies.

2.1.3. Recruitment

① The following hospitals were recruited : A, KyungHee University Hospital at Gangdong,
Dunsan Korean Medicine Hospital of Daejeon University, Dongguk University Bundang Oriental Hospital, Oriental Medicine Hospital of Dong-eui University, Oriental Medicine Hospital of Sangji University, Oriental Medicine Hospital of Semyung University, Woosuk Korean Medicine Clinic in Jeonju, Wonkwang University Gwangju Oriental Medicine Hospital, Wonkwang University Sanbon Oriental Medicine Hospital.

② The recruitment period was from April 2009 to April 2010, and the follow-up was undertaken in July 2012.

2.1.4. Process of subjects investigation

① A brief explanation was given to prospective patients by telephone or in person. Then an interview reservation was made with those that intended to participate.

② After the interview subjects arrived, the instruction documentation was explained to the subjects. Only those subjects that agreed to the instruction and gave written consent were accepted.

③ After written consent was received, those who satisfied the selection criteria were granted identification numbers. Those who met the exclusion criteria were not.

④ Researchers conducted a questionnaire (demographic survey) with a direct question and answer format.

⑤ We conducted the interview about the biggest stress environments or events that generate the Hwabyung symptoms. We then classified subjects to either a Hwabyung group and a non-Hwabyung group using the Hwabyung SCID made in a prior study, and investigated whether they had the mental disorders frequently confused with Hwabyung by utilizing SCIDs of chronic depressive disorder, dysthymic disorder, undifferentiated somatoform disorder, panic disorder, generalized anxiety disorder from the DSM-IV disorders in the first axis of a structured clinical interview.

⑥ After being grouped according to the SCID, researchers used an oriental medicine questionnaire developed by the Korea Institute of Oriental Medicine to conduct interviews with the subjects, which included the Sasang constitutional study, the tools of Pattern Identification from a prior study, and a survey on the cultural aspects of Hwabyung.

⑦ After the oral questionnaires, subjects completed a Hwabyung questionnaire and mental and psychological assessment tools self-survey. The Hwabyung questionnaire was developed during the previous study, and the other mental and psychological assessment tools were: CES-D for depression, STAXI for anger, STAI for anxiety, WBSI (White Bear Suppression Inventory) and ERQ (Emotion Regulation Questionnaire) for suppression that related to the regulation of Hwabyung's major emotions, the scale of external entrapment for measurement of the entrapment perception in cognition, the scale of social support that is known to be related to the long-term prognosis of depression, the scale of perceived spousal criticism, and antisocial items from the inventory of interpersonal problems, and a stress questionnaire.

⑧ After completing all questionnaires and self-surveys, an anthropometry investigation, blood
tests, and electrocardiogram were carried out to calculate the predictive disease from the Framingham Point Scores\textsuperscript{15,16}. The entire process was completed in 3 hours.

\textsuperscript{9} Data for each subjects CRF (Case Report Form) was entered in a Microsoft Access file at the Hwabyung Research Center. The final data was confirmed following a review of input error.

\textsuperscript{10} The same process was performed on the 2nd, 3rd, 4th, 5th visits, which were conducted at 6 months, 1 year, 2 years, 3 years after the 1st visit respectively.

### 2.2. Demographical Characteristics

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>4.2–13.3%\textsuperscript{†}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age</td>
<td>Mainly prevalent during middle age (40-50), the average age is 49.35 for this Hwabyung epidemiological study</td>
</tr>
<tr>
<td>Gender</td>
<td>Majority female. The percentage of male sufferers of Hwabyung is 11.8–23.0%\textsuperscript{‡}</td>
</tr>
<tr>
<td>Hwabyung patient's level of education</td>
<td>In the majority of previous studies patients were self-educated. However, 41% of patients in this study are high school graduates.</td>
</tr>
<tr>
<td>Age when major stress event occurred</td>
<td>Mid 30s (34.45)</td>
</tr>
</tbody>
</table>
| Cause of stress | 1. Husband  
2. Family of husband  
3. Economic problem |
| Period of Hwabyung | Anger period 3-7%, Conflict period 7%, Resignation period 13-19%, Symptom period 66-75%\textsuperscript{§} |
| Accompanied diseases | Digestive system 46.4%, Endocrine system 37.7%, Psychiatry 36.2%, Musculoskeletal disease 33.3% |
| Accompanied mental disease | Previous study: somatization disorder, major depressive disorder, dysthymic disorder, general anxiety disorder  
Hwabyung epidemiological study: major depressive disorder, general anxiety disorder, panic disorder, undifferentiated somatoform disorder\textsuperscript{§§} |
| Oriental medicine pattern identification | Liver qi stagnation (肝氣鬱結) 45.2%, incoordination between heart and kidney (心腎不交) 38.7% |


\textsuperscript{‡} From previous studies the ratio of male Hwabyung sufferers is: Bogildo (1986) 11.8%, Ganghwado (1990) 23.0%, Wonju, Gangwon-Do (2008) 19.4%. The prevalence of male Hwabyung sufferers was not available in 1986. In 1990, however, the prevalence was 2.1% and 5.6% for men and woman respectively, and in 2008, it was 2.5% and 7.4% for men and woman respectively.

\textsuperscript{§} Depending on the number of visits, the ratio was slightly different.

2.3. Attack of Hwabyung

2.3.1. age

① As it originates from the result of chronic suppression of anger, Hwabyung's onset is difficult to pinpoint.
② The average duration before onset is 8~9 years, mainly between 40s-50s.
③ The average age for the Hwabyung epidemiological study was 49.35, but the rate of Hwabyung tends to be higher as age increases.

2.3.2. Progress

Hwabyung passes through 4 periods after the impact event: which are named anger period, conflict period, resignment period, and symptom period.

① The anger period is the period that anger rises and has the symptom surging anger. This ends after a few minutes or a few days.
② The conflict period occurs when the anger is resolved. It is a period filled with the mental symptoms such as worrying, feeling anxious, and being frightened easily.
③ The resignment period is the period when anger is suppressed and endured. As the anger is not truly resolved, it is easy makes the connection to the same stress and become depressed.
④ The symptom period is caused by a feeling of long-term unfairness, in which the physical symptoms of Hwabyung emerge, along with depression and anxiety, not anger.

Data from the Hwabyung research center shows that Hwabyung patients' endure the symptom period the longest (anger period 3.84%, conflict period 7.69%, resignment period 13.46%, symptom period 75.0%).

