



2018 Vol. 4(1) 3:1-4

A Study of Modern Healthcare for People by Analysis of the Kampo pathological theory on “KI-KYO” and “KI-UTSU”

Chizuko HIOKI

Research Institute of Traditional Asian Medicine, Kindai University School of Medicine, 377-2 Ohno-Higashi, Osaka-sayama, Osaka 589-8511, Japan chioki@med.kindai.ac.jp

Citation: HIOKI, C. A Study of Modern Healthcare for People by Analysis of the Kampo pathological theory on "Ki-kyo" and "Ki-utsu" *JAS4QoL* **2018**, 4(1) 3:1-4.

Online: <http://as4qol.org/?p=2084#art3>

Received Date: 2018/03/25 Accepted Date: 2018/04/01 Published: 2018/04/01

2018 International Conference and Cruise

- The 2018 International Conference on Quality of Life will be a **5-night Genting Dream Cruise** leaving **Sunday, Sept. 2nd, 2018** from Singapore, visiting Malaysia, Cambodia, Laem Chabang in Thailand, and returning to Singapore on **Friday, Sept. 6th, 2018**.
- We are now calling for papers. Proceedings as well as photos and other information from past conferences can be found at <http://as4qol.org/icqol/2018/>

By special arrangement with the cruise operators, Conference attendees will receive a one-time special discount. Full details to be as4qol.org/icqol/2018/accomodations/.

24 Jun & 2 Sep 2018

Palau Redang – Sihanoukville – Bangkok Cruise

(5 nights, Sun – Fri)

DAY	DESTINATION	ETA (Local)	ETD (Local)
Sun	Singapore	–	1800
Mon	Pulau Redang	1100	2000
Tue	Sihanoukville	1100 (1000)	2000 (1900)
Wed	Bangkok (Laem Chabang)	0900 (0800)	2100 (2000)
Thu	Cruising Day	–	–
Fri	Singapore	1200	–



A Study of Modern Healthcare: Analysis of the *Kampo* pathological theory on “*Ki-kyo*” and “*Ki-utsu*”

Chizuko HIOKI

Research Institute of Traditional Asian Medicine, Kindai University School of Medicine, 377-2 Ohno-Higashi, Osaka-sayama, Osaka 589-8511, Japan
(chioki@med.kindai.ac.jp)

Abstract

We examine the pathological theory of *Kampo* with regard to *ki-kyo* and *ki-utsu* or the respective states of mind and body in our ordinary lives. In addition, correlations between “quality of sleep” and *ki-kyo* and *ki-utsu* were analyzed. Female patients (n=154) in the 30s to 60s underwent consultations at the Institute of Oriental Medicine at Kindai Medical University in Japan. Subjects filled out a first-visit questionnaire concerning their body (physical) condition and feelings (state of mind) based on *Kampo* physiological theory. The *ki-kyo* (physical state where biological conditions are attenuated) correlated markedly with *ki-utsu* (r=0.604), showing mental depression was present with subjects exhibiting marked uneasiness and moodiness, disinterest in their surrounding, and reluctance to talk to others. *Ki-utsu* manifested “feelings of anger and fear” (r=0.660), “pessimistic behavior” such as easily tearing and frequent sighing (r=0.689). Of all items, “forgetful” of events indicated the closest correlation (r=0.464) with *ki-kyo*. “Anger” was strongly correlated with “pessimistic behavior” (r=0.561). Sleep quality was markedly correlated with the physical state, the biological reaction of *ki-kyo* (r=0.509) or the “feeling of heaviness” item (r=0.433) was more closely correlated than the mental depression of *ki-utsu* (r=0.388). *Ki-utsu* and *ki-kyo* correlated well with anger and pessimistic behavior. Overall, this study clarified how body and mind influence each other. Modern people who become easily irritated and angry in daily life may be inclined to experience *ki-kyo* and/or *ki-utsu*. Thus, examining the pathological theory of *Kampo* may provide a new perspective for formulating useful traditional therapy for the modern people.

Citation: HIOKI, C. A Study of Modern Healthcare for People by Analysis of the *Kampo* pathological theory on “*Ki-kyo*” and “*Ki-utsu*”. *JAS4QoL* 2018, 4(1) 3:1-4.

Available online at
<http://as4qol.org/?p=2084#art3>

Received: 2018/03/25
Accepted: 2018/04/01
Published: 2018/04/01

©2016 JAS4QoL as4qol.org

Keywords: *Kampo*, *Ki-kyo*, *ki-utsu*, Correlation coefficient, Mental and physical correlations

1. Introduction

The Department of Oriental Medicine, which is located in Kindai Medical University hospital, provides free healthcare services with its medical professionals of pharmacists, physicians and acupuncturist.

