The Relationship between Prevalence of Applied Thai Massage and Cause of Diseases

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Abstract

Thai people got problems of musculoskeletal system and connective tissues and this resulted in over 1,700 million baht for medicines each year. The aims of this study were to find out the relationship between the prevalence of patients applied Thai massage and bio-social factors through the cause of diseases treated by the principles of Thai traditional medicine and massage therapy. This project employed the cross-sectional method with prospective studies. The samples of 776 were chosen by simple random sampling from the population of 1,552 patients of Applied Thai Traditional Medicine College in 2007-2008. All patients were interviewed and the general data was analyzed to find out the relationship between the prevalence of applied massage and bio-social factors. Descriptive statistics and Chi-square were used for data analysis. The results showed that most of patients got problems on backaches 42.4 % and neck and shoulder pains 39.3%. Both pains resulted from the prevalence of gender, occupation, the four traditional elements (earth, wind, fire and water),

age group, weather, period of day and cause of 5 diseases of work characteristics, rest, sadness, anger, and surroundings with statistically significant difference at 0.05. It was recommended that people should understand and take action in personal health care by applying the principles of Thai traditional medicine in their daily lives.

Keywords: Element Genesis, Cause of diseases, Bio-social factors, Patients of applied Thai massage

Introduction

A survey of National Statistical Office in 2012, Thais got problem of diseases of musculoskeletal system and connective tissues such as Osteoarthritis, Gouty arthropathy, myofascial pain syndrome, soft tissue disorders etc. (National Statistical Office, 2010 - 2012). Thailand imported medicine to cure the patients of muscle aches, tendon and orthopedic surgery over 7,427.41 million baht a year (Bureau of drug control, 2011). Doctors from Bangkok Orthopedic Center (Sombat, 2006) also claimed that there were many causes of orthopedics such as inborn, infection, accidents, body deterioration and individual behavior etc. According to the National Economic and Social Development Plan no.10 aimed for "Happiness and Sustainability Society" which goes accordingly with Thai Traditional Medicine (TTM) which focused on the holistic health care (Department for Development of Thai Traditional and Alternative Medicine, 2003). Human body is composed of the four principle elements ('tard' in the Thai language) include earth, water, wind and fire. When the four principle elements of the body are in equilibrium, it results in healthy body (Vichai and Anchalee, 2005). On the contrary, if an imbalance of these elements happens, a person becomes ill. Inappropriate behaviors that cause ailments, according to TTM, are eating habits, imbalanced postures, exposure to extreme weather, deprived of food, water or sleep, delayed urination or defecation, overwork, over-exercise, deep sorrow, and extreme anger (Somporn and Khesorn, 2002). These lead to the study of the Relation between Prevalence Patients of Applied Thai Massage and Cause of Diseases.

Subjects and Methods

The cross-sectional with prospective studies were used as a research design in this study. The 776 samples chosen by simple random sampling from 1,552 patients of the Clinic of Applied Thai Traditional Medicine, Rajamangala University of Technology, Thanyaburi. The samples were classified into 3 groups according to the seasons they came – summer, rainy and winter. Samples were interviewed and data was analyzed to find out the relationship between the prevalence of applied Thai massage patients and cause of diseases. The instrument was a checklist included bio-social factors (sex, age, date and place of birth, date of getting the therapy) and former illness information (symptom, present illness, past history, family history and personal history).

Analysis

Descriptive statistics for demographic characteristic and Chi-square for the relationship of elements, age, season, time, regional habitation and causes of the diseases were used for data analysis.

Results

Demographic and characteristics could be defined as a patient's personal bio-social factors and former illness record. All samples of 776 were classified as follows: Percentage of male (64.7%) and female (35.3%) were shown. Occupations all sample include civil servant (36.7%),personal business (17.5%), worker (14.7%),housewife (14%), monk (10.4%), students (4.8%) and agriculture (1.8%).

Elements referred to the four principle elements claimed in Thai Traditional Theory included earth, water, wind and fire. Percentage of patients visited include were as follows: 36 % in fire, 23.3% in wind, 23.1% in earth and 17.7% in water.

All patients were grouped according to age ranges as childhood (infant–16 years old), middle - age (16–32 years old), and old age (over 32 years old). Percentage of patients in each group were 0.3% (childhood),12.0% (middle - age)and 87.8% (old age).