2.3.3. Psychological characteristics

① Total 151 subjects complete Hwabyung questionnaires, CES-D, STAXI, STAI, the scale of social support, the scale of perceived spousal criticism, White Bear Suppression Inventory, Emotion Regulation Questionnaire, the scale of external entrapment, stress questionnaire, the inventory of interpersonal problem. Due to the nature of the questionnaires, singles were excepted from the scale of perceived spousal criticism, and single women and men were excepted from the stress questionnaire because it targeted housewives.
② There were statistically significant differences between the Hwabyung group and non-Hwabyung group in all details of the Hwabyung scale, CES-D, STAI, WBSI, the scale of perceived spousal criticism, the scale of external entrapment, state anger, suppression, control from STAXI, stress questionnaire, and interpersonal Sensitivity and lack of sociability from the inventory of interpersonal problem.
Table 2-1. Comparison of survey between Hwabyung group and non Hwabyung group

<table>
<thead>
<tr>
<th>Survey</th>
<th>Group</th>
<th>Hwabyung n</th>
<th>Hwabyung score ±</th>
<th>Non Hwabyung n</th>
<th>Non Hwabyung score ±</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hwabyung</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total score of characteristic</td>
<td>92</td>
<td>38.88 ± 10.909</td>
<td>58</td>
<td>32.91 ± 9.229</td>
<td>0.001**</td>
<td></td>
</tr>
<tr>
<td>total score of symptoms</td>
<td>92</td>
<td>37.17 ± 11.163</td>
<td>58</td>
<td>27.29 ± 11.659</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td>CES-D</td>
<td>92</td>
<td>31.98 ± 10.813</td>
<td>58</td>
<td>22.43 ± 11.428</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td><strong>STAI</strong></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>state anxiety</td>
<td>92</td>
<td>56.20 ± 10.995</td>
<td>58</td>
<td>48.93 ± 10.427</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td>trait anxiety</td>
<td>92</td>
<td>55.83 ± 9.337</td>
<td>58</td>
<td>47.26 ± 9.528</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td><strong>STAXI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>state anger</td>
<td>92</td>
<td>16.71 ± 6.014</td>
<td>58</td>
<td>13.43 ± 5.299</td>
<td>0.001**</td>
<td></td>
</tr>
<tr>
<td>trait anger</td>
<td>92</td>
<td>23.26 ± 6.356</td>
<td>58</td>
<td>21.24 ± 6.334</td>
<td>0.060</td>
<td></td>
</tr>
<tr>
<td>expression</td>
<td>92</td>
<td>17.61 ± 4.792</td>
<td>58</td>
<td>16.31 ± 3.908</td>
<td>0.085</td>
<td></td>
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<tr>
<td>suppression</td>
<td>92</td>
<td>11.90 ± 3.207</td>
<td>58</td>
<td>10.64 ± 3.105</td>
<td>0.019*</td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>92</td>
<td>25.62 ± 6.101</td>
<td>58</td>
<td>23.59 ± 5.242</td>
<td>0.038*</td>
<td></td>
</tr>
<tr>
<td><strong>The scale of social support</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support</td>
<td>92</td>
<td>18.54 ± 5.290</td>
<td>58</td>
<td>18.84 ± 4.641</td>
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<tr>
<td>conflict</td>
<td>92</td>
<td>10.66 ± 4.295</td>
<td>58</td>
<td>9.93 ± 4.259</td>
<td>0.309</td>
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<tr>
<td>the scale of perceived criticism of spouse</td>
<td>87</td>
<td>21.14 ± 11.450</td>
<td>51</td>
<td>16.04 ± 11.423</td>
<td>0.013*</td>
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<tr>
<td><strong>White Bear Suppression Inventory</strong></td>
<td></td>
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<td>total score</td>
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<td>57.90 ± 10.249</td>
<td>58</td>
<td>50.05 ± 14.198</td>
<td>0.000**</td>
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<tr>
<td>intrusion</td>
<td>92</td>
<td>19.10 ± 3.997</td>
<td>58</td>
<td>16.60 ± 5.426</td>
<td>0.003**</td>
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<tr>
<td><strong>Emotion Regulation Questionnaire</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>revaluation</td>
<td>92</td>
<td>26.77 ± 7.048</td>
<td>58</td>
<td>27.28 ± 6.823</td>
<td>0.666</td>
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<tr>
<td>suppression</td>
<td>92</td>
<td>17.25 ± 4.137</td>
<td>58</td>
<td>16.47 ± 4.418</td>
<td>0.272</td>
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<tr>
<td><strong>The scale of external entrapment</strong></td>
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<tr>
<td>husband</td>
<td>85</td>
<td>7.38 ± 4.214</td>
<td>43</td>
<td>4.33 ± 3.676</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td>family of husband</td>
<td>85</td>
<td>3.41 ± 3.303</td>
<td>43</td>
<td>2.51 ± 3.680</td>
<td>0.164</td>
<td></td>
</tr>
<tr>
<td>children</td>
<td>85</td>
<td>4.62 ± 3.879</td>
<td>43</td>
<td>2.60 ± 2.709</td>
<td>0.001**</td>
<td></td>
</tr>
<tr>
<td>economic problem</td>
<td>85</td>
<td>5.24 ± 3.483</td>
<td>43</td>
<td>3.95 ± 2.609</td>
<td>0.021*</td>
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</tr>
<tr>
<td>household duties</td>
<td>85</td>
<td>6.41 ± 3.600</td>
<td>43</td>
<td>4.30 ± 3.827</td>
<td>0.003**</td>
<td></td>
</tr>
<tr>
<td>total score</td>
<td>85</td>
<td>27.21 ± 11.526</td>
<td>43</td>
<td>17.70 ± 10.754</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td><strong>Inventory of interpersonal problem</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>interpersonal Sensitivity</td>
<td>92</td>
<td>16.76 ± 6.692</td>
<td>58</td>
<td>14.14 ± 7.007</td>
<td>0.023*</td>
<td></td>
</tr>
<tr>
<td>interpersonal Ambivalence</td>
<td>92</td>
<td>16.27 ± 8.914</td>
<td>58</td>
<td>14.62 ± 8.054</td>
<td>0.254</td>
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</tr>
<tr>
<td>aggression</td>
<td>92</td>
<td>8.87 ± 7.346</td>
<td>58</td>
<td>7.45 ± 6.339</td>
<td>0.226</td>
<td></td>
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<tr>
<td>need for social approval</td>
<td>92</td>
<td>15.07 ± 7.308</td>
<td>58</td>
<td>13.19 ± 7.027</td>
<td>0.122</td>
<td></td>
</tr>
<tr>
<td>lack of sociability</td>
<td>92</td>
<td>21.35 ± 11.806</td>
<td>58</td>
<td>15.05 ± 10.957</td>
<td>0.001**</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01
2.4. Recovery from Hwabyung

The recovery from Hwabyung means the exclusion from Hwabyung diagnosis criteria, and the remission of emotional and physical symptom. In this study, we surveyed the stressful events, the causes of stress, marital satisfaction, STAXI, STAI, CES-D to evaluate factors associated with recovery.

At the time of the initial investigation performed by the Hwabyung research center, the Hwabyung group was 62.02% and Non Hwabyung group was 37.97%. After 1 year, 42.42% of non Hwabyung group were diagnosed with Hwabyung and 46.15% of Hwabyung group no longer met the Hwabyung criteria. In order of significance, the causes of stress in Hwabyung group were husbands, the families of husbands and economic problems. For the non-Hwabyung group, in order of significance, the causes of stress were higher from husbands, and economic problems, and relatively lower from families of husbands. Both had no significant differences in marital satisfaction.

Subjects who developed Hwabyung after 1 year showed four differences to other non-Hwabyung subjects in survey. First, new Hwabyung subjects received a higher expression of anger score on STAXI than non-Hwabyung subjects, which implies that a greater expression of anger affects Hwabyung.

Second, new Hwabyung subjects received a lower score on the scale of social support than non-Hwabyung subjects, which implies that less support affects Hwabyung.

Third, new Hwabyung subjects received a higher score on the scale of perceived spousal criticism than non Hwabyung subjects, which implies that a high perceived criticism of spouse affects Hwabyung.

