

ความสัมพันธ์ของธาตุเจ้าเรือนกับการปวดประจำเดือนชนิดปฐมภูมิตามทฤษฎีการแพทย์แผนไทย

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บทคัดย่อ

การปวดประจำเดือนชนิดปฐมภูมิ เป็นอาการปวดบริเวณท้องน้อยขณะมีประจำเดือน ซึ่งเป็นปัญหาที่พบได้บ่อยที่สุดของหญิงวัยเจริญพันธุ์และพบได้ในหลายประเทศทั่วโลก การปวดประจำเดือนนั้นเป็นปัญหาที่ส่งผลกระทบต่อการใช้ชีวิตประจำวันการวิจัยครั้งนี้เป็นการศึกษาเชิงพรรณนามีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างธาตุเจ้าเรือนกับลักษณะการปวดประจำเดือนตามทฤษฎีการแพทย์แผนไทยและศึกษาความสัมพันธ์ระหว่างพฤติกรรมการรับประทานอาหารตามธาตุเจ้าเรือนกับอาการปวดประจำเดือนกลุ่มตัวอย่าง ได้แก่ สตรีวัยเจริญพันธุ์ที่มีอาการปวดประจำเดือน อายุ 15-25 ปี ใช้วิธีการเลือกกลุ่มตัวอย่างโดยการเลือกแบบเจาะจงมีจำนวนทั้งสิ้น 205 คนเก็บข้อมูลโดยใช้แบบสอบถามและแผ่นวงกลมวิเคราะห์ธาตุเจ้าเรือน วิเคราะห์ข้อมูลโดยใช้ค่าร้อยละค่าเฉลี่ยส่วนเบี่ยงเบนมาตรฐานและทดสอบค่าสถิติแบบไค-สแควร์

ผลการวิจัยพบว่าลักษณะการปวดประจำเดือนมีความสัมพันธ์กับธาตุเจ้าเรือนอันบังเกิดแต่กองธาตุ 4 (ธาตุดิน ธาตุน้ำ ธาตุลม ธาตุไฟ) อย่างมีนัยสำคัญทางสถิติ และพฤติกรรมการรับประทานอาหารตามธาตุเจ้าเรือนไม่มีความสัมพันธ์กับการปวดประจำเดือนอย่างมีนัยสำคัญทางสถิติ

สรุปผลการวิจัยธาตุเจ้าเรือนมีความสัมพันธ์กับอาการปวดประจำเดือนตามทฤษฎีการแพทย์แผนไทย

คำสำคัญ: ธาตุเจ้าเรือน การปวดประจำเดือนชนิดปฐมภูมิ พฤติกรรมการบริโภคอาหาร การแพทย์แผนไทย

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The association between dhatchaoruean (Dominant body element) and primary dysmenorrhea symptoms based on Thai Traditional Medicine theory

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Abstract

Introduction: Primary dysmenorrhea, a lower abdomen painful condition in menstruation period, is one of the most common problems found in women. Since the high prevalence in many countries were reported, the primary dysmenorrhea has been acknowledged to be a disturbing problem in everyday life.

Objective: This descriptive study was performed to investigate the correlation between Dhat Chao Ruean (dominant body element) and primary dysmenorrhea symptoms, and also aimed to examine the correlation between food consumption behavior based on the body elements and dysmenorrhea symptoms in accordance with Thai Traditional Medicine theory.

Methods: This study used questionnaires technique applied to conduct on 205 female subjects in reproductive stage (15-25 years old) by purposive sampling in Pathum Thani province. In order to clarify the relationship among Dhat Chao Ruean and other factors, birth wheel chart in interpreting body elements following the principles of Thai Traditional Medicine was used as instrumentation. The data were presented as percentage, mean, standard deviation, and statistically analyzed using Chi-Square test.

Results: The results revealed that Dhat Chao Ruean including earth, water, wind, and fire significantly correlated with dysmenorrhea symptoms in reproductive age-women. In contrast, there is no correlation between food consumption behavior and dysmenorrhea symptoms.