Season included summer, rainy and winter, which the patients came for treatment. The findings were as follows: Summer (43.4%), Rainy (35.7%) and Winter (20.9%).

Place of birth could be defined as the patient's birthplace classified by regions included central, north, northeast and south. The findings were as follows: Central Region (79%), North (8.5%), Northeast (7.1%) and South (5.4%).

Habitation while being ill referred to the place where the patient stayed while he was ill classified by regions included central, north, northeast and south. The findings were as follows: Habitation while being ill: Central Region (99.2%), North (0.4%), Northeast (0.3%) and South (0.1 %).

Illness duration could be defined as day and night. Day indicated the time between 2 PM.- 6 pm., 6 AM.- 10 AM., and 10 AM.- 2 PM. Night indicated the time between 2 AM.- 6 AM., 6 PM.- 10 PM., and 10 PM.- 2 AM. The findings were as follows: At 02.00 – 06.00 PM. and 02.00 – 06.00 AM. (36.7%), at 06.00 – 10.00 AM. and 06.00 – 10.00 PM. (34.0%), and at 10.00 AM. - 14.00 PM. and 10.00 PM – 02.00 AM (29.3%).

Patient's behaviors were classified as food type, food taste, temperature, patient's behavior of consumption, exercise, emotion, excretion and deportment. The findings were as follows: Take starchy foods (69.3%), appropriate deportment (53.5%), eat three meals on time (48.1%), tasteless food (40.5%), long time sitting (33.1%).

Prevalence of illness referred to groups of illness found in patients. The findings were as follows: Back pain (42.4 %), Neck pain and upper back pain (39.3%), Knee ache (8.1%), Ankle pain (3.2%), Paralysis (1.9%), frozen shoulder and trigger finger were equal (1.8%), and pains and aches (1.4%).

Element disorders could be defined as the imbalance of the four elements as earth, water, air and fire. This resulted in patient's illness one Element (57.5%), 2 Elements (40.9%), and 3 Elements (1.7%).

Summary of the relationship between patient's prevalence of applied massage and cause of disease classified as sex, element, age, season, region, time and patient's behaviors causing diseases.

Analytical results of the relationship between the prevalence of patients applied Thai massage and patients characteristic found that sex and occupation,There are relationship with statistically significant difference at 0.05 (Table 1).

Analytical results of the relationship between the prevalence of patients applied Thai massage and cause relation of illness found that tard genesis age season and time are relationship with statistically significant difference at 0.05. Birthplace current address and illness place are not relationship with prevalence of patients applied Thai massage (Table 2).

Analytical results of the relationship between the prevalence of patients applied Thai massage and behavior found out that job description sleep hardwork sorrowful anger temperature exercise restrain of feces and imbalance of Element. There are all relationship with statistically significant difference at 0.05. Therefore drinking water alcohol tea or coffee anger feces urine restrain urine are not relationship with prevalence of patients applied Thai massage (Table 3).

Analytical results of the relationship between the prevalence of patients applied Thai massage and behaviors including the tastes and types of food taken. Moreover, taste of food carbohydrate food protein food fried foods bitter food and sour food there are relationship with statistically significant difference at 0.05. Mealtime is not relation with prevalence of patients applied Thai massage (Table 4).

Table 1: Patients characteristic

Characteristics	Pearson Chi-Square	P -Value
1. Sex	17.329	0.015*
2. occupation	131.513	0.000*

*P - Value ≤ 0.05

Table 2: Cause relation of illness

Cause of illness	Pearson Chi-Square	P - Value
1. Tard Genesis	54.849	0.000*
2. Age	33.818	0.002*
3. Season	28.988	0.010*
4. Birthplace	27.476	0.156
5. Current address	13.663	0.884
6. Illness place	16.828	0.721
7. Time	30.211	0.007*