Finally, new Hwabyung subjects received a higher score on the sensitivity of the inventory of interpersonal problems than non Hwabyung group, which means the lack of interpersonal boundaries and the sensitivity to criticism of others, affects Hwabyung.

Of the Hwabyung group, the sustained Hwabyung group and recovered group showed differences in CES-D, STAI, White bear suppression inventory, the scale of external entrapment, and stress questionnaire.

First, the CES-D score of the recovered group is lower than the sustained group after 1 year. This means that the recovery from depression relates to the recovery from Hwabyung.

Second, the 'state anxiety' and the 'trait anxiety' score from STAI of the recovered group is lower than the sustained group after 1 year. This means that the recovery from anxiety relates to the recovery from Hwabyung.

Third, the 'intrusion' score from White bear suppression inventory of the recovered group is lower than the sustained group after 1 year. This means that the intrusion of thinking is decreased in the recovery group.

Fourth, the scale of external entrapment score of the recovered group is lower than the
sustained group after 1 year. This means that the decrease of external entrapment relates to the recovery from Hwabyung.

Also, the sustained group has higher score on the 'family of husband' from stress questionnaire, which implies that stress from the families of husbands relates to the sustainment of Hwabyung.

2.5. Accompanied Disease with Hwabyung

Hwabyung has characteristics that are associated with anger depression, anxiety, and physical symptoms that co-exist with a variety of diseases. In previous studies, Hwabyung patients in DSM-III phase were diagnosed with, in order of prevalence, somatization disorder, major depression, dysthymic disorder, generalized anxiety disorder, panic disorder, phobic disorder, obsessive disorder, adjustment disorder. Hwabyung patients received an average of 1.8 diagnosis each and somatization disorder and depression was the most common combination(17). In addition, major depression and generalized anxiety disorder are key parameters to determine between Hwabyung and non Hwabyung sufferers(18).

The diseases diagnosed with the data from the first visit were chronic depressive disorder 63.8%, generalized anxiety disorder 17.4%, panic disorder 11.6%, undifferentiated somatoform disorder 8.7%, and dysthymic disorder 7.2% Chronic depressive disorder and generalized anxiety disorder often appeared together.

At the time of follow-up after one year, the percentage of participants who did not suffer from chronic depression disorder and developed it after 1 year is 41.46%, and the percentage of participants who suffered from chronic depressive disorder but recovered after 1 year is 31.81%. Patients who suffered from generalized anxiety disorder all recovered from anxiety after 1 year, but 5.1% of the participants who didn't suffer from generalized anxiety disorder developed generalized anxiety disorder. 85.7% of the panic disorder participants recovered after 1 year and panic disorder developed 2.5% of the participants who did not suffer from panic disorder. 85.71% of the participants suffering from undifferentiated somatoform disorder no longer met the diagnostic criteria.

This looks similar to the results of previous studies, which show that depression and anxiety trends change over time.

In addition, since Hwabyung is caused by emotional stress causes, previous studies inferred that the physical diseases related to anger or stress have relevance to Hwabyung(19). Given that the suppression of anger is associated with cardiovascular disease and cancer, it is suggested that Hwabyung can have a serious impact on the pathology of the body. Type A behavior, which is characterized by aggression, hostile tendencies and a lack of patience, is recognized as a factor associated with the onset of cardiovascular disease. An epidemiologic study from Gangwon-Do, 2006, showed Hwabyung patients have more type A behavior and, therefore, their risk of
cardiovascular disease was also significantly higher\(^{20}\).

However, no real difference was found in the risk of cardiovascular disease between the general rural population and the general public. Hwabyung and its symptoms are associated with anger. It can be concluded that by appealing injustices to those around them Hwabyung sufferers can reduce anger sufficiently for it to no longer harm the body through diseases other than cardiovascular disease, such as chronic gastritis, and peptic ulcer diseases of the digestive system\(^{21}\).

In the Hwabyung research center data, 36.2% of Hwabyung patients suffered from psychiatric disorders, and 33.3% of Hwabyung patients suffered from musculoskeletal disorders, 20.3% of Hwabyung patients suffered from diseases of the circulatory system, 46.4% of Hwabyung patients suffered from diseases of the digestive system, 21.7% of Hwabyung patients suffered from respiratory disease, 37.7% of Hwabyung patients suffered from endocrine disease, 11.6%, of Hwabyung patients suffered from Benign tumors and 5.8% of Hwabyung patients suffered from malignant tumors.

Among them thyroid diseases were considered to be most closely related with Hwabyung symptoms, but only 11.6% of the Hwabyung group had thyroid disease or it had appeared, and 1.4% patients suffered from angina pectoris, 14.5% of patients suffered from high blood pressure. This ratio is similar to the non Hwabyung group, so it is expected that patients who have psychiatric disorders and diseases of the circulatory system seem to be not significantly more in the Hwabyung group. Rather, it can be seen that Hwabyung patients have most commonly been diagnosed with diseases of the digestive system. However, in another study, the survey results showed that hypertension, hyperlipidemia, metabolic syndrome prevalence are significantly higher in the Hwabyung group than the non Hwabyung group, so the further study is needed\(^{22}\).

2.6. References

2. Research on the Status


3. Diagnosis and Assessment

3.1. Diagnostic Criteria of Hwabyung

Hwabyung can be summarized by being divided into major physical and psychological symptoms, and related physical and psychological symptoms. If similar symptoms are present, but related to medical illness or drugs reactions, these should be diagnosed first.

<table>
<thead>
<tr>
<th>Table 3-1. Hwabyung criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
</tr>
<tr>
<td>A. Major Physical symptoms</td>
</tr>
<tr>
<td>(3 or more of 4 symptoms)</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>B. Major psychological symptoms</td>
</tr>
<tr>
<td>(1 or more of 2 symptoms)</td>
</tr>
<tr>
<td>C. Related Physical symptoms</td>
</tr>
<tr>
<td>(2 or more of 4 symptoms)</td>
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<td></td>
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<td></td>
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<tr>
<td>D. Related psychological symptoms</td>
</tr>
<tr>
<td>(2 or more of 3 symptoms)</td>
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<tr>
<td></td>
</tr>
<tr>
<td>E. Decline of Psychological and Social skills</td>
</tr>
<tr>
<td>F. Related stress</td>
</tr>
<tr>
<td>G. Medical disease</td>
</tr>
</tbody>
</table>

In previous studies, the duration of symptoms was six months and acute stress reaction was diagnosed separately. In synthesis of recently reported cases, because the duration of symptoms of Hwabyung may change depending on the aspect of disease, the duration was not included in the diagnostic criteria. However, Hwabyung should be distinguished from simple stress responses.
3.2. Principles of diagnosis and assessment

Diagnosing the Hwabyung clearly reduces confusion through the care of patients, and it helps physicians to refer patient care and cooperate, especially between themselves. The following information summarizes the principles of Hwabyung diagnosis.

