

EFFECTS OF SUAN SUNANDHA PALACE'S THAI MASSAGE FOR HEALTH TOWARDS RELAXATION AND SATISFACTION OF ELDERS IN WAT CONCEPTION COMMUNITY ON PHYSICAL FITNESS

***Nongnuch Boonjang, **Supalak Fakkham**

**Nongnuch Boonjang, M.Sc., Lecturer, College of Allied Health Sciences, Suan Sunandha Rajabhat University, Thailand, Email: nongnuch.bo@ssru.ac.th*

***Supalak Fakkham, Ph.D. Lecturer, College of Allied Health Sciences, Suan Sunandha Rajabhat University, Thailand, Email: supaluk.fu@ssru.ac.th*

ABSTRACT

The research was a quasi-experimental research that aimed 1) to study the effects of Suan Sunandha Palace's Thai traditional massage for health on the relaxation and its levels of satisfaction of elders in Wat Conception Community, Dusit District, Bangkok, Thailand, and 2) to comparatively analyze the physical fitness of elders before and after receiving Suan Sunandha Palace's Thai traditional massage for health. Focused samples were 25 volunteered care users, age at 60-80 years old, who took a full course of Suan Sunandha Palace's Thai traditional massage. The experiment period was 8 weeks out, 60 minutes in weekly, and related program constructed by researcher. The research tools used in data collection were item-objective congruence equaled to 0.96 and reliability verified by try-out test, which composed of 1) the relaxation and its levels of satisfaction evaluation of elders towards Suan Sunandha Palace's Thai traditional massage for health, 2) physical fitness test for elders. The data were statistic analyzed by computerized program for arithmetic mean, standard deviation and paired sample t-test.

The findings of this study were as follows;

1. The effects of Suan Sunandha Palace's Thai traditional massage for health on elders.

1.1 The effects of Suan Sunandha Palace's Thai traditional massage for health was $\bar{x} = 4.42$ in high level relaxation Physical Fitness

1.2 The effects of Suan Sunandha Palace's Thai traditional massage for health was $\bar{x} = 4.72$ in very high level satisfaction.

2. The effects of Suan Sunandha Palace's Thai traditional massage for health on elders in 1st and 8th weekly were significant difference as follows.

2.1 The 30 Second-Chair Stand were significant difference at the 0.001 level.

2.2 The Sit and Reach were significant difference at the 0.01 level.

2.3 The Shoulder Girdle Flexibility were significant difference

2.3.1 Upper right-Pose were significant difference at the 0.001 level.

2.3.2 Upper left-Pose were significant difference at the 0.001 level.

2.4 2 Minute-Step were significant difference at the 0.001 level.

Keywords— Thai massage, satisfaction, relaxation, physical fitness

INTRODUCTION

The physical and mental change of elders would depend on health care of each person, an amount and proportion of elders in Thailand was increased rapidly and continuously which most of them was female due to their longevity (Foundation of Thai Gerontology Research and Development Institute, *Circumstance of Elders*, 2014: Page 6). The elders had longevity and risk for health issues especially the chronic disease in the muscular pain which reflected to the significance of health care by Thai massage to relieve their pain. Massage had the long history since the reign of Krungsri Ayutthaya and the reign of King Buddha Yodfa Chulaloke (Rama I), Wat Pho was renovated for being the royal temple namely "Wat Phra Chetuphon Vimolmangklararm" and being the origin of Thai Traditional Medicine. The *80-Pose hermit statue* made by zinc and tin, and *60-Thai massage picture* made by marble which described and decorated on the wall and pillar that were built in the reign of King Nangklao (Rama III). The textbook of Thai traditional massage namely "Royal Medical Sciences of Rama V" was revised as the textbook of relief medicine for Thai Traditional Medicine in the reign of King Chulalongkorn (Rama V).

From the significance and role of liege in Suan Sunandha Palace as the royal park of the King Rama V for his relaxation and the royal residence of the Queen, Her Highness and Royal Mothers, the King would be satisfied with massage by the Royal Mother Aeim, Chuey and Prakong but the Royal Mother Aeim was the best masseur who had the better artifice. The royal and educational institution, Suan Sunandha Rajabhat University arranged the learning of “Applied Thai Traditional Medicine” to respond to the government policy on the national strategy plan and benefit for health care focused on self-dependence and holistic health care according it was the identity of health cultural heritage of Thailand (Chanwiboon and Fakkham, 2010).

In addition, Thailand has become the society of elders rapidly and the trend of longevity which affected to the health issues especially the chronic disease that reflected to the significance of health readiness, a massage was applied for the health promotion as a choice of relaxation included promoting and improving a massage wisdom to benefits for health care and physical fitness of the elders.