Conclusion: Dhat Chao Ruean or the body elements might be correlated with dysmenorrhea symptoms based on Thai Traditional Medicine theory.

Keywords: Dhat Chao Ruean, Primary dysmenorrhea, Food consumption behavior, Thai Traditional Medicine

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Background

Dysmenorrhea refers to the symptom of painful menstruation occurring by cramps from uterine which can be subcategorized into 2 broad categories. Primary dysmenorrhea is a common problem which usually occurs in adolescence with an absence of pelvic pathology, and secondary dysmenorrhea which results from identifiable organic diseases.^{1,2} In the previous studies, the prevalence of dysmenorrhea was reported that it can be mostly found adolescent women.³ The research in the United States indicates that dysmenorrhea is a factor causing a loss of over 140 million hours of working time.^{3,4} While in Thailand, the study revealed that dysmenorrhea was an impact issue in Thai women leading to an important issue in public health problem.⁵

According to the principles of traditional medicine, *dhat* (the elements), *utu* (the seasons), *ayu* (age), *kala* (time) are believed to be the main *samutthan* (causal factors) of disease. Other important factors are *prathet* (place) and *munhet* (causes) arising from human actions and behavior. There are many diseases which appeared in the Thai Traditional medical text books, including dysmenorrhea. As aforementioned, dysmenorrhea has two types, primary dysmenorrhea and secondary dysmenorrhea, in accordance with Thai Traditional Medicine which also has two types-usual dysmenorrhea symptoms and unusual dysmenorrhea symptoms. Moreover, the dysmenorrhea symptoms are also divided by Thai Traditional Medicine following *Dhat* (the element) which are *Pa Ta Wi* (earth), *Ar Po* (water), *Wa Yo* (wind) and *Te Cho* (fire) element.⁶⁻⁸

Even though, Thai Traditional Medicine demonstrated that the characteristics and symptoms of

dysmenorrhea caused by 4 *dhats*, the correlation between the body element and dysmenorrhea symptoms based on theory of Thai Traditional Medicine and the correlation between food consumption and behavior based on body elements and dysmenorrhea symptoms have never been established. Therefore, the aim of this study was to investigate the correlation between *Dhat Chao Ruean* (dominant body element) and primary dysmenorrhea symptoms, and also aimed to examine the correlation between food consumption behavior based on the body elements and dysmenorrhea symptoms in accordance with Thai Traditional Medicine theory.

Methodology

Study design

The study was performed using questionnaire with closed-ended questions to investigate the correlation between the body element and dysmenorrhea symptoms based on theory of Thai Traditional Medicine and the correlation between food consumption behavior based on body elements and dysmenorrhea symptoms.

Sample size

This study was conducted on 205 female subjects by purposive sampling between September 2015 and May 2016 in PathumThani province. The inclusion criteria consisted of single marital status, age range 15-25 years old, having a regular menstrual cycle and experience in primary dysmenorrhea symptom. The sample size was considered by a confidence level of 95% and 7% sampling error using the Taro Yamane formula.⁹

Ethics consideration

This study was ethically approved by the Human Ethics Committee of Thammasat University (Number 148/

2557). The purposes and procedures of the study were clearly explained to the participants in advance, and consent forms. All data were confidentially kept and presented only in the examinee groups.

Data Collection

The data were collected using questionnaires which divided into 4 parts including demographic characteristics with some personal information, menstrual information such as menstrual pattern, severity of dysmenorrhea and associated symptoms in both modern medicine and Thai traditional medicine, health behaviors and lifestyles, health belief and health promotion regarding to regular consumption, drinking water, sleeping habits, bowel system and urinary habits, physical activity, smoke habits, caffeine or alcohol consumption, and other activities, food consumption behavior with tastes of a particular food to a specific body element in Thai Traditional Medicine theory.