① Considering the diagnosis method of both oriental medicine and psychiatry.
② Generally applying the interview formed standardized diagnostic tool for determine Hwabyung1).
③ In addition to a simple diagnostic tool, diagnosis must be confirmed by comprehensive judgment considering a variety of clinical features such as the patient's emotional and physical symptoms, environmental factors.
④ In enforcing oriental medical diagnostic methods, in order to reduce confusion of concepts, it will help to diagnose Hwabyung by considering first psychological characteristics such as anger, unfairness, resentment that appeared in Hwabyung and to categorize the concept of Hwabyung as being limited to mental disorders with unique features.
⑤ Hwabyung diagnostic tool is set to the six month duration of the symptoms, but additional discussion is needed. To reflect especially the characteristics of anger-like disease such as acute Hwabyung and PTED (Post Traumatic Embitterment Disorder). It is suggested to reset the duration of the criteria.

3.2.1. Basic diagnostic tool

① Hwabyung Diagnostic Interview Schedule-HBDIS : The Hwabyung Diagnostic Interview Schedule Developed, in 2004, proved the reliability and validity. Hwabyung is diagnosed when 7 kinds of items meet all the diagnostic criteria. It consisted of major physical and psychological symptoms, and related physical and psychological symptoms1).
② Hwabyung SCID : the same diagnostic criteria with HBDIS has been edited according to the type of Structured Clinical Interview for DSM-IV: SCID2).
③ Hwabyung scale : Developed in 2008, consisted of two axis of Hwabyung symptoms and characteristics with a self-report questionnaire, and a 30 point symptoms scale is suggested to apply the diagnosis and assessment of Hwabyung3).

3.2.2. Pattern Identification and Assessment

① Instrument of Pattern Identification for Hwabyung : It was developed by a committee of experts consisting of professors of Oriental Psychiatry. It was an interviewer evaluation questionnaire that consisted of 38 questions, classified into five kinds of Pattern Identification type depending on the results of surveys4).
② Instrument of oriental medical evaluation for Hwabyung : Developed at 2010, it consists of
five survey tests which were used to assess the degree of symptom according to the Pattern Identification, and applies to the Pattern Identification and treatment evaluation of Hwabyung\(^5\).

### 3.3. Hwabyung SCID

#### 3.3.1. Overview of Hwabyung SCID

① Kim et al\(^1\) conducted an assessment of a variety of symptoms and psychological status that can be induced in Hwabyung based on the literature review and the clinical experience of experts. Based on this, and confirmed by the diagnostic criteria of Hwabyung and developed HBDIS (Hwabyung diagnostic interview schedule) which is standard scale of Hwabyung, and proved reliability and validity.

② In this study, The test-retest reliability of the tool was 0.82, Kappa values for validity assessment was 0.70, Sensitivity 0.83, specificity 0.88.

#### 3.3.2. Composition and criteria of HBDIS

① HBDIS consists of the seven sequential groups of questions.

② All items are composed of complete sentences to minimize differences according to the interviewees.

③ It is composed of 4 question groups about disease symptoms that are included in the diagnostic criteria, 2 stress-related question groups, assessment of psychosocial dysfunction, one question group regarding the exclusion criteria.

④ Through the interviewer assessment method, 1 point is scored if the symptom is not present symptoms, 2 points when the symptoms exist but the intensity does not meet the diagnostic criteria, 3 points when the presence of symptoms exists. Hwabyung is diagnosed finally when all items meet diagnostic criteria.

After that, Lee et al.\(^6\) corrected the SCID-I at DSM-IV in the study for diagnosis and Pattern Identification of Hwabyung and added the HBDIS to suggest SCID-Hwabyung.

### 3.4. The Scale of Hwabyung

#### 3.4.1. Hwabyung scale (1)\(^3\)

① The first self-report type survey to measure Hwabyung made by Kwon and Kim.

② All items of Hwabyung scale and Hwabyung characteristics, the subscales of symptoms of Hwabyung have a relatively high degree of internal consistency, and the symptoms of Hwabyung shows significantly different between Hwabyung groups.
3. The internal consistency of the Hwabyung scale was 0.92, and the internal consistency of characteristics and symptoms were 0.85, 0.93 respectively. The AUC of the scale of symptoms of Hwabyung was 0.78, which is useful as the primary screening tool of Hwabyung.

4. Min et al. suggested that the significant differences in the symptoms scale reaffirmed the fact that the Hwabyung group and depression group is different. On the other hand, the lack of any significant differences in personality scale would imply similarly personality predisposition between Hwabyung and depression group.

5. The scale of the symptoms of Hwabyung can be applied to the primary screening tool at a cut point of 30 points.

3.4.2. Hwabyung scale (2)

1. Min produced the preliminary Hwabyung Scale(pHB Scale) based on previous Hwabyung study.

2. In total there are 22 symptoms.
   - Group A include 6 specific core symptoms of Hwabyung [subjective anger or rage, unfairness and resentment, external express of anger, heat (get flushed, feeling hot, intolerance of heat), hatred, "Haan"]
   - Group B includes 8 physical and behavioral symptoms associated with Hwabyung [pushing-up innerside, feeling a lump in throat or pit of the stomach, stuffiness, palpitation, dryness in mouth, sigh, idle thoughts, plenty of complain]
   - Group C is comprised of 8 other symptoms related to Hwabyung [sadness/shed tears, anxiety/nervous, feeling guilty, insomnia, headache/pain in body, loss of appetite, being easily frightened, go outside].

3. The 6 items of Group A are evaluated on a 5-point scale ranging from 'nothing' 1 to 'very severe' 5. Group B and C are evaluated on a 3-point scale (except sadness/shed tear, anxiety/nervous, which are evaluated on a 5-point scale.

3.5. Instrument of Pattern Identification for Hwabyung

1. Jung cognized that the development of a specific Pattern Identification tool for Hwabyung was needed, because Hwabyung has an original Pattern appearance and specific symptoms. Therefore, a Pattern Identification tool for Hwabyung should be developed.

2. Through the review of literature and advice of experts, 5 major pattern (liver qi stagnation, up-flaming of liver fire, incoordination between heart and kidney, deficiency of both qi and blood, and stagnation of gallbladder qi and disturbance of phlegm) and the weighted value of each symptom for diagnosis and Pattern Identification was recommended.
3. Diagnosis and Assessment

③ The Pattern Identification was determined using interviewer evaluation, where Yes or No (1 for Yes, 0 for No) was entered into an excel file.

④ It was frequently used in case reports and clinical trials published in the oriental medical community for the tools of Pattern Identification.

⑤ In the clinical studies of the assessment of the reliability of Pattern Identification tools with 159 Hwabyung patients, the result of the analysis of the intra-observer and inner-observer agreement by Cohen's kappa is at the 'fair to good agreement beyond chance' level (intra-observer Kappa coefficient=0.673, inner-observer Kappa coefficient=0.432, intra-observer / inner-observer Kappa coefficient=0.554). Therefore, the reliability of the tool is secure.

3.6. Instrument of oriental medical evaluation for Hwabyung

① From the perspective that each pattern needs a different assessment tool because each pattern has a different major symptom. Jung et al. ⑤ developed an instrument of oriental medical evaluation for Hwabyung by utilizing the symptoms of each pattern.

② Using interviewer evaluation methods, the presence and severity of each clinical symptom was evaluated using a Likert 5 point scale for each pattern.