OBJECTIVE

1. To study the effects of Suan Sunandha Palace’s Thai traditional massage for health on the relaxation and its levels of satisfaction of elders in Wat Conception Community, Dusit District, Bangkok, Thailand.
2. To comparatively analyze the physical fitness of elders before and after receiving Suan Sunandha Palace’s Thai traditional massage for health.

METHODOLOGY

This research was the Quasi-Experimental Research by using the One Group Pretest-Posttest Design.

Population and Sample Group

Population: 82 elders at the age of 60 – 80 years old in Wat Conception Community.

Sample Group: 25 volunteers by using the purposive sampling, the researcher was the masseur, and the population and sample group would not be injured, acute infectious disease, fracture, dislocation, heart disease, hypertension, diabetes, infective disease, cancer, inflammatory vein disease and osteoporosis. The samples must took a full course of Suan Sunandha Palace’s Thai traditional massage.

Time: The experiment period was 8 weeks, 60 minutes in weekly.

Research tool: item-objective congruence equaled to 0.96, reliability verified by try-out test which composed as follows.

1. The relaxation and levels of satisfaction evaluation of elders towards Suan Sunandha Palace’s Thai traditional massage for health.
2. Physical fitness for elderly person test. The data were statistic analyzed by computerized program for arithmetic mean, standard deviation and paired sample t-test.

DATA COLLECTION

Before being treated by massage (Week 1): 4 – 5 persons per day by the researcher as the masseur

1. The volunteer signed on an agreement letter.
2. Test the physical fitness of the elders.
3. Record the physical fitness result of the elders.

Being treated by massage (Week 2 - 7);

1. Record the profile and diagnosis of the elders.
2. Assess the result of Thai massage for health by Suan Sunandha Palace’s Thai traditional massage; 1) the relief towards Thai massage for health by Suan Sunandha Palace’s Thai traditional massage and 2) the satisfaction towards Thai massage for health by Suan Sunandha Palace’s Thai traditional massage.

After being treated by massage (Week 8);

1. Test the physical fitness of the elders.
2. Record the physical fitness result of the elders.

RESULTS

The results of this research were divided into three parts.

Part 1: demography (sex, age, weight, height)

Of all 25 care receiver-volunteers, most of elders in Wat Conception Community were female. There was 19 female volunteers which accounted for 76%. Others were men which accounted for 24%. Most of volunteers were average 67.4 years old, 57.76 kilogram-weight, 162.32 centimeter-height.

Part 2 – Evaluation of Suan Sunandha Palace’s Thai traditional massage for health

Table 1

Evaluation of levels of relaxation of physical fitness in elders after Suan Sunandha’s Palace Thai traditional massage for health (Week 1 and Week 8)

Massage	\bar{x}	S.D	Level of relaxation
Type 1 Foot massage	4.32	0.48	High
Type 2 Lower leg massage	4.68	0.48	Very high
Type 3 Upper leg massage	4.60	0.50	Very high
Type 4 Arm and hand massage	4.32	0.48	High
Type 5 Bum and hip massage	3.92	0.40	High
Type 6 Wrist and back massage	4.52	0.51	Very high
Type 7 Shoulder blade and arm massage	4.48	0.51	High
Type 8 Back and shoulder massage	4.52	0.51	Very high
Total	4.42	0.04	High

Table 1 showed that Suan Sunandha Palace’s Thai traditional massage for health positively affected elders which the average score (\bar{x}) and standard deviation (S.D) of level of relaxation were 4.42 and 0.04 respectively. These implied that level of relaxation of physical fitness after massage was “*high*”.

Table 2

Evaluation of levels of satisfaction in elders after Suan Sunandha’s Palace Thai traditional massage for health (Week 1 and Week 8)

levels of satisfaction	\bar{x}	S.D	Level of relaxation
1. Care receiver perceived that a masseur was polite and good manner.	4.60	0.50	Very high
2. Care receiver perceived that a masseur took care of the cleanness.	4.52	0.51	Very high
3. Care receiver perceived that a masseur had a good control in hand power during massage.	4.76	0.44	Very high
4. Care receiver perceived that a masseur had a good communication with, and promptly responded to any comments during massage.	4.56	0.51	Very high
5. Care receiver perceived that a masseur always asked about the satisfaction on the levels of hand power that applied during massage.	4.56	0.51	Very high
6. Care receiver perceived that a masseur was a qualified massager.	4.76	0.44	Very high
7. Care receiver perceived that a masseur did massage smoothly.	4.60	0.50	Very high
8. Care receiver perceived that a masseur provide enough treatment time of massage.	3.96	0.20	high
9. Care receiver perceived that a masseur was massaging for health and relaxation.	4.68	0.48	Very high
10. Care receiver perceived that a masseur provided a court-type Thai traditional massage to you.	4.68	0.48	Very high
Total	4.57	0.09	Very high