Data Analysis

The questionnaires were pre-tested among 10 participants, and its reliability was analyzed using SPSS (Version 17.0). The descriptive statistics which were used in this study including frequency, percentage, mean, and standard deviation for explaining the demographic characteristics, menstrual information, health behaviors, and food consumption behavior based on body elements. In addition, the inferential statistics were used to analyze the correlation between the body elements and food consumption behavior with dysmenorrhea symptoms using Chi-square test. The statistical significances were obtained when $p < 0.05$. Furthermore, *Dhat Chao Ruean* (dominant

body element) was analyzed using a birth wheel chart in interpreting body elements following the principles of Thai Traditional Medicine which developed by Dr. Pennapa Subcharoen, MD.⁸

Results

The main body element of mostly subjects was found to be earth (30.10%), and the secondary element was found to be water (42.72%). The marital status of the mostly subjects were single (98.06%). The educational information generally was bachelor's degree (80.10%). The occupations were other occupations (45.15%). Moreover, the non-congenital disease (86.89%), non-smoking (98.54%), non-alcoholic drink (84.95%), non-dysmenorrhea symptoms in family members (64.56%), and willing to take herbs that have properties to reduce dysmenorrhea symptoms (54.37%) were examined.

Duration of pain occurred at the menstruation process was found to be 74.76%. Furthermore, the women who suffered at the lower abdomen and intense pain were respectively found to be 48.40% and 53.78%. Noteworthy that pimply could be slightly found in the subjects (15.83%). In addition, the phase of the menstrual cycle was found to be 42.23% with 79.61% regular menstruation. In term of menstrual appearance, red clot and smelly were consequently found to be 38.35% and 56.31%. While, sanitary pad evaluation was found that approximately 3 sanitary pads used was found to be 43.20%, and 52.91% used large size pads. The subjects (36.41%) also used hot compressions or hot water bags as a pain reliever. Eventually, no behavior causing disease in Thai Traditional Medicine theory, menstrual cycle of a month and abnormal

menstrual cycle were found to be 63.59%, 18.89% and 22.44% respectively.

The association between the main body elements and dysmenorrhea symptoms based on Thai Traditional Medicine theory was evaluated. The results was found that fever (gallbladder), tendon (headache) and discomfort (bone) statistically correlated to fire, wind, water and earth element regarding the main body elements and

dysmenorrhea symptoms ($p < 0.05$) as shown in the Table 1. In addition, the correlation between the secondary body elements and dysmenorrhea symptoms based on Thai Traditional Medicine theory were found that fever (gallbladder) and discomfort (bone) dependently correlated to fire, wind, water and earth element ($p < 0.05$) as shown in the Table 2.

Table 1 The association between the main body elements and dysmenorrhea symptoms based on Thai Traditional Medicine Theory

Dysmenorrhea symptoms based on TTM theory	χ^2	Df	Sig.
Normal menstrual symptoms			
The menstruation resulted to psychic (heart)	6.219	3	.101
The menstruation resulted to fever (gall bladder)	11.036	3	.011*
The menstruation resulted to skin (skin)	1.976	3	.577
The menstruation resulted to tendon (headache)	8.686	3	.033*
The menstruation resulted to discomfort (bone)	7.898	3	.048*
Menstruation related to the <i>Dhat</i>			
Menstruation related to Fire element (<i>Te Cho Dhat</i>)	49.839	3	.000*
Menstruation related to Wind element (<i>Wa Yo Dhat</i>)	20.331	3	.000*
Menstruation related to Water element (<i>Ar Po Dhat</i>)	42.761	3	.000*
Menstruation related to Earth element (<i>Pa Ta Wi Dhat</i>)	81.232	3	.000*

Data are expressed as a chi square (χ^2) statistic; * $p < .05$. (Thai Traditional Medicine: TTM)

Table 2 The association between the secondary body elements and dysmenorrhea symptoms based on Thai Traditional Medicine Theory

Dysmenorrhea symptoms based on TTM theory	χ^2	Df	Sig.
Normal menstrual symptoms			
The menstruation resulted to psychic (heart)	2.779	3	.426
The menstruation resulted to fever (gall bladder)	12.311	3	.006*
The menstruation resulted to skin (skin)	5.367	3	.146

Table 2 The association between the secondary body elements and dysmenorrhea symptoms based on Thai Traditional Medicine Theory (Cont.)