③ In the clinical studies of the assessment of the reliability of Pattern Identification tools with 159 Hwabyung patients, the result of the analysis of the intra-observer and inner-observer agreement by Intraclass correlation coefficient(ICC) is at the 'strong agreement' level with 0.742 ICC in overall pattern test-retest. Therefore, the reliability of the tool is secure. By Pattern Identification, liver qi stagnation (肝氣鬱結) test-retest ICC is 0.827, up-flaming of liver fire (肝火上炎) 0.768, lack of coordination between heart and kidney (心腎不交) 0.547, deficiency of both qi and blood (氣血兩虛) 0.805, and stagnation of gallbladder qi and disturbance of phlegm (膽鬱痰擾) 0.729.
3.7. Hwabyung Psychological Assessment Tools

<table>
<thead>
<tr>
<th>Assessment tool</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| MMPI - 2            | Understanding of the psychological characteristics of Hwabyung patients  
• Used to identify the psychopathology of Hwabyung patients  
• Apply when asked to advanced medical facilities and other healthcare organizations |
| SCL-90-R            | Overall understanding of the mental and the psychological state  
• Helps to identify various psychological states of the patient in a short time.  
• Apply when review the association between Hwabyung and other mental disorders |
| STAXI               | Intensive assessment for anger  
• Understanding Hwabyung patients about the state of anger and the trait of anger |
| BDI SDS HAM-D       | Intensive assessment for depression  
• Use to enforce the assessment of depressed state of Hwabyung patients |
| STAI SAS            | Intensive assessment for anxiety  
• Enforce if the patient complained of anxiety |
| ISI PSQI            | Intensive assessment for insomnia  
• To Identify symptoms of insomnia for Hwabyung patients |
| WBSI ERQ            | The assessment of cognitive status  
• To determine the degree of suppression of the patient's thoughts and emotions |
|                     | For environmental assessment  
• To determine the extent of environmental stress in Hwabyung patients |
|                     | The assessment of personality  
• Inventory to identify the factors of personality for Hwabyung occurrence |
3.8. Other assessment tools

3.8.1. DITI (Digital Infrared Thermographic Imaging)
① Use to assist diagnostic equipment when the symptom of body's heat and cold such as hot flush is noticeable.
② According to the clinical trial [9], Hwabyung patients have significantly different temperatures between the upper and lower back and between the trunk and limbs than normal.
③ With respect to the variance in temperature between upper and lower meridian points in Hwabyung patients, GV4 body heat is significantly higher than GV14, and CV17 is higher than PC8 when comparing the trunk and limbs.
④ With respect to the variance in temperature between upper and lower, the front and the back, the trunk and the limbs between, the groups GV26, CV22, CV17, GV14, CV6, GV9, GV4, CV12, PC3, PC8, ST36, KI1 were significantly higher in Hwabyung patients, the difference between CV17 and GV4 is especially severe.

3.8.2. Algometer
① Apply to assistance diagnostic equipment when the pain around CV17 is complained.
② According to the clinical trial [10], the severity of symptoms of Hwabyung and the pressure pain of CV17 shows correlation.

3.8.3. HRV (Heart Rate Variability)
① Apply to assistance diagnostic equipment when the autonomic nerve system shows unbalance.
② According to the clinical trial related to HRV [11], it was reported that the overall activity of the autonomic nervous system is degraded and the sympathetic activity tends to decrease in Hwabyung group.
③ Another clinical trial shows that there is no significant difference between Hwabyung and non Hwabyung group in the HRV value [12].
④ The efficacy of HRV as a tool for differential diagnosis and evaluation is not yet clear.

3.9. References

4) Lim HJ, Kim SH, Lee SR, et al. Study to Develop the Instrument of Pattern Identification for
4. Treatment

4.1. Purpose and principal

Hwabyung therapy is frequently applied as a combination of various therapies. Both short-term treatment and ongoing management is required. Short-term treatment goals should match the symptoms.

① Acupuncture aims to relieve symptoms in the short-term, and moxibustion and cupping are also combined to relieve symptoms immediately.

② Medication is administered to relieve short-term symptom, treat long-term diseases and prevent recurrence of symptoms. The selection of medication changes with patient's progress, so it is necessary to observe symptom changes closely.

③ Psychotherapy including counseling needs to the ultimate treatment.

④ Management methods including lifestyle education may be performed as a means of long-term prevention of Hwabyung.

Hwabyung therapy is frequently applied as a combination of various therapies in the clinical field of Korean Medicine, and the previous studies show the same pattern. Therefore, it is recommended that practitioners incorporate various approaches and therapies, such as medication, acupuncture, cupping, oriental psychotherapy, preventive management, education in their treatment.

4.2 Medication

4.2.1. The basic principle of medication

To relieve the original physical symptoms of Hwabyung, Pattern Identification, which is the basic principle of oriental medicine, is very important. Additionally, consideration should be given to the changing symptoms as Hwabyung progresses, the constitutional approach with individual characteristics, and individual circumstances (Level of Evidence D, Strength of Recommendation I).

Also, Hwabyung patients suffer other stress diseases such as depression, anxiety, insomnia, so if Western medicine is being taken consideration should be given to its interaction with any herbal medication administered (Level of Evidence D, Strength of Recommendation I).
4.2.2. The selection of prescription

In the treatment of patients, with consideration of symptoms to determine the pattern of disease, the equivalent Pattern Identification treatment should be done (Level of Evidence D, Strength of Recommendation I). In this study the 'Instrument of Pattern Identification for Hwabyung' applied was developed by an expert committee of professors of oriental psychiatry in 2008. Five major patterns were classified: (liver qi stagnation (肝氣鬱結) / up-flaming of liver fire (肝火上炎) / incoordination between heart and kidney (心腎不交) / deficiency of both qi and blood (氣血兩虛) / and stagnation of gallbladder qi and disturbance of phlegm (膽鬱痰擾)) for diagnosis and treatment1). This evaluation tool allows herbal medicine to be adjusted according to the symptom. The considerations in the selection of medicine are the degree of fever, degree of stuffiness, the appearance of heat and cold, the aspect of emotion and the vulnerability of body as a result of the chronic progression of Hwabyung symptoms 2) (Level of Evidence D, Strength of Recommendation I). The selection of prescription and duration administration should be cost-effective, safe, have no side effects, and, consider the interaction of medicines.

Bunsimgi-eum2) can be selected in a typical prescription of Hwabyung (Level of Evidence D, Strength of Recommendation I), and 抑肝散, 加味逍遙散, 黃連解毒湯, 歸脾湯, 清心温膽湯, 加味補益湯, 黃耆桂枝湯, 补血安神湯, 补心健脾湯, 清心健脾湯 can be prescribed depending on the symptoms (Level of Evidence C, Strength of Recommendation I), and 清心蓮子湯 or 熱多寒少湯 for Taeum-in Hwabyung, 凉膈散火湯 for Soyang-in and 香附子八物湯 or 十二味寬中湯 for Soeum-in can be prescribed depending on the constitution (Level of Evidence C, Strength of Recommendation I).

The study about the medicine treatment of Hwabyung.

① In May 2010, the development committee of clinical guidelines review of the Korean Society of Oriental Neuropsychiatry confirmed the high frequency of herbal medicine prescription according to the pattern and symptoms (Level of Evidence D, Strength of Recommendation I).

② Bunsimgi-eum2) could be chosen as a representative prescription.(Level of Evidence B, Strength of Recommendation I).