*P - Value ≤ 0.05

Table 3: Patient's habits and his job characteristics

Behavior	Pearson Chi-Square	P - Value
1. Job description	78.077	0.000*
2. Drinking water	16.290	0.269
3. Drinking alcohol	14.344	0.424
4. Drinking tea or coffee	21.044	0.101
5. Sleeping habits	53.959	0.000*
6. Overwork	37.091	0.001*
7. Deep sorrow	42.848	0.000*
8. Anger	37.215	0.016*
9. Temperature	47.475	0.001*
10. Exercise	55.794	0.001*
11. Feces	7.099	0.419
12. Restrain feces	47.567	0.000*
13. Urine	21.327	0.094
14. Restrain urine	18.952	0.167
15. Element imbalance	085.526	0.000*

*P - Value $\leq$ 0.05

Table 4: Meal: This table showed patient's behaviors including the tastes and types of food taken

| Meal	Pearson Chi-Square	P - Value
1. Mealtime	21.566	0.088
2. Taste of food	92.057	0.000*
3. Carbohydrate	24.777	0.037*
4. Protein	36.618	0.001*
5. Fried foods	60.417	0.000*
6.Bitter from vegetable	62.323	0.000*
7. Sour from fruit	23.947	0.046*

*P - Value $\leq$ 0.05
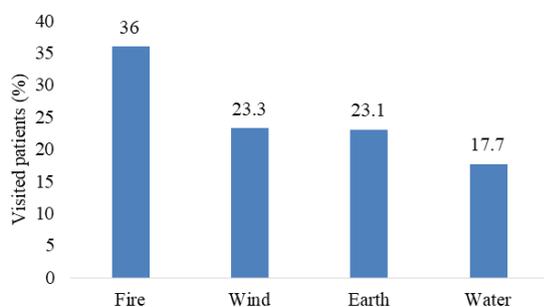
Fig.1: Percentage of patients versus elements
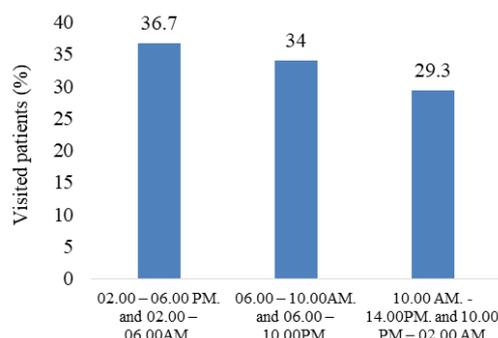
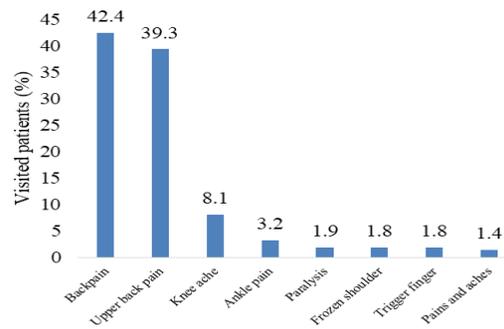**Fig.6:** Illness duration of patients
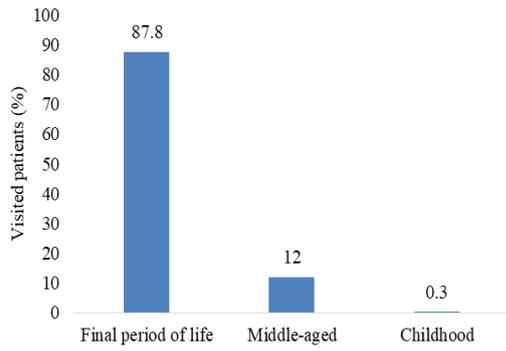
Fig.2: Percentage of patients versus age
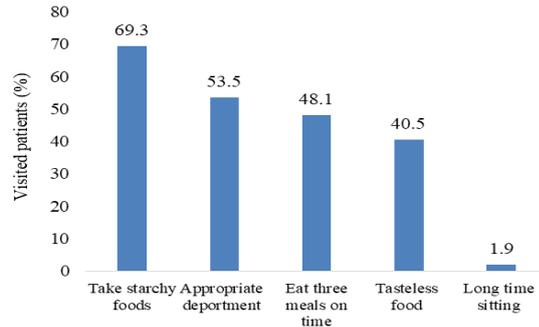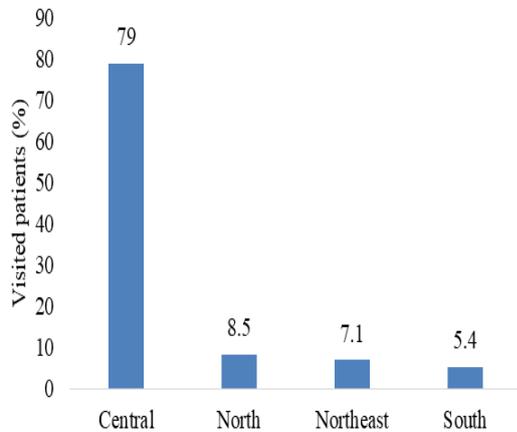