Many patients are treated in both Western medicine and *Kampo*, which is a kind of herbal medicine conducted in Japan. The physiological theory of *Kampo* is based on the three basic elements “*ki*, blood and water”. The state of a person’s health is maintained by circulating and metabolizing these elements in the human body according to *Kampo* theory. In particular, “the productive function of *ki* being lowered: i.e. *ki-kyo* (deficiency of *ki*)”, and “*ki* not properly circulating, i.e. *ki-utsu* (depression of *ki*)” are the most important factors that causes various diseases. *Ki*-like energy represents vital activity. Abnormality in *ki* indicates functional disorder between the body and mental activity.¹ Doctors investigate abnormal *ki* situations by making full use of their senses to find the etiology of patients. They gather the patient information via inquiries and inspection, assess the pathology, and prescribe herbal medicine. It is the same common procedure used in Western medicine at present to effectively elicit information a patients’ mental and physical condition. However, in order to proceed with treatment based on the theory of *Kampo* Physiology, it is necessary to understand the biological mechanism that is established based on “*ki*, blood and water”. We modern people will embody what signs are judged to be *ki-kyo* and *ki-utsu*.² As a result of observing a lot of patients, it was presumed that *ki-kyo* and *ki-utsu* are symptoms that are routinely observed in daily life.

2. Objectives

To examine the pathological theory of *Kampo*, *ki-kyo* and *ki-utsu* appear what the state of our mind and body in ordinary lives. There are not a few patients who complain of poor health due to insomnia.² We consider the correlation between “quality of sleep” and *ki-kyo* and *ki-utsu*.

3. Methods

Female patients (n=154; 50.3 ± 6.3 years old), who had not been diagnosed with dementia, who sought consultation at the Institute of Oriental Medicine at Kindai Medical University of Japan were enrolled. Upon the first visit, patients themselves answered a questionnaire about the body condition and feelings of daily life. The contents of the questionnaire were presented orally to the patient if necessary.

Ki-kyo and *ki-utsu* were classified as criteria for determining physical lesions and investigating psychological lesions, respectively. *Ki-kyo* was diagnosed by six questions on the questionnaire and *ki-utsu* was judged seven questions, as given in Table 1. On a given question, a positive answer, was counted as

Table 1: Contents/Items of inquiry consultation

① Ki-Kyo (physical condition)	③ Sleep Quality	⑥ Absence of perseverance
1. Easily tired	1. Bad sleep	1. Lack of patience
2. Sluggish feeling	2. Shallow sleep	2. Lack of concentration
3. Hypersensitive response to events	3. Often dream	3. Feeling restless
4. Susceptible to cold	4. Awake in the middle of the night	⑦ Intense anger/fear
5. Diarrhea	5. Poor/moody waking-up	1. Feeling anxious and/or frustrated
6. Annoying/bothersome in behavior	④ Pessimistic action	2. Quick-tempered
② Ki-UTSU (State of mind)	1. Often sigh	3. Intense fear
1. Feeling unwell/gloomy	2. Easily moved to tears	
2. Feeling anxious at all time	3. Worrisome	
3. Over-concerned	⑤ Body feels heavy	
4. Worried over trivial matters	1. Trunk feels heavy	
5. Not in the mood of talking	2. Legs/waist feel heavy	
6. Unconcerned of surrounding events	3. Feeling lack of energy	
7. Feeling depressed persistently		

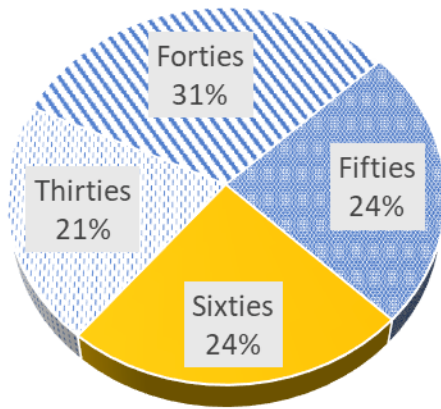


Fig.1: Ratios by age against number of subjects: the age groups include those in the 30s, 40s, 50s, and 60s.

one point for the corresponding classification. Similarly, “quality of sleep” was scored by five questions, “pessimistic behavior” was evaluated by three questions. If no answer was provided, the item was scored as 0 points. Drowsiness during the period of activity/daytime was evaluated on a scale from 0 to 3 points. The correlation between 10 items including the age was examined. The question for *ki-kyo* and *ki-utsu* were selected from the *Ki-Blood-Water* study by Terasawa³. This study was approved by the Ethics Committee of Kindai Medical University.