③ The randomized placebo controlled clinical trial about Bunsimgi-eum(different from above prescription)3)6) and Sihogayonggolmoryeo-tang5) was conducted. (Level of Evidence A, Strength of Recommendation II) Additionally, a single group clinical trial about Yuldahansotang4) which is a prescription of Sasang constitution was undertaken. (Level of Evidence C, Strength of Recommendation II).

④ Eleven cases of herbal medication effect on various Hwabyung symptoms were collected and evaluated (Level of Evidence C, Strength of Recommendation I).
<table>
<thead>
<tr>
<th>Pattern Identification</th>
<th>Symptoms</th>
<th>General recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver qi stagnation</td>
<td>Anger</td>
<td>分心氣飲加味, 逍遙散加味, 半夏瀉心湯, 柴胡加龍骨牡蠣湯</td>
</tr>
<tr>
<td>Up-flaming of liver fire</td>
<td>Stuffedness</td>
<td>分心氣飲, 六鬱湯</td>
</tr>
<tr>
<td>Incoordination between heart and kidney</td>
<td>Hot flush</td>
<td>加味逍遙散, 柴胡疏肝湯, 加味逍遙散, 分心氣飲加味, 六鬱湯</td>
</tr>
<tr>
<td>Up-flaming of liver fire</td>
<td>Feeling mass in he chest</td>
<td>分心氣飲加味, 六鬱湯, 半夏瀉心湯, 柴胡加龍骨牡蠣湯加代赭石</td>
</tr>
<tr>
<td>Deficiency of both qi and blood</td>
<td>Pushing-up</td>
<td>加味逍遙散, 柴胡加龍骨牡蠣湯, 分心氣飲加味, 六鬱湯</td>
</tr>
<tr>
<td>Stagnation of gallbladder qi and disturbance of phlegm</td>
<td>Anxitey (palpitation)</td>
<td>分心氣飲加味, 半夏瀉心湯, 六鬱湯, 柴胡加龍骨牡蠣湯加代赭石</td>
</tr>
<tr>
<td></td>
<td>Insomnia</td>
<td>天王補心丹, 四物安神湯, 加味逍遙散</td>
</tr>
<tr>
<td></td>
<td>Headache</td>
<td>清上蠲痛湯, 清上瀉火湯, 川芎茶調散</td>
</tr>
<tr>
<td></td>
<td>Dizziness</td>
<td>清暈化痰湯, 半夏白朮天麻湯, 柴胡加龍骨牡蠣湯加味逍遙散</td>
</tr>
<tr>
<td></td>
<td>Body pain</td>
<td>木香順氣散, 蘇合香丸, 柴胡加龍骨牡蠣湯加味逍遙散</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial herbal formulation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>分心氣飲加味, 逍遙散加味, 半夏瀉心湯, 柴胡加龍骨牡蠣湯</td>
<td></td>
</tr>
</tbody>
</table>

Stated in order of recommendation
4.2.3. The co-administration of herbal medicine and western medicine

① Hwabyung is the complex mix of some neurosis with depression, somatization and anxiety disorder according to DSM-4. If depression or anxiety symptom fit the criteria then western medicine is needed, while herbal medicine may be administered in consideration of the main physical symptoms and personality traits (Level of Evidence C, Strength of Recommendation II).

② It must be decided whether to combine psychotropic drugs or not after fully understanding the precise treatment target and the mechanism. Furthermore, if it is combined, then western medicine should be taken at intervals with the herbal medicine, taking into account absorption and the half-life of the drugs (Level of Evidence C, Strength of Recommendation II).

③ Many previous case reports reported that the combination of western medicine and herbal medicine leads to an improvement without side effects7)8)9)10). Further study into combining psychotropic and herbal medicine with respect to, safety, effectiveness and cost-efficiency from the clinical trial papers is required to produce a more accurate evidence-base, especially for Hwabyung treatment where synergies are expected (Level of Evidence C, Strength of Recommendation II).

4.3. Acupuncture & Moxibustion

4.3.1. Principle

Acupuncture & moxibustion (A&M) and herbal medicine have basically the same treatment principle. The A&M method uses acupuncture and moxibustion, applied to meridian points in body, to approach the treatment of disease through the meridian effect. It treats disease by harmonizing yin and yang, supporting health qi to eliminate pathogens, circulation of meridian11), so acupuncture treatment is a basic important method of treating various physical and psychotic symptoms in Hwabyung.

In general, treatments should ideally take place every 2-3 weeks for 1-2 months, and various acupuncture methods should be applied depending on the symptoms. Acupuncture is Especially effective in treating stuffiness of the chest, which is an original symptom of Hwabyung with push-up in the chest Treating stuffiness of the chest is a very important aspect in the treatment of Hwabyung. Acupuncture also effectively treats abdominal symptoms such as dyspepsia, heat symptoms, and mental symptoms like depression, and anxiety. Therefore, the acupuncture treatment of Hwabyung must focus on improving target symptoms. The patient's symptoms, Sasang constitution, social and psychological status should be considered when determining whether to combine medication and other treatment.
1. The acupuncture treatment of Hwabyung must focus on the target symptom improvement, and the patient's symptoms, constitutional status should be considered when determining whether to combine medication and other treatment.

2. It is recommended that various methods of acupuncture treatment be applied with due consideration of the physical symptoms and traits of patients.

4.3.2. Choose acupuncture prescription

The general acupoints to apply with Hwabyung are CV17, CV12, ST25, LI4, ST36, GV20, KI1 and PC6, HT8, LR3, especially CV17 is important acupoint to judge diagnosis, treatment, progress\(^12\) (Level of Evidence D, Strength of Recommendation I).

Beyond mere symptomatic prescription, the Sa-am acupuncture method which controls the physiology of organs related to Hwabyung is recommended, and the clinical trial of Simjeongkyeok\(^12\) and Simpojeongkyeok\(^13\) was undertaken (Level of Evidence A, Strength of Recommendation I).

The clinical trial was performed on Hwabyung patients with insomnia, who were divided into a trial group (acupuncture treatment) and a control group (non-treatment) using a randomized, patient-assessor blind, placebo-controlled trial. The trial group was treated using legitimate acupuncture treatment (B62 and K6), which was combined with Shigu\(^\) (視區) and Ahnmyun\(^\) (安眠) of scalp acupuncture to stimulate the visual function of the occipital lobe associated with the sleep and arousal circadian rhythms. Before and after the acupuncture treatment evaluations of sleep quality and a scale of the major symptoms of Hwabyung were compared. Changes in the scale of depression, anxiety and anger were significant and demonstrated that general acupoint acupuncture applied with scalp acupuncture is useful in the treatment of Hwabyung patients with insomnia\(^14\) (Level of Evidence D, Strength of Recommendation I).

The single group clinical trial performed with Hwabyung patients combined anxiety, HT7, SP6, EX-HN3, CV17 showed acupunctured significantly reduced the physical and psychotic symptoms of Hwabyung (Level of Evidence B, Strength of Recommendation I).