Dysmenorrhea symptoms based on TTM theory	χ^2	Df	Sig.
The menstruation resulted to tendon (headache)	4.300	3	.230
The menstruation resulted to discomfort (bone)	11.874	3	.007*
Menstruation related to <i>Dhat</i>			
Menstruation related to Fire element (<i>Te Cho Dhat</i>)	39.603	3	.000*
Menstruation related to Wind element (<i>Wa Yo Dhat</i>)	14.275	3	.002*
Menstruation related to Water element (<i>Ar Po Dhat</i>)	9.399	3	.024*
Menstruation related to Earth element (<i>Pa Ta Wi Dhat</i>)	36.627	3	.000*

Data are expressed as a chi square (χ^2) statistic; * p < .05. (Thai Traditional Medicine: TTM)

Whereas, the association between food consumption behaviors based on body elements and dysmenorrhea symptoms in accordance with Thai Traditional Medicine theory revealed that either favorite

fruits and regular consumption or favorite vegetable menu and regular consumption were significant correlated to dysmenorrhea symptoms as shown in the Table 3.

Table 3 The association between food consumption behaviors based on body elements and dysmenorrhea symptoms in accordance with Thai Traditional Medicine Theory

Dysmenorrhea symptoms based on TTM theory	χ^2	Df	Sig.
Taste and regular consumption	3.010	3	.389
Favorite fruits and regular consumption	9.114	3	.027*
Favorite vegetable menu and regular consumption	9.721	3	.021*
Favorite food menu and regular consumption	1.605	3	.658
Favorite snack menu and regular consumption	2.333	3	.506
Favorite beverage menu and regular consumption	2.370	3	.499

Data are expressed as a chi square (χ^2) statistic; * p < .05. (Thai Traditional Medicine: TTM)

Discussion

This study was found that fever (gall bladder), discomfort (bone), fire element (*Te Cho Dhat*), wind element (*Wa Yo Dhat*), water element (*Ar Po Dhat*), and earth element (*Pa Ta Wi Dhat*) associated with

dysmenorrhea symptoms based on Thai Traditional Medicine theory. Dysmenorrhea symptoms might result in the imbalance of four internal elements. The imbalance of these four elements may take a higher possibility to cause

illness and might cause the health problems with different symptoms based on individual body element.¹⁰⁻¹¹

Food consumption behavior based on body elements was found that favorite fruits and vegetables as well as regular consumption associated with dysmenorrhea symptoms in accordance with Thai Traditional Medicine theory. Fruits and vegetable are common sources of minerals and vitamins which need by living organism. These nutrients acts as an antioxidant, deterioration reducer, immunogenicity stimulator and infection preventer.¹²⁻¹⁵ In the view of Thai Traditional Medicine theory, fruits and vegetables affected by adjustment and promotion of the health. The primary help for illness prevention is the daily food consumption. Therefore, the application of fruit and vegetable was known as “Medicinal Food”. Furthermore, food is also importance for illness prevention, the treatment and health promotion. The different fruits, vegetables, and food flavors are suitable for the body element, illness, or imbalance element of the individual. This might help the internal body element could be recovered into the balance which leads to healthy.¹⁰⁻¹¹

As aforementioned, fruit and vegetable had an effect on dysmenorrhea symptoms relieving. In fact, there are several of fruits and vegetables which proper on reproductive system. Some nutrients had an effect on restraining to produce prostaglandin and some hormones which affected on the nervous system. This might help, relax and reduce uterine from the contraction symptoms. Even though, some shortages of systematic study showed that fruits and vegetables were unacceptable for relieving dysmenorrhea symptoms. Consequently, the need for further study of the correlation between the body elements

and dysmenorrhea symptoms base on Thai Traditional Medicine theory as well as food behavior consumption in accordance with the body element related to dysmenorrhea symptoms must be further research on other factors which might be affected.

Conclusion

In conclusion, the primary element and food consumption behavior might be correlated with dysmenorrhea symptoms based on Thai Traditional Medicine theory. Furthermore, the significances from this study could be provided and used as a plan for self-management in dysmenorrhea patients, and should be promoted to the primary health care as an optional for management of menstrual pain symptom.

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