



**Enhancing the Process of Self-Healing through Integrating Yoga Practice in  
Persons with Allergic Respiratory Symptoms**

**Prapaporn Chukumnerd**

**A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy in Nursing (International Program)**

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**Author** Mrs. Prapaporn Chukumnerd  
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**Major Advisor**

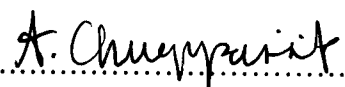
  
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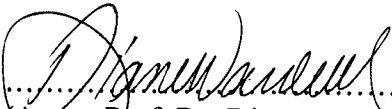
  
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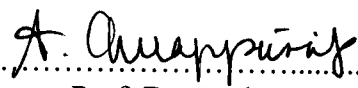
  
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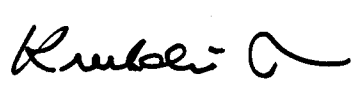
  
.....  
(Assoc. Prof. Dr. Wandee Suttharangsee)

  
.....  
(Assoc. Prof. Dr. Diane Wind Wardell)

  
.....  
(Assist. Prof. Dr. Urai Hatthakit)

  
.....  
(Assoc. Prof. Dr. Arphorn Chuaprapaisilp)

The Graduate School, Prince of Songkla University, has approved this thesis as partial fulfillment of the requirements for the Doctor of Philosophy Degree in Nursing (International Program)

  
.....  
(Assoc. Prof. Dr. Kerkchai Thongnoo)

Dean of Graduate School

ชื่อวิทยานิพนธ์ การส่งเสริมกระบวนการเยียวยาตนเองโดยการผสมผสานโยคะในผู้ที่มีอาการ  
ภูมิแพ้ระบบทางเดินหายใจ  
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### บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อพัฒนารูปแบบการส่งเสริมกระบวนการเยียวยาตนเอง  
โดยการผสมผสานโยคะในผู้ที่มีอาการภูมิแพ้ระบบทางเดินหายใจใช้เทคนิคการบอกต่อ (snowball  
sampling) โดยรวบรวมกลุ่มตัวอย่างที่มีคุณสมบัติตามที่กำหนดจำนวน 15 ราย ศึกษาโดยใช้  
กระบวนการวิจัยเชิงปฏิบัติการแบบมีส่วนร่วมซึ่งประกอบด้วย การเข้าใจสถานการณ์อย่างลึกซึ้ง  
การวางแผน การปฏิบัติ การสังเกต และการสะท้อนคิด ทำการศึกษาในอำเภอหาดใหญ่ จังหวัด  
สงขลา ตั้งแต่เดือนพฤษภาคม พ.ศ. 2549 ถึงเดือนกุมภาพันธ์ พ.ศ. 2550 เก็บข้อมูลโดยการสัมภาษณ์  
เจาะลึก การบันทึกประจำวัน การสังเกตอย่างมีส่วนร่วม และการบันทึกภาคสนาม สถานะสุขภาพ  
และผลลัพธ์ด้านสุขภาพประเมินโดยใช้คะแนนรวมของอาการภูมิแพ้ การวัดออร่า และคุณภาพชีวิต  
วิเคราะห์ข้อมูลโดยใช้วิธีวิเคราะห์เนื้อหาและการสะท้อนคิดเป็นกลุ่มและเป็นรายบุคคลและสถิติ  
เชิงพรรณนา

รูปแบบการส่งเสริมกระบวนการเยียวยาตนเองของบุคคลที่มีอาการภูมิแพ้ระบบทางเดิน  
หายใจโดยผสมผสานโยคะสู่วิถีชีวิตประจำวัน ประกอบด้วย 3 ขั้นตอนคือ การเข้าใจสถานการณ์  
การเรียนรู้ในการเผชิญและการจัดการกับอาการภูมิแพ้ และการผสมผสานโยคะในชีวิตประจำวัน  
การรับรู้การให้ความหมายและการจัดการกับอาการภูมิแพ้ในแต่ละขั้นตอนมีดังนี้

1. การเข้าใจสถานการณ์ผู้ที่มีอาการรับรู้สถานการณ์คือ อยู่อย่างทุกข์ทรมานจากอาการและ  
ผลข้างเคียงของยาที่ได้รับ อยู่กับความไม่แน่นอน อยู่กับความกลัวและความวิตกกังวล ต้องพึ่งพา  
ยา และยังคงแสวงหาวิถีทางที่จะจัดการกับอาการด้วยตนเองอย่างต่อเนื่อง

2. การเรียนรู้ในการเผชิญและการจัดการกับอาการภูมิแพ้ ในขั้นตอนนี้บุคคลที่มีอาการภูมิแพ้  
ระบบทางเดินหายใจแบ่งออกเป็น 2 กลุ่มตามการรับรู้ความรุนแรงของอาการภูมิแพ้คือ กลุ่มที่รับรู้  
ว่ามีอาการรุนแรง และกลุ่มที่รับรู้ว่ามีอาการปานกลาง ผลการศึกษาพบว่า การรับรู้จุดเปลี่ยนของ  
กลุ่มที่มีอาการรุนแรงคือ การเรียนรู้จากการอยู่อย่างทุกข์ทรมานไปสู่ความสามารถในการควบคุม  
อาการได้ดีขึ้น ซึ่งสะท้อนจากการเรียนรู้การปฏิบัติโยคะจากการใช้การผ่อนคลายอย่างลึกและ  
หายใจสลับรูมูก และการรับรู้ผลด้านบวกของโยคะ การรับรู้จุดเปลี่ยนของกลุ่มที่มีอาการปาน