4.3.3. Herbal Acupuncture Therapy

Herbal Acupuncture Therapy is a new acupuncture method that combines the theory of acupuncture and the theory of herbology. Acupuncture includes the 12 meridians, 8 extraordinary meridians, and extra points and A-shi points. The theory of herbology researches the mechanisms of herb accession and its actions on organs or lesion in the human body.
Herbal Acupuncture Therapy is applied to a very wide range disorders such as musculoskeletal disorders, as well as neurological disorders like stroke and bell's palsy, and urinary diseases, liver biliary, allergy, diabetes\textsuperscript{15}. Research is actively being conducted into the balance of the autonomic nervous system\textsuperscript{16}\textsuperscript{17}\textsuperscript{18}\textsuperscript{19}\textsuperscript{20}, and about the symptoms of insomnia\textsuperscript{21}\textsuperscript{22}\textsuperscript{23}\textsuperscript{24}, fatigue\textsuperscript{25}, hot flushes, thirst, and sweating\textsuperscript{26} (Level of Evidence C, Strength of Recommendation I).

In a case report where Jahageo Herbal Acupuncture\textsuperscript{27} was applied to a Hwabyung patient, it had the effect of reinforcing qi, nourishing blood, and nourishing essence to treat the symptoms of push-up heat, deficiency syndrome of five zang organs, and neurasthenia, that the range of applications is diverse (Level of Evidence C, Strength of Recommendation I).

In addition, Hwabyung is a disease characterized by physical symptoms such as warmth, heaviness, insomnia, dry mouth by distinct stressors, so Herbal Acupuncture is expected to be an effective treatment of Hwabyung (Level of Evidence D, Strength of Recommendation I).

4.3.4. Moxibustion

Similar to acupuncture Moxibustion treats disease by enhancing circulation of qi and blood and the activity of qi. It cannot be differentiated simply because it adjusts qi to treat the body: it is only different from acupuncture in heat stimulation\textsuperscript{11}). Therefore, it is a useful treatment of lower abdominal coldness and digestive symptoms caused by the syndrome of upper heat and lower cold.

During the survey of experts, every expert said to apply moxibustion to both physical and psychotical symptoms of Hwabyung\textsuperscript{12}). 7 out of 15 experts said that it is an effective treatment of abdominal symptoms such as dyspepsia, 4 said that it is an effective treatment of mental symptoms such as anxiety and depression. The most preferred acupoints are CV4, CV12, and CV6, which are in the abdominal area (Level of Evidence D, Strength of Recommendation I).

Similar to acupuncture, moxibustion is contraindicated in the treatment of the severely hunger, overly full, drunk, severely frightened, severely dehydrated, excessively bleeding bleeding, severely weak, chronically diseased, mentally traumatized, severely fatigued, sensitive areas, and those who find it difficult to endure the stimulation of moxibustion like the old and children. Special care should be taken not to form a suppuration or ulcer by burning through either direct or indirect moxibustion\textsuperscript{11}) (Level of Evidence D, Strength of Recommendation I).

The moxibustion for Hwabyung is act of balancing water and fire and encouraging the qi, blood and original qi. For digestive symptoms, moxa is recommended to be performed at CV12, CV10, and original qi is to be encouraged at CV6, CV4.
4. Treatment

4.3.5. Cupping

Cupping therapy removes stagnant fluid congested in the body from skin to relax tendons and activate collaterals, thereby improving the circulation of whole or part of the body\(^{11}\). Therefore, it is directly relieves the physical symptoms of Hwabyung (Level of Evidence D, Strength of Recommendation I).

Every expert, in the survey of experts, recommends cupping to treat the physical and psychotical symptoms of Hwabyung\(^{12}\) (Level of Evidence D, Strength of Recommendation I). 8 of 15 said that it is an effective treatment of pain like myalgia, and the psychotic symptoms like insomnia, stuffiness, nervous (Level of Evidence D, Strength of Recommendation I).

The precautions are: use weaker stimulation to begin with, don't use too many cups in one area, limit the duration of cupping.

The goal of cupping therapy is to relieve insomnia and pain and is performed dry cupping at the nape, governor vessel and conception vessel. Its application is recommended to relive minor symptoms in Hwabyung patients.

4.4. Psychotherapy

4.4.1. Principle

From the first meeting to the end of treatment, oriental psychotherapy can be used in various ways depending on the patient's condition doctor's decision. In the initial meeting, the trigger that induced Hwabyung, the patient's coping strategies, the patient's personality, the dynamics of the people around the patient, and the association between stressful events and symptoms should be carefully reviewed. Looking at the environmental conditions that can support the patients is an important factor for determining the treatment plan and prognosis. Oriental psychotherapy is especially effective when combined with acupuncture or medication. Sometimes it can be applied alone.

A clinical trial showed that the use meditation as an intervention methods, without the use other treatment methods such as acupuncture and medication improved the patients symptoms, cognition, and interpersonal relationships\(^{28}\). There are many case reports that show combining psychotherapy with other treat methods helps the treatment of Hwabyung\(^{29}\)(30) (Level of Evidence C, Strength of Recommendation I).
4.4.2. Recommended Psychotherapy

Every expert, in the survey of experts, recommended psychotherapy to treat the physical and mental symptoms of Hwabyung. 13 of 15 experts said that it is an effective treatment of mental symptoms like depression and anxiety, 2 said that it is an effective treatment of physical symptoms. In order of prevalence, the western and oriental medicine therapies experts administered were Li-Gyeung-Byun-Qi Therapy, Gi-Un-Go-Roen Therapy, supportive therapy, cognitive therapy. Until recently there were few studies of psychotherapy designed specifically for the Hwabyung patients, but this view of experts shows the utilization of therapy for Hwabyung patients and its intended effects. (Level of Evidence D, Strength of Recommendation I).

Li-Gyeung-Byun-Qi Therapy effects to stressful disease from the interpersonal relationship[31]).

Gi-Un-Go-Roen therapy is a dialogue therapy used in clinical field. Its description, persuasion, and support of the progress and treatment of Hwabyung patients is considered useful[32]).

Kyungja-pyungji Therapy is a behavioral therapy that can be applied to Hwabyung patients with anxiety disorder[33]). Oh-Ji-Sang-Seung Therapy (also known as Emotion Sang-Seung therapy) is an applied Five Elements Theory to control biased emotions[34]). The effectiveness of the cure is the relative relationship between anger and sadness that is induced to heal the pathological emotion. In addition, meditation and Autogen training, relaxation therapy similar to meditation, couple therapy, and cognitive therapy are recommended.

Table 4–2. The oriental psychotherapy recommended on Hwabyung

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<td>Contribute to emotional communication (Level of Evidence C, Strength of Recommendation I)</td>
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<td>至言高論 Gi-Un-Go-Roen Therapy</td>
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<td>五志相勝 Oh-Ji-Sang-Seung Therapy</td>
<td>Healing the pathological emotion by inducting other emotions in relative relationship for the cure of anger and sadness which is the major emotion of Hwabyung patients (Level of Evidence C, Strength of Recommendation I)</td>
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<td>Oriental music therapy</td>
<td>The relieving of suppressed emotion through the expression (Level of Evidence C, Strength of Recommendation I)</td>
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<tr>
<td>Other</td>
<td>Kyungja-pyungji Therapy (Level of Evidence C, Strength of Recommendation I), Autogenic training (Level of Evidence C, Strength of Recommendation I), Cognitive Therapy (Level of Evidence C, Strength of Recommendation I), Couple Therapy (Level of Evidence C, Strength of Recommendation I)</td>
</tr>
</tbody>
</table>
1. In the interview with Hwabyung patients, it is recommended for doctors to review closely the reason of occurrence, the coping style of patients, the dynamics between patients and the people around them, the relationship between symptoms and stress events.