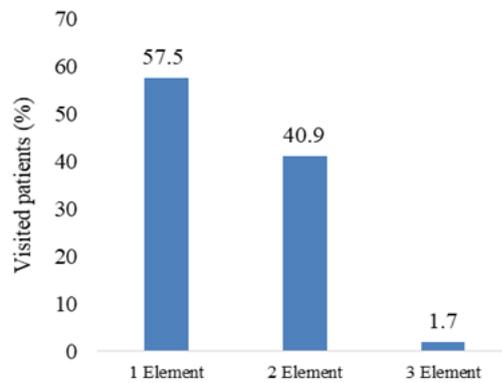**Fig.7**: Patient's behaviors which caused diseases
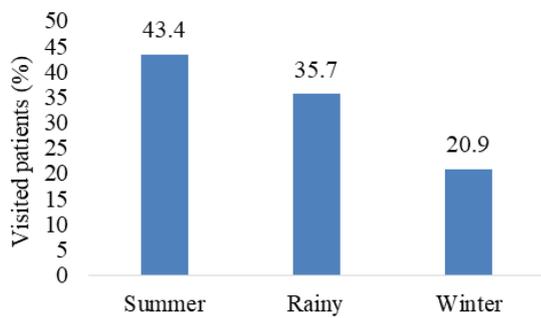
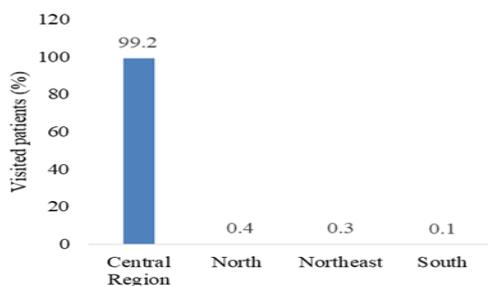**Fig.3:** Percentage of patients versus season

Fig.8: Prevalence of illness in patients

Fig.4: Percentage of patient's place of birth

Fig.9: Percentage of patients with different element disorders

Fig.5: Percent of patient's habitation while being ill

Discussion

From the samples, it was found that 36.0% of patients who came for the treatment were born on the fire element, 43.4% of them came for the treatment during the fire season (summer time) and 87.0% of them were in the middle age which belonged to the fire period. The patients of 36.7% were ill while they were in the wind element during 2 pm.-6 pm. and 2am.-6 am. and 99.3% of them resided in the region where belonged to the wind element. This could be concluded that the elements of fire and wind showed relationship of prevalence patients of applied Thai massage and cause of diseases at statistically significant difference ($P \leq 0.05$).

Conclusion

It was found that the prevalence of musculoskeletal disorder among patients was backaches 42.4 % and neck and/or shoulder pains 39.3% at a significance level of 0.05. These illnesses resulted from the imbalance in one of the 42 elements in human body. The etiology of diseases in Thai raditional medicine revealed that there are associated with 6 influences including 1) the genesis, 2) the seasonal change, 3) body power and strength, 4) age changes, 5) time alteration, 6) place of residence and 7) daily behavior such as eating, exercise, relaxation, temper, excretion, and working habit. All of above reasons exhibited that the patients should have good health care in basically prior leading cause of severe symptoms. These illnesses are primary caused by the imbalance in only one of human elements which is the etiology of wind or fire elements referring to circulatory system and body power and strength, respectively.

For promoting sustainable healthy of people, individual should receive proper personal advice in dietary management concerning the etiology of elements, season, age, time, place and behavior. Furthermore, the study on the relationships between other illnesses and etiology in Thai traditional medicine theory should be investigated and comparing Thai traditional medicine to modern medicine in health care should be examined.

Acknowledgement

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