กลางคือการเรียนรู้จากการเพิ่มความสามารถในการควบคุมอาการสู่การเยียวยาตนเอง ซึ่งสะท้อน โดย การเรียนรู้การปฏิบัติโยคะจากการเข้าใจในหลักการของโยคะและเทคนิคในการปฏิบัติ การรับรู้ผลด้านบวกของการฝึกปฏิบัติโยคะ และการรับรู้การเปลี่ยนแปลงภายในที่เกิดขึ้น ซึ่งสามารถ ยืนยันด้วยข้อมูลเชิงประจักษ์

บุคคลที่มีอาการภูมิแพ้ระบบทางเดินหายใจเรียนรู้ที่จะควบคุมอาการตามการรับรู้ความ รุนแรงของอาการ กลุ่มรับรู้ว่ามีอาการรุนแรงจัดการกับอาการ โดยเลือกใช้โยคะร่วมกับการใช้ยา และเลือกปฏิบัติทำโยคะที่นุ่มนวล เช่น ท่าผ่อนคลายอย่างลึก และท่าหายใจสลับรูจมูก ผู้รับรู้ว่า มี อาการภูมิแพ้ระบบทางเดินหายใจปานกลางเรียนรู้ในการควบคุมอาการ โดยเลือกใช้ทำโยคะที่ เหมาะสมและหลักการ โยคะที่สำคัญ จากการรับรู้ผลด้านบวกของโยคะและการเปลี่ยนแปลงภายใน ที่เกิดขึ้นจากการฝึกโยคะส่งผลให้ผู้มีอาการมีการฝึกปฏิบัติโยคะอย่างต่อเนื่อง

3. การผสมผสานโยคะในชีวิตประจำวัน ในขั้นตอนนี้บุคคลที่มีอาการภูมิแพ้รับรู้จุดเปลี่ยน คือ การเรียนรู้การเยียวยาโดยการผสมผสาน โยคะสู่วิถีชีวิตประจำวันซึ่งสะท้อน โดยการเรียนรู้ วิธีการผสมผสาน โยคะเข้าสู่ชีวิตประจำวัน การใช้โยคะได้ทุกที่ทุกเวลา ความสามารถอยู่อย่าง สมดุลและปรองดอง การเข้าใจตนเอง การเข้าใจผู้อื่น การคิดเชิงบวก และการส่งเสริมการพัฒนา ด้านจิตวิญญาณ ในแต่ละขั้นตอนของรูปแบบนี้ยังได้กล่าวถึง บทบาทของพยาบาล บทบาทของผู้มี อาการ บทบาทของบุคคลที่ให้การสนับสนุน กลยุทธ์เพื่อส่งเสริมกระบวนการเยียวยาตนเอง ปัจจัย เกื้อหนุน ปัจจัยที่เป็นอุปสรรค และผลลัพธ์จากการเยียวยาตนเอง

ผลจากการศึกษาแสดงให้เห็นว่ารูปแบบการส่งเสริมกระบวนการเยียวยาตนเองโดยการ ผสมผสานโยคะช่วยให้พยาบาลเข้าใจเกี่ยวกับกระบวนการเยียวยาตนเองในบุคคลที่มีอาการภูมิแพ้ ระบบทางเดินหายใจ และสามารถใช้เป็นแนวทางในการปฏิบัติกรพยาบาลองค์กรวม การศึกษาวิจัย ในอนาคตควรติดตามการใช้รูปแบบนี้ในผู้ที่มีอาการภูมิแพ้และศึกษาความยั่งยืนของการใช้รูปแบบนี้ และการศึกษาวิจัยในลักษณะคล้ายกับการศึกษานี้ในผู้ป่วยเรื้อรังอื่นๆ เพื่อเพิ่มทางเลือกในการดูแล ผู้ป่วยเรื้อรัง

**Thesis Title** Enhancing the Process of Self-Healing through Integrating  
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**Author** Mrs. Prapaporn Chukumnerd

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### **ABSTRACT**

The purpose of this study was to develop a model for enhancing the self-healing process through integrating yoga practice in persons with allergic respiratory symptoms. Snowball sampling was used to recruit 15 participants in accord with the inclusion criteria. Participatory action research processes (reconnaissance, planning, action, observing, and reflecting) were conducted in Hat Yai, Songkhla from May, 2006 to February, 2007. Data were collected by in-depth interviews, the writing of diaries, participatory observation and taking field notes. The participants' health conditions and health outcomes were assessed using total symptom scores, aura tests, and quality of life scores. The data were analyzed by using content analysis, group and individual reflection, and descriptive statistics.

The model for enhancing the process of self-healing through integrating it in yoga practice in persons with allergic respiratory symptoms consisted of three steps or stages. These were: understanding situations, learning to cope with allergic respiratory symptoms, and integrating yoga into daily life. First, five themes emerged in the stage of understanding situations: living with suffering from allergic respiratory

symptoms and the side effects of drugs: living with uncertainty; living with fear and anxiety; dependence on drugs; and continuing seeking ways for self-management.

Second, in the stage of learning to cope with allergic respiratory symptoms, the participants were categorized into two groups in accord with the perceived severity of their symptoms. These were the group with severe symptoms, and the one with moderate symptoms. The turning point experienced by the participants with severe symptoms was learning from living with suffering the symptoms to an increasing sense of control. This was supported by themes including; learning the way to practice yoga using deep relaxation and alternate nostril breathing; and perceiving the positive effects of yoga. The turning point experienced by the participants with moderate symptoms was moving from learning from an increased sense of control to self-healing. Three themes emerged at this stage: learning the ways to practice yoga by understanding yoga principles and yoga techniques; perceiving the positive effects of yoga; and perceiving inner changes as a result of yoga practice through objective evidence.