4. Results

As shown in Fig. 1, the age ratio of 154 subjects (154 specimens) was 21% in their 30s, 31% in their 40s, and 24% in their 50s and 60s. Correlation coefficient are given in Table 2 (rejection limit value of 154 specimens in the non-correlation test: 0.209, $p < 0.01$); there was no correlation between age and other items. No correlation was showed between “forgetfulness” and “pessimistic behavior.” Everyone generally experiences that the more you lose concentration and composure, the more forgetful you become.⁴ Therefore, since the correlation coefficient between “lack of concentration” and “forgetfulness” was 0.399, a coefficient of more than 0.399 was based on the criteria. In Table 2, a value of 0.399 or more is shown in bold.

Ki-kyo (physical situation in which the biological reaction is weakened) had a strong correlation ($r=0.604$) with *ki-utsu* (mental depression accompanied with uneasiness and trouble, lack of interested in things, and reluctance to speak). *Ki-kyo*, in addition, was related to symptoms that the body felt heavy ($r=0.551$), and that concentration was lost ($r=0.564$).

The *ki-utsu* and “feelings of anger and fear” ($r=0.660$), “pessimistic behavior: tears, often sighing” ($r=0.689$), and “forgetfulness” events had a stronger correlation ($r=0.464$) than any other contents.

The quality of sleep was stronger correlated with the physical situation, the biological reaction of “*ki-kyo*” ($r=0.509$) or “heavy body” ($r=0.433$), than the mental depression of “*ki-utsu*” ($r=0.388$).

“Drowsiness during the day or during activity” was not correlated with “pessimistic behavior” ($r=0.170$). People who get sleepy during the day may be correlated with the physical state of *ki-kyo* ($r=0.389$).

Table 2: Correlation Analysis of items at the first inquiry consultation

	Age	Ki-kyo (physical condition)	Forgetfulness	Ki-utsu (state of mind)	Intense anger/fear	Lack of perseverance and/or concentration	Pessimistic behavior	Heavy feeling in legs/waist and body	Sleep quality	Sleepiness during daytime
Age	1.000									
Ki-kyo (physical condition)	-0.084	1.000								
Forgetfulness	0.022	0.322	1.000							
Ki-utsu (state of mind)	-0.118	0.604	0.464	1.000						
Intense anger/fear	-0.174	0.449	0.232	0.660	1.000					
Lack of perseverance and/or concentration	0.062	0.564	0.399	0.576	0.450	1.000				
Pessimistic behavior	-0.157	0.413	0.184	0.689	0.561	0.392	1.000			
Heavy feeling in legs/waist and body	0.120	0.551	0.233	0.439	0.298	0.438	0.327	1.000		
Sleep quality	-0.035	0.509	0.212	0.388	0.358	0.301	0.357	0.433	1.000	
Sleepiness during daytime	-0.053	0.389	0.222	0.317	0.308	0.250	0.170	0.317	0.206	1.000

Number of subjects: 154

“Anger” was strongly correlated with “pessimistic behavior”(r=0.561). It may be concluded that getting angry weakens the life force and interferes in social life.

5. Discussion

It is interpreted in *Kampo* that *ki* is the energy that activates the human body and actions⁵. In this study, the *ki-kyo* score showed the degree of the physical situation, in which the productive function of *ki* decreases. while *ki-utsu* was a depressed state that arises from the absence of proper circulation and was a measure of mental states.

From results of our analysis, *ki-utsu* and *ki-kyo* were correlated with feelings of being angry and pessimistic behavior. In a word, modern people become easily irritated and feelings of anger tend to be *ki-kyo* and/or *ki-utsu*. In addition, anger and fear give us the tendency to become pessimistic. These causal relationships are not analyzed in this study, but in modern societies where there is a lot of stress and opportunities for frustration, *ki-kyo* is a pathology in daily life. Since the *ki-kyo* and *ki-utsu* exhibit a strong correlation, *ki-utsu* is also a familiar pathology. The results showed that the work of the “invisible mind” and physical activity were linked. Many modern people who complain of insomnia may demonstrate *ki-kyo*. The stronger the emotions of anger and fear, the more likely they are to harm your health.

6. References

1. Yuzo Sato et al. (2005). Introduction to KAMPO: Chapter 2. The Japan Society for Oriental Medicine, p.47-49.
2. Koyama F, Yoda T, Hirao T. Insomnia and Depression: Japanese Hospital Workers Questionnaire Survey. *Open Med (Wars)*. 2017 ;12pp.391-398.
3. Katsutoshi Terasawa: Grasp of pathology by the concept of Ki- blood- water. A study of natural medicine from the case. *Igakushoin*; 2nd Edition: p15-66 (Tokyo).
4. Li X, Lv Q, Li C, Zhang H, Li C, Jin J. The relationship between expectation regarding aging and functional health status among older adults in China. *J Nurs Scholarsh*. 2013;45(4)pp.328-335.
5. So RWL, Wong HS, Ko KM. (2015). A traditional Chinese medicine approach in treating depression by promoting liver qi circulation: a western medicine perspective. *Chinese Medicine* 6:187–195.