2. Oriental psychotherapy is performed by oriental psychiatry specialists, and Li-Gyeung-Byun-Qi Therapy, Gi-Un-Go-Roen Therapy, Oh-Ji-Sang-Seung Therapy, Kyungja-pyungji Therapy, meditation, Cognitive Therapy, and oriental music therapy are recommended to treat Hwabyung.

4.5. References

5. Management and Prevention

5.1. The Principle of Management and Prevention

Even after the symptoms of Hwabyung have been treated, ongoing management practices are necessary to sustain and strengthen the self-control capability.

Preferentially, stress factors which can be the cause of Hwabyung in the everyday life should be reduced as much as possible, then counseling should be performed to prevent the recurrence of Hwabyung, which is caused by accumulated anger psychologically.

Additionally, even after treatment, programs that synthesize the methods used in psychotherapy should be offered that allow patients of Hwabyung to manage anger continuously.

In addition to routine treatments, methods that can be performed in everyday life are presented to manage and to prevent Hwabyung.

It is recommended that these methods are used extensively as they can increase the therapeutic effect and prevent disease recurrence.

5.2. Management and Prevention

Strategies of stress management include exercising to manage daily stress, hobbies, self-development, and appropriately adjusting feelings like anger, which can be a cause of Hwabyung. Patients should be educated about management strategies before their treatment is terminated, and in case patients may need intervention like counseling after treatment is terminated. A Hwabyung management strategy, consisting of relaxation and support systems, have induced cognitive changes and improved many symptoms. Follow-ups three months later, however, showed that symptoms reappeared\(^1\). Therefore management strategies should not be ended at once, but the involvement of patients and therapist and/or patient's is required in the patients self-management (Level of Evidence B, Strength of Recommendation I).

Management strategies that can be used by patients of Hwabyung include therapy models of forgiveness\(^2\) and management programs of anger\(^3\). (Level of Evidence D, Strength of Recommendation I).

After the treatment of patients with Hwabyung, is terminated, efforts to prevent recurrence is needed by using management strategies that can be used in daily life.
5.3. References

3) http://www.williamslifeskills.com
6. Limitations and Initiatives

6.1. The limitations on clinical practice guideline of Hwabyung

Hwabyung is a syndrome that appears as a combination of several physical and psychological symptoms. It has something in common with depression, anxiety disorder, and somatoform disorder on categories of Western medicine, and even same patients with Hwabyung, there are a variety of symptoms which they complain. For therapists, it is recommended to choice an appropriate psychotherapy accordingly a variety of patients as Hwabyung is from not a single biological cause but life events mainly. Many experts of oriental psychiatry are recognized that oriental psychiatric therapy is essential for curing Hwabyung\(^1\). Until now, however, because of the absence RCT (Randomised Controlled Trials) which can be an important basis of clinical guidelines, Level of Evidence and Strength of Recommendation are not high. There may be lots of causes like a lack of research staff who is major in oriental psychiatry, practice patterns of oriental medicine based on the past literature, a shortage of support for research, and so on. In addition, confirming the effects of psychotherapy alone is difficult, because on the majority of clinical studies it performed in combination with acupuncture or herbal medicine. Despite these limitations, for positive prevention, treatment and management to Hwabyung, we made the guideline on psychotherapy and management of Hwabyung by basing accumulated researches to date and opinions of the experts. We expect that there will be reliable studies continuously in future and that outcomes will be complementary through the revision of guidelines.

6.2. The means of developing clinical practice guidelines of Hwabyung

The means of developing clinical practice guidelines of Hwabyung are as follows.

① First was to establish the standardized diagnosis of Hwabyung, and by taking this, we could derive the definite disorder concept of Hwabyung.

In this guideline, Hwabyung is defined as a kind of mental disorder, and is diagnosed in a similar way to other psychiatric disorders diagnosed, but it can contain oriental medical opinions by focusing on patients. We have been able to elaborate the concept of the disease Hwabyung through the processes to discriminate against other mental disorders and to perform this standard diagnostic method clinically. From the results of standardized diagnosis progress on epidemiological studies of Hwabyung, actually, despite Hwabyung occurs with other mental disorders highly, the single group of patients was found that can be diagnosed separately as Hwabyung, so it is understood that Hwabyung has its own unique
Hwabyung in the meantime has been understood as a culture-specific disorder in Korea, in terms of culture. So we can obtain a deep understanding of the mental characteristics peculiar to Koreans in the process of identifying pathogenesis in Hwabyung and deep-seated emotions. The clinical practice guidelines of Hwabyung are expected to be utilized as specialized treatment protocols to deal with mental disorder in Korean, by combining the understanding of mental characteristics of Korean with the treatment methods of traditional medicine.

As development projects of clinical practice guidelines for Hwabyung developed standardized guidelines based on the disease concept presented in traditional medicine, unlike other guidelines, development cases of clinical practice guidelines can be presented which using the approach to encompass the concept of disease presented in traditional medicine. It seems to be able to become prompt to methodology of development project for consultation guidelines in the oriental clinical field in future.

Although Hwabyung is an extensive disease common from a clinical perspective, in the meantime, there have been a shortfall in the established treatment procedures and evaluation methods. If these clinical practice guidelines widespread, and based on this when patients with Hwabyung can be diagnosed with standard and able to receive treatment, the primary clinical level of oriental medicine would be improved. And it is expected to contribute to the improvement of public health by sharing socially the Hwabyung-related knowledge in the form of objective organization.

6.3. Difficulties in the development of clinical practice guidelines of Hwabyung and Following subject

In psychiatry at Western medicine, development projects of clinical practice guidelines for psychiatric disorders are typically performed on the basis of research data accumulated over a long period of time.

By contrast, development project of clinical practice guidelines in oriental medicine was performed for the first time in 2008, and there is a limit because of insufficient data which can be based by lack of research to date and limited period of time.

Thus if development of evidence-based clinical practice guidelines is evaluated based on systematic review of randomized controlled trial of high-reliability, the development of clinical practice guidelines in oriental medicine will be possible after accumulation of much research.

Difficulty in the development of clinical practice guidelines in oriental medicine also appears in the consultation method in oriental medicine.

Basically in oriental medicine, there are frequent treating based on past literature rather than study.

And there is a limitation to uniform standards because of differences in treatment and drug
occurred depending on the characteristic dialectic of individuals, and different methodologies for therapeutic approaches.

If this clinical trials performed strictly, there would be a limitation to be different from the treatment performed in the clinic.

The characteristics of Hwabyung also make it difficult to develop clinical practice guidelines.

Hwabyung is a concept that has been used for the first time in private, Korea, and contains the basic concepts of oriental medicine.

It has been widely used in clinical oriental medicine, but clinicians have had a different point of view in this process as the standard diagnostic criteria were not used.

This is because in oriental medicine literatures there is a broad concept about 'Fire(火)', so it is difficult to establish the concrete concept of disease when considering both in terms of causes and phenomenon about Fire(火).

To overcome these limitations, in the development of clinical practice guidelines, Hwabyung, new approach like selecting information contained in the oriental medicine literature as the primary basis and restricting concept of Hwabyung as a mental disorder were used apart from the general guidelines.

6.4. References

CLINICAL GUIDELINES FOR
HWABYUNG