The participants learned to cope with their symptoms in accord with the perceived severity of the symptoms. The participants in the severe group managed their symptoms by using yoga complemented with inhalant drugs. They start their practice with some gentle yoga postures, such as deep relaxation and alternate nostril breathing. The participants in the group with moderate symptom learned to cope with their symptoms by using selected sets of yoga postures and yoga principles. As they perceived the positive effects and their inner changes resulting yoga practice, the participants were encouraged to continue their practice.

Third, the participants experienced an important turning point in this step: they learned from self-healing to integrating yoga into their daily life. There were seven themes that emerged in this step: learning the way to incorporate yoga in their daily life; practicing yoga at any time and place; achieving a state of balance and harmony; understanding themselves; understanding others; positive thinking; and promoting spiritual growth. The descriptions of each of the implementing steps or stages include: the nurse's roles, the participants' roles, the social supporters' roles, strategies, facilitating factors, inhibiting factors, and self-healing outcomes.

The findings showed that this model should help nurses gain more understanding of the self-healing process in persons with allergic respiratory symptoms. It could be used to guide holistic care for patients. Future research is needed to follow up the applications of this model and its sustainability. Furthermore, similar research should be conducted into other chronic illnesses to extend alternative ways of caring.

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Prapaporn Chukumnerd



## CONTENTS

	<b>PAGE</b>
Contents.....	ix
List of Tables.....	xii
List of Figures .....	xiii
Chapter	
1. Introduction	
Background and Significance of the Problem.....	1
Purpose of the Study.....	6
Research Questions.....	7
Significance of the Study.....	7
Conceptual Framework.....	7
Definition of Terms.....	13
2. Literature Review	
Persons with Allergic Respiratory Symptoms.....	14
Yoga and Allergic Respiratory Symptoms.....	16
Self-Healing.....	37
Holistic Nursing.....	57
Participatory Action Research.....	60
3. Research Methodology	
Roles of the Researcher.....	71
Research Design.....	71
Research Process.....	72
Participants of the Study.....	83

## CONTENTS (Continued)

	<b>PAGE</b>
Research Setting.....	84
Instrumentations and Data Collection.....	84
Data Analysis.....	86
Protection of Human Subjects' Rights.....	87
Trustworthiness .....	88
<b>4. Findings and Discussion</b>	
The Context of the Setting at the Center for Holistic Health and Eastern Wisdom .....	92
Participant Descriptions.....	93
Gender, Religion, and Age of Participants.....	94
Model of Enhancing the Process of Self-Healing through Integrating Yoga Practice in Persons with Allergic Respiratory Symptoms.....	103
Step 1 Understanding situations .....	105
Step 2 Learning to cope with allergic respiratory symptoms...	121
Step 3 Integrating yoga into daily life.....	168
Guidelines for the Implications of the Model of Enhancing the Process of Self-Healing through Integrating Yoga.....	196

## CONTENTS (Continued)

	<b>PAGE</b>
5. Conclusion and Recommendations	
Conclusion.....	199
Limitations of the Study.....	202
Implications for Nursing.....	202
Recommendations for Further Research.....	203
References.....	204
Appendices	
A The Demographic and Health Status Sheets .....	222
B Case Screening Sheet.....	229
C Guideline Questions for Persons with Allergic Respiratory Symptoms....	231
D Guideline Questions for Reflection with Allergic Respiratory Symptoms	233
E Interview Guide for evaluation.....	235
F Consent Form.....	237
G Handout of Yoga Practice for Persons with Allergic Respiratory Symptoms.....	240
VITEA.....	270

## LIST OF TABLES

<b>TABLE</b>		<b>PAGE</b>
1.	Major chakras and the area of the body.....	49
2.	Aura color and personality .....	52
3.	Age, gender, religion, education level, since diagnosed (years), symptoms, and self-management of participants.....	95
4.	Aura test report, Total Symptom Score (TSS), and quality of life score at the beginning.....	109
5.	The aura of the participants at before, one and after two months.....	142
6.	The aura of participants before, after one and after two months of the practice.....	149
7.	The auras, TSS and QOL scores before and one month, two months, and three months after yoga practice.....	175

## LIST OF FIGURES

FIGURE		PAGE
1.	Conceptual framework of this study.....	12
2.	Aura picture.....	54
3.	Aura size.....	55
4.	Yin-Yang balanced.....	55
5.	Participatory action process for enhancing self-healing process through integrating yoga practice in persons with allergic respiratory symptoms.....	82
6.	Map showing the Prince of Songkla University and Center for Holistic Health and Eastern Wisdom .....	93
7.	Model of Enhancing the Process of Self-Healing through Integrating Yoga Practice in Persons with Allergic Respiratory Symptoms.....	104
8.	PAR cycles of severe group.....	124
9.	PAR cycles of moderate group.....	131
10.	Total Symptom Score comparing the scores before the yoga practice, and at one month, two months, and three months after the yoga practice.....	143
11	PAR cycles of integrating yoga into daily life.....	171

## **CHAPTER 1**

### **INTRODUCTION**

This chapter explains the background and significance of the problem, the purpose of the study, research questions, significance of the study, and the conceptual framework. Definitions of the terms used in this study are also clarified.