Table 2 revealed that the elders as the care receivers were overall satisfied with the service served by Suan Sunandha Palace's Thai traditional massage which the average score (\bar{x}) and standard deviation (S.D) of satisfaction level were 4.57 and 0.09 respectively. These implied that level of satisfaction towards Suan Sunandha's Palace Thai traditional massage was "very high".

Part 3 - Physical fitness Test for elders

Table 3

Comparison of physical fitness test for elders before (Week 1) and after (Week 8) Suan Sunandha's Palace Thai traditional massage for health

Test / Massage	Before test	After test	Paired Differences	t	p
	(Week 1) \bar{x}	(Week 8) \bar{x}			
1. 30-Second Chair Stand (time)	21.04	24.12	3.08	-7.63	0.000***
2. Sit and Reach (hour)	-4.32	-3.86	0.46	-3.57	0.002**
3. Shoulder Girdle Flexibility					
3.1 Upper right	16.86	14.76	2.10	7.38	0.000***
3.2 Upper left	18.58	16.22	2.36	8.36	0.000***
4. 2-Minute Step (time)	52.76	54.16	1.40	-4.66	0.000***

Note: P<0.001*** and P<0.01**

Table 3 also revealed that after receiving Suan Sunandha's Palace Thai traditional massage, the physical fitness according to *30-Second Chair Stand* of Week 1 (Pre-test) and Week 8 (Post-test) were significant difference at the 0.001 level. At the same sense, physical fitness according to *Sit and Reach* were significant difference at the 0.01 level. Physical fitness according to *Shoulder Girdle Flexibility (Upper right)* and *Shoulder Girdle Flexibility (Upper left)* were significant difference at the 0.001 level. Physical fitness according to *2 Minute-Step* were also significant difference at the 0.001 level.

DISCUSSION

1. The total of Thai massage for health by Suan Sunandha Palace's Thai traditional massage which affected to the relief was in the very high level ($\bar{x} = 4.42$) and The total of Thai massage for health by Suan Sunandha Palace's Thai traditional massage which affected to the satisfaction was in the very high level ($\bar{x} = 4.57$). It was consistent with Apinya Kachamat (2009), A Study of Result of Applied Thai Massage towards Decrease of Fatigue in the Chronic Obstructive Pulmonary Disease Patient, it revealed that the average of fatigue of the experimental group was lower than the control group and the average of fatigue after being treated by the applied Thai massage was in the low level which was decreased from before being treated as it was in the moderate level. Additionally, it was also consistent with Niratchala Phoosee (2006), A Study of Thai and modern massage towards muscle fatigue and rehabilitation, it revealed that the average of fatigue of the right leg muscle in the 2nd test of the control group both of Thai massage group and international massage group was higher than the 1st test.

2. The total of physical fitness of the elders before and after being treated by massage; 1) *30-Second Chair Stand* (time) was differed with 0.001 level of significance, 2) *Sit and Reach* (hour) was differed with 0.01 level of significance, 3) *Shoulder Girdle Flexibility* (upper right) was differed with 0.001 level of significance and (upper left) was differed with 0.001 level of significance, and 4) *2-Minute Step* (time) was differed with 0.001 level of significance. It was consistent with Chanawong Hongsuwan (2014), a study on Effect of Applied Thai Traditional Medicine towards a change of physical fitness in football player, there were 7 physical fitness tests consisted of; *Sit and Reach* (flexibility), *Grip Strength* (muscle strength), *40-Yard Run* (agility), *50-Meter Run* (rapidity), *Push-Ups*, *Sit Up* (muscle endurance) and *O₂-MAX* (cardiorespiratory endurance), it was tested before and after being treated by applied Thai massage and relaxation which revealed that the result of applied Thai massage was better with the level of significance. After being treated by applied Thai massage compared with relaxation by *Sit and Reach* and *Sit Up* in the control group was better with the level of significance. Nevertheless, there was no difference on those results in 2 groups, the applied Thai massage would promote some parts of physical fitness of the football player.

ACKNOWLEDGMENT

The author would like to thank Suan Sunandha Rajabhat University for financial support, volunteers in Wat Conception Community for their participation, colleagues and student trainees worked at College of Allied Health Sciences for the kind assistances.

REFERENCES

- [1] Chanwiboon, P. & Fakkham, S. (2010). The Effect of a court-type Thai traditional massage on back pain of care receivers at Applied Thai Traditional Medicine Health Center. Bangkok: Suan Sunandha Rajabhat University.
- [2] Department of Thai Traditional and Alternative Medicine, Ministry of Public Health. (2013). Thai Public Health Report on Thai Traditional, Folk, and Alternative Medicines 2011-2013. Bangkok: Kaewchaochom Media and Publishing.
- [3] Department of Thai Traditional and Alternative Medicine, Ministry of Public Health. (2009). Folk Massage. Bangkok: The Agricultural Co-operative Federation of Thailand, LTD.
- [4] Department of Health Service Support. (2006). Principle of Traditional Medicine 1-3. Bangkok: Thaiphum Publishing.
- [5] Fine Arts Department. (1999). King Rama V Royal Medicine Textbook. Bangkok: Amarin Printing and Publishing.
- [6] Foundation of Thai Gerontology Research and Development Institute. (2014). Circumstance of Elders. Bangkok.
- [7] Health Information System Development Office. (2010). Migraine. Retrieved November 5, 2016, from http://www.hiso.or.th/hiso5/healthy/news2_5.php?m=3.
- [8] Hirunramadech, A. (1986). Suan Sunandha in the Past. Bangkok. Karn Printing.
- [9] Hirunramadech, A. (2007). 70th Anniversary of Suan Sunandha. Bangkok: Amarin Printing and Publishing.
- [10] Hongsuwan, C. (2014). Effect of Applied Thai Traditional Medicine towards a change of physical fitness in football player. (Unpublished doctoral dissertation). Khon Kaen University, Khon Kaen, Thailand.
- [11] Kachamat, A. (2009). A study of result of applied Thai massage towards decrease of fatigue in the chronic obstructive pulmonary disease patient. Mahasarakam: Mahasarakam University.
- [12] Penjai, R. et al. (2005). Effect of Thai traditional massage towards stress in elders at Mae Phoo Community in Lublue District, Uthradit Province. (Unpublished master's thesis). Naresuan University, Phitsanulok, Thailand.
- [13] Phoosee, N. (2006). A study of Thai and modern massage towards muscle fatigue and rehabilitation. (Unpublished master's thesis). Srinakharinwirot University, Bangkok, Thailand.
- [14] Phuengphai, C. (2007). Effect of Applied Thai Traditional Medicine towards relaxation. (Unpublished master's thesis). Srinakharinwirot University, Bangkok, Thailand.
- [15] Pongpanit, A. (2016). Short-term result of the integrated Thai traditional massage towards shoulder, neck and head aches. (Unpublished master's thesis). Khon Kaen University, Khon Kaen, Thailand.
- [16] Pornmonpraneet, P. (2010). Effects of a court-type Thai traditional massage vs. Drug treatment towards knee pains in elders at Muak-lek, Saraburi Province, (Unpublished master's thesis). Mahasarakam University, Mahasarakam, Thailand.
- [17] Prasartkul, P. (2014). Situation in elders 2013. Bangkok: Amarin Printing and Publishing.
- [18] Samahito, S. et al. (2013). Task and physical fitness standard for elders at 60-89 years old. Bangkok: Ministry of Tourism and Sport.
- [19] Singhaneti, K. (2006). Go back Chao Chom Kok-or to King Rama V. Bangkok: Muengboran.
- [20] Singhaneti, K. (2015). Chao Chom Kok-or. Bangkok: Amarin Printing and Publishing.
- [21] Sophitsakul, P. & Boonsinsook, P. (2008). Health promotion: Thai massage. Bangkok: SP Printing.
- [22] Tangtrongjit, P. (1991). Treatment and Folk Medicine of Wat Phra Chetuphon Vimolmangklararm. Bangkok: School of Folk Medicine at Wat Phra Chetuphon Vimolmangklararm.
- [23] Thai Massage Rehabilitation Project. (1998). Thai massage textbook. Bangkok: Thai Massage Rehabilitation Project of Health and Development Foundation.
- [24] Udompuntharak, S. & Phoon-iam, J. (2012). Tara Yamane's method. Retrieved January 5, 2017, from <http://hpe4.anamai.moph.go.th/Surveillance/data/yamane.pdf>.
- [25] Wirojanathamkoon, K. (2010). Go back Suan Sunandha Palace. Bangkok: Dokya Printing 2000.
- [26] Wirojanathamkoon, K. (2011). Inside Kaew Palace. Bangkok: Dokya Printing 2000.