#### *Background and Significance of the Problem*

Allergic respiratory symptoms are important public health problems. There has been an increase in persons with allergic respiratory symptoms in Thailand every year (National Statistical office, 2003). The rates for in-patients admitted to hospitals according to diseases per 100,000 population by region in 2003 was 162.26 for the whole country (excluding Bangkok), and was 214.82 for the southern region (Ministry of Public Health, 2004). This high prevalence produces symptoms that exact a high cost and have a major effect on the quality of life (Koreck et al., 2005). Allergic respiratory symptoms mainly consist of allergic rhinitis and bronchial asthma (Carlsen, 2004). The symptoms are characterized by nasal mucosal inflammation resulting from early and late phase responses to allergens. These symptoms are rhinorrhea, nasal congestion, nasal itching, and sneezing (Rosenwasser, 2002). They are systemic symptoms that appear as chronic effects in multiple organ systems (Ryan, Levy, Morris, Sheikh, & Walker, 2005). For example, nasal symptoms can cause sleep disruption and poor concentration. Many research studies have showed that the severity of rhinitis has more of an effect on the quality of life, sleep, daily activities,

and work performance over the duration of rhinitis. In moderate/severe rhinitis, more than eighty percent of patients report impaired ability to participate in activities (Bousquet et al., 2006).

The allergic respiratory symptoms are a complex illness, which may be triggered by a range of different conditions. Emotional stress, dust and dust mites in particular, molds, pollens and other inhaled products are known triggers for it. In terms of patients' suffering, socio-economic costs and co-morbidity, the impact of allergic symptoms are underestimated (Lewith, 1996).

There are several methods that are used to treat persons with allergic respiratory symptoms using conventional technology and medications. These medications can create many side effects (Lewith, 1996; Ryan et al., 2005). Because they are safe, cheap, and supported by research, complementary therapies are increasingly used to manage these symptoms ( Bhattacharya, Pandey, & Verma, 2002; Birkel & Edgren, 2000; Birkel, & Edgren, 2005; Cooper et al., 2003). They include acupuncture, homeopathy, nutritional therapies, yoga, and herbal medicines (Lewith, 1996). Yoga has been reported to be successfully used to manage the symptoms of persons with allergic respiratory symptoms, which can thus improve lung capacity, decrease symptoms, and increase the quality of life (Graham & Blaiss, 2000).

Yoga is a complementary therapy that helps a person strive for the perfect union of body, mind, and spirit, through a system of postures, breath control, relaxation and meditation (Morris, 1998). There is a large variety of physical and mental techniques geared toward gaining control over body systems. Yoga is widely used for persons with allergic respiratory symptoms and thus helps increase the

quality of life (Sabina et al., 2005). Anecdotal evidence favors yoga's effectiveness as an adjunctive treatment for persons with allergic respiratory symptoms, and this is supported by physiologically based theories of mechanisms of action. Yogic practices promote relaxation, reduce sympathetic activity and reactivity (Cooper, 2003; Girodo, Ekstrand, & Metivier, 1992; Visweswaraiyah & Telles, 2004), and reduces the use of medical treatment. Moreover, holistic practitioners have successfully used yoga to control respiratory ailments. Research has shown that a fifteen-week program of yoga that included physical posture, breathing techniques, and relaxation significantly improved pulmonary functions (Birkel & Edgren, 2000; Mandanmohan, Jatiya, Udupa, & Bhavanani, 2003; Manocha, Marks, Kenchington, Perters, & Salome, 2002; Yadav & Das, 2001). From the results of the previous studies showed that yoga practice may help the persons with allergic respiratory symptoms to heal themselves. Commonly practiced yoga methods are pranayama (controlled deep breathing), asanas (physical postures) and dhyana (meditation) mixed in varying proportions with differing philosophic ideas (Yardi, 2001). Therefore integrating yoga practice for self-healing, this study includes the following components of yoga: pranayama, asanas, relaxation and meditation.

Self-healing is defined as a process and outcome, and has been described in several places in the literature relating to yoga (Guthrie, 2005; Herrick & Ainsworth, 2000; Keegan, 2001; Taylor, 2003). This concept appears central to the phenomenon of energy based therapies and appears to be the root of complementary and alternative therapies using medicine (Robb, 2006). The processes of self-healing are natural processes, occurring from within, restoring balance to systems, using the capacity for self diagnosis and repair. They are the process of union of physical, psychological,



social, and spiritual aspects. They provide an individual, unique experience, and involve active processes in which clients take responsibility for their own health. The consequences or outcomes of self-healing are balance, wholeness, relaxation, and harmony (Glaister, 2001; Quinn, 2000; Thorpe & Barsky, 2001; Robb, 2006). A variety of complementary therapies can be used to assist in the healing process. These therapies include meditation, relaxation, imagery, hypnosis, yoga, tai chi, energetic touch therapies, acupressure, reflexology, healing prayer, and shamanism (Quinn, 2000).

Yoga can be used to re-channel energy in the self-healing process. Nurses can integrate yoga as part of the self-healing process. It is a catalyst that is necessary to make the process happen. The following is an explanation of how and why yoga postures (asanas) keep the body in the best possible health. The specific positions and movements were designed to strengthen and stretch the back musculature to achieve perfect balance. In addition, chakras are described as energy centers which are only opened by serious spiritual practice, including awakening of the Kundalini energy. Yoga releases tension, improves flexibility, maximizes the flow of energy, and restores a sense of balance and calmness. All the techniques of yoga provide a total approach to life, health and healing. The tools of yoga are techniques for discovering the truth of life within ourselves (Page, 2005). For many, the path of yoga opens up to us the idea of a link between the body and emotions.

In the yogic view, the human being exists simultaneously on many levels; these levels or sheaths of existence are called the koshas. The koshas include the physical body (anamayakosha), the vital or energy body (pranamayakosha), the mind or emotional body (manomayakosha), the intellect or wisdom body (vjanamayakosha),

and the bliss body (anandamayakosha). Yoga practices are mindful. Yoga postures, breath control, sound, relaxation and meditation bring the koshas into alignment (Coombe, 2005; Nagarathna, R., Nagendra, H., & Monro, R., 2002). Moreover, yoga practice can influence psychoneuroimmunologic functions, which are identified as the numerous mechanisms through which the central nervous system and immune system interact. It includes direct anatomical linkages and soluble neuroendocrine derived products. This mechanism is supported through the promotion of several nursing interventions such as relaxation training, progressive muscle relaxation, guided imagery and touch therapy (Ader, 2001; Prolo et al., 2002; Zeller, McCain, & Swanson, 1996). In conclusion, yoga is an old system of natural self-healing that improves immune functions and involves controlling the subtle energies through the transformational methods of asanas, pranayama (breath control), and relaxation.

In current public health philosophy there has been a shift in health care away from cure-oriented to healing-oriented care and this provides more opportunities to enhance self-healing processes that include yoga to help persons with chronic illness. Yoga has been reported to be successfully used to manage the symptoms of persons with allergic respiratory symptoms, but most studies have focused on physical improvement. This study explores the holistic outcomes of yoga in persons with allergic respiratory symptoms, and emphasizes nursing roles in facilitating participants' healing processes. However, there are no clear guidelines for nurses who may wish to use yoga in their nursing practice, especially for persons with allergic respiratory symptoms. For this study, yoga was used for persons with allergic respiratory symptoms to enhance self-healing processes through integrating yoga practice. In order to gain sustainable and suitable knowledge for the study, Yoga

philosophy, and participatory action research, provided the theoretical and methodological framework for knowledge development. The researcher employed the philosophy of critical social sciences and Hatha yoga to develop this study and its focus on participatory action research. This is because the philosophy of this methodology is congruent with the philosophy of yoga.

Participatory action research consists of four phases: reconnaissance, planning, acting and observing, and reflecting. These research activities exist interdependently and follow each other in a cycle (Kemmis & McTaggart, 1988; McTaggart, 1997). The objectives of the study were to combine knowledge and action that were directly useful to persons with allergic respiratory symptoms and, through research, to see how self-healing could improve the quality of their lives. The nurse requires such a model to care better for persons with allergic respiratory symptoms. It is hoped that the results of this study provide guidelines for nurses who wish to enhance self-healing processes through integrating yoga practice for persons with allergic respiratory symptoms, and to help them maintain balance in their lives.

#### *Purpose of the Study*

The purpose of the study was to develop a model of enhancing the process of self-healing through integrating yoga practice in persons with allergic respiratory symptoms.

### *Research Questions*

This study attempted to answer the following questions:

1. What is an appropriate model of enhancing the process of self-healing through integrating yoga practice in persons with allergic respiratory symptoms?
2. How can nurses enhance the process of self-healing through integrating yoga practice?

### *Significance of the Study*

The study is significant because it intended to:

1. gain more understanding the process of self-healing in persons with allergic respiratory symptoms;
2. enhance self-healing process through integrating yoga practice for persons with allergic respiratory symptoms;
3. illustrate the development of nursing knowledge that integrates eastern therapeutics from the participants' perspective.

### *Conceptual Framework*

This study aimed to develop a model of enhancing the process of self-healing through integrating yoga practice in persons with allergic respiratory symptoms. Yoga, using the philosophy of Hatha yoga which emphasizes on mind-body connection provided the theoretical framework. Yoga is a feature of an ancient science that focuses on health and wellness at all levels of the person: physical, psychological and spiritual. The associated process leads progressively to higher stages of health and awareness (Cameron & Parker, 2004; Sadhakas, 1999). Hatha

yoga offer guidelines for living a valuable and positive life. In fact, from the perspective of yoga, this raising of consciousness or heightening of awareness is the ultimate definition of health through the process of mind-body connection which guiding by practicing asanas, pranayama, and relaxation. The meaning of illness is to point back towards greater awareness and balance.

Self-healing in this study is considered as process and outcomes. It is process of bringing parts of one's self together at a deep level of inner knowledge. Self-healing describes a process that facilitates health and restores harmony and balance between the mind and the body (Glaister, 2001). It is an individualized process that happens over time and begins with acceptance and originates from within persons. It describes an individualized dynamic process that facilitates health and restores harmony and balance between the mind and the body. It is considered as outcomes. The self-healing results are an integrated, balanced whole with each part having equal importance and value and attainable inner peace. Healing presence and energy refers a deep emotional presence that enhances recovery and repair. In briefly, the self-healing as outcomes are balance, wholeness, relaxation, and harmony.

Yoga is brought to integrate with nursing for the process of self-healing in the persons with allergic respiratory symptoms. The specific postures are designed to strengthen and stretch the musculature back to perfect balance. In Hatha yoga: asanas, pranayama (breath control), and relaxation can motivate chakras in the body, which are described as energy centers and only opened by serious spiritual practice, including awakening of the energy. This allows a more healthful state to be experienced and allows the mind to become more calm, balance, and harmony. Yoga practice also influence psychoneuroimmunologic functions. It includes direct

anatomical linkages and soluble neuroendocrine derived products. Yoga practice may improve the individual's self-healing by direct actions toward homeostatic stabilization of the autonomic nervous system. Self-healing of each person can occur when the nervous system is in homeostatic balance, individuals will feel an enhanced sense of well-being, be more effective in coping with their conditions of living, and therefore be less susceptible to stress-induced illness. (Walling, 2006; Zeller, et al., 1996).

Holistic nursing is nursing practice which cares for the person as an integrated, holistic human being, inseparable and integral with the environment in order to heal the whole person from birth to death. The researcher used holistic nursing for the enhancement of healing the whole person. Holistic nurses can identify the interrelationships of the bio-psycho-social-spiritual dimensions of the person, recognize that the whole is greater than the sum of its parts, and understand the individual as a unitary whole in mutual process with the environment. (Dossey & Guzzetta, 2005).

This study is the process of enhancing of self-healing. The nurse uses the critical thinking process for directing practice. She took on many roles to participate in the process such as facilitator, educator, assessor, coordinator, and collaborator. She also helped empower the persons with allergic respiratory symptoms to focus their minds on their postures and breathing. When the persons feel calm and in harmony, the immune system increases and then their health can improve.

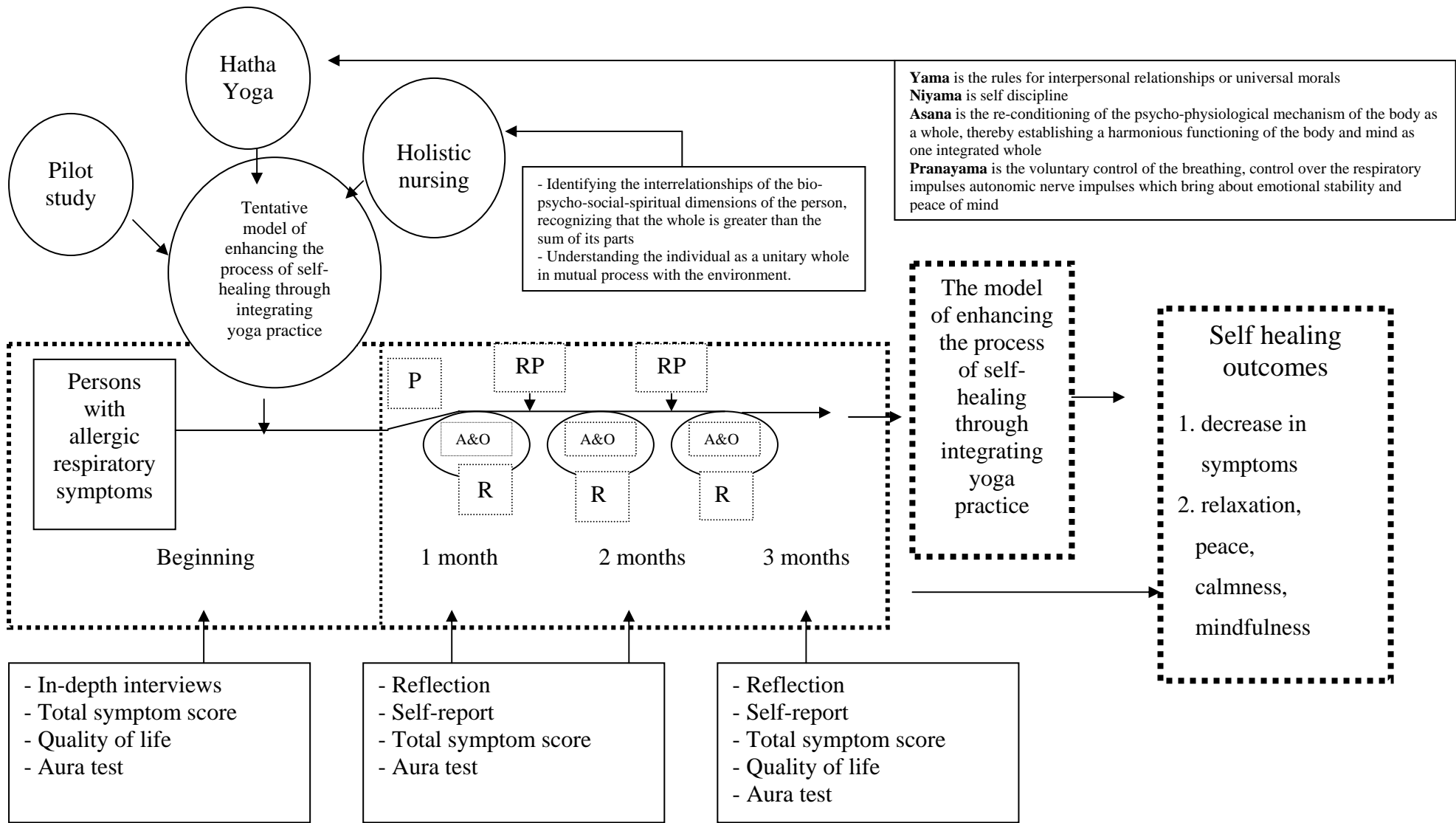
The methodological conceptual framework guided this research study was participatory action research. Participatory action research is a form of qualitative research that seeks to understand human experiences (Olshansky et al., 2005). Participatory action research treats people as autonomous and responsible agents who actively participate with the investigators throughout the research process, possibly in

order to improve the conditions of their lives (McTaggart, 1997). Seymour-Rolls and Hughes (2000) described participatory action research as consisting of reflecting, planning, acting, and observing. Reflecting refers to focusing on the shared concerns of the members of the research team with a view to clearly defining the research problem being studied. Planning refers to the process of developing the strategies involved in conducting the research project. Acting refers to the actual implementation of the strategies developed in the planning process. As with reflecting and planning, the participants are involved in the actual implementation of the research, thus leading to enhanced communication among all the participants in the research. Observing refers to the analysis of data and is very much intertwined with the operational moments. In the analysis of data, it is likely that the data analysis reflects the perspectives of the research participants. All four of these stages actually occur several times, as there are several cycles involved and each of these stages occurs as part of each cycle. According to Wong and Chow (2004), participatory action research consists of three key features: first, a commitment to liberating courses of action; second, a commitment to honoring the lived experience and knowledge of the people involved; and third, a commitment to genuine collaboration in the research.

This research aimed to develop a model of enhancing the process of self-healing through integrating yoga practice by moving through a complete cycle of reconnaissance, planning, acting and observing, reflecting, and revising of the processes. This process was based on the basic themes of empowerment, collaboration, acquisition of knowledge, and behavior change (Kemmis & McTaggart, 1988; McTaggart, 1997). Reconnaissance includes holding discussions with people with

allergic respiratory symptoms to identify a shared concern or problem. Planning is a constructive act and arises during discussions among the participants. The plan must be a critically examined course of action for using yoga by the participants in the group. Action happens when the plan for using yoga is applied for self-healing. Most important is the action or change that happens in the persons with allergic respiratory symptoms. Observation is the part of the process where implementation of the plan is observed in the context of the actual situation (McTaggart, 1997). Reflection is used to examine, construct, and evaluate throughout the cycle. The interaction between researchers and persons with allergic respiratory symptoms follows the action research cycle and this helps to create the process of self-healing through integrating yoga practice. The persons with allergic respiratory symptoms perceive the effects of self-healing such as decreased in symptoms, being more relaxation, peace, calmness, and mindfulness. The indicators of self-healing are evaluated by in-depth interviews, self-report forms developed by the researcher, aura monitoring, total symptoms score, and assessing the quality of life. The conceptual framework is shown in figure 1.





P = Planning, A&O = Acting and Observing, R = Reflecting, RP = Revision plan

Figure 1. Conceptual framework of this study

### *Definition of Terms*

*Persons with allergic respiratory symptoms:* refers to persons who have symptoms associated with respiratory allergies. Common symptoms are sneezing, rhinorrhea, itchy nose, and nasal congestion, coughing, watery and red eyes. The diagnosis has been made by physicians.

*Self-healing:* refers to well being made evident by persons with allergic respiratory symptoms having decreased allergic symptoms, feeling relaxation, peacefulness, calmness and mindfulness.

*Model of enhancing the process of self-healing through yoga practice:* refers to the set of nursing practices that are integrated with yoga and aims to guide persons with allergic respiratory symptoms to reach self-healing. This model is developed through mutual collaboration between the researcher and the persons with allergic respiratory symptoms and is constructed by using participatory action research as a process for self-healing in persons with allergic respiratory symptoms.

## **CHAPTER 2**

### **LITERATURE REVIEW**

This review of literature relating to background information has the following categories: persons with allergic respiratory symptoms; yoga and allergic respiratory symptoms; self- healing; holistic nursing; and participatory action research.

#### *1. Persons with Allergic Respiratory Symptoms*

##### *1.1 An overview of allergic respiratory symptoms*

This overview of allergic respiratory symptoms consists of the definition, prevalence, causes and mechanisms of the allergy. The term of allergic respiratory symptoms refer to many symptoms involving the functioning of the respiratory system of people. The respiratory system is one of the most vital systems in the body. It provides oxygen, gets rid of the carbon dioxide, and also allows people to speak. Any obstruction in the respiratory system can cause a lack of oxygen supply in the body. The respiratory system is also often affected by allergies or the immunologic reaction to a substance, which is normally harmless. The substance that triggers allergic reaction is called an allergen. The most common allergens include pollen, dust, molds, food, insect venom, medicines, and latex rubber. Irritants such as cigarette smoke, air pollution, and some strong odors can also directly impact on the respiratory system and can trigger allergic reaction. In short, allergic respiratory symptoms are the effects of immunologic reactions to allergens which impact on the functions of respiratory systems.

There are many symptoms that occur from allergic reactions. Common symptoms are: sneezing; watery eyes; runny or clogged nose; coughing; itching of the eyes, nose and throat; dark circles around the eyes; and conjunctivitis. These reactions are the body's way of defending itself against bacteria and viruses. These symptoms are the results of reactions by the immune system. The immune system generates immunoglobulin E, or IgE, which is specific for the particular allergen that enters the body. When the IgE meets its allergen, it binds to the allergen and the cell. The IgE is attacked and releases histamine, cytokines or leukotrienes, or any powerful inflammatory chemical.

Allergic rhinitis is one type of allergen-induced, IgE-mediated inflammatory disease of the nasal mucosa. The development of the disease is characterized by an initial sensitization phase to a specific allergen, when no clinical symptoms are presented. At later points in time, the encounter of the same allergen by sensitized individuals is followed by the elicitation of a specific immune response and the activation of effector mechanisms (Koreck et al., 2005).

### *1.2 Impact of allergic respiratory symptoms*

Allergic respiratory symptoms affect many aspects of people's health. The severity of the rhinitis affects the participants' quality of life, sleep, daily activities, and work performance. For example, in the study by Bousquet, et al., (2006) performed in general practices on a large number of patients with allergic rhinitis in primary care, most of the effect was on the quality of life, sleep, daily activities, and work performance.

Leynaert and colleagues (2000) found that the quality of life is impaired both in young adult patients with asthma and in patients with allergic rhinitis. It was reported that both asthma and allergic rhinitis were associated with impairment in the quality of life, problems with social activities, difficulties with daily activities as a result of emotional problems, and poorer mental well-being.

Sleep in patients with allergic rhinitis was also impaired. Many other studies have shown that allergic rhinitis impairs sleep (Graham & Blaiss, 2000; Lawson, 2003; Workman, 2002a). Sleep was impaired in intermittent and persistent rhinitis, and the severity of the rhinitis was more important than its duration.

Moreover, there are various effects that may result in impaired allergic respiratory symptoms. For example, loss of smell is a common symptom in allergic rhinitis. Although it is commonly accepted that work is impaired by allergic rhinitis, no extensive study exists in general practices assessing the effect of nasal symptoms on work performance (Workman, 2002b).

## *2. Yoga and Allergic Respiratory Symptoms*

Yoga is one of the complementary therapies which is used for many chronic patients. Yoga has developed physical and mental techniques geared to gain control over many systems. It is a psycho-philosophical-cultural method of leading one's life that alleviates stress, induces relaxation and provides multiple health benefits to the person following its system. It is a method of controlling the mind through the union of an individual's dormant energy with the universal energy. Commonly practiced yoga methods are asanas (physical postures), pranayama (controlled deep breathing) and dhyana (meditation) (Yardi, 2001). In short, yoga is a way of life that helps to

develop a complete personality and leads to the goal of highest integration of physical, mental, emotional balance and stability, and to spiritual development.

### *2.1 History of yoga*

Yoga is one of the oldest systems of healing. It comes from the Sanskrit word “yuj”, meaning to join, which aims for the perfect union of body, mind, and spirit through a system of postures, breath control, sounds, meditation, and relaxation (Keegan, 2001; Morris, 1998; Nagarathna, et al., 2002). Yoga has been practiced for thousands of years in India, where it is a way of life that includes ethical models for behavior and mental and physical exercises aimed at producing spiritual enlightenment. In summary, yoga is a science and art that has developed from Hinduism to become a journey of the body, mind, and spirit on a path towards unity.

### *2.2 Philosophy of yoga*

Philosophy is an attempt on the part of the human mind to present the problems of existence, life, meaning and values in a comprehensive and consistent framework. In the philosophical systems, it emphasizes the mind, particularly in its relation to the body. Religious and philosophical approaches, like yoga, aim to explain the ultimate nature of the mind (Gharote, 1999).

Yoga is a way of living, by means of achieving health in body, mind, and spirit. The human body is an instrument for journeying through this life. It must be kept properly if the mind is to function well. The mind-body connection resonates too profoundly with people’s experience to be discounted. It has been shown to powerfully influence health outcomes for a wide range of disease processes as well as

to improve the quality of life. Holistic health care providers have evolved sophisticated means for accessing this profound connection. Mind-body connection has gained great popularity with the public and is widely used by the health care profession. It has a long history of playing a vital role in both health and healing practices. The mind is responsible for what one thinks or believes, and it can have either a positive or negative effect on health (Herrick, & Ainsworth, 2000). This turns attention to the concept of mind/body healing, whereby the mind can have a significant influence on healing. There are various modalities for mind-body connection. Faith and belief appear to be key elements in all therapies. A positive attitude not only improves outcome but also positively affects the quality of life.

Yoga is generally considered to be a system of philosophy and adopts a group of practices for the attainment of the ultimate goal of emancipation. Patanjali stated in his Yoga Sutra that yoga consists of eight interconnected limbs, or aspects of the whole, that lead progressively to higher stages of health and awareness (Cameron & Parker, 2004; Fritz, 2006; Sadhakas, 1999). The eight limbs are guidelines for living a valuable and positive life. The eight limbs of Yoga Sutra are explained by Patanjali as follows:

1. Yama (Moral restraints)

Yama means the principles of right relationship to the world and universal ethics. It consists of Ahimsa, Satya, Asteya, Brahmacharya, and Aparigraha. Ahimsa means non-aggression, non-violence, constructive thought and speech. Conflict and violence comes out of fear, anger, ignorance, restlessness, and selfishness. Ahimsa is practiced through compassion, love, understanding, patience, self-love, and worthiness. Satya is to be true to oneself, practicing acceptance rather

than judgment in one's thoughts. Practicing honesty towards oneself provides the foundation for honest communication with others. Asteya means: not stealing; generosity; cultivating a sense of completeness, self-sufficiency; and letting go of cravings. Brahmacharya is moderation, building up and preserving a high level of vital energy, channeling emotions, and stepping out of the overindulgence of mind (thoughts, intellect). Moreover, people have to practice moderation at all levels such as with sex, food, activity, rest and all aspects of daily life. Aparigraha means learning the art of non-attachment to material things and the outer world at large. This includes non-possessiveness, not being-greedy, satisfying the needs rather than wants, and not being attached to material things, possessions, relationships and habits.

## 2. Niyama (Moral observances)

Niyama means the principles of right relationship with the self, disciplines, and observances which consists of saucha, santocha, tapa, svadihyoga, and ishvarapranidhana. Saucha means learning the art of purity such as purity of body, cleanliness, good food and healthy habits, the practice of consistency in thought, speech, and discrimination. Santocha means being content with what is, accepting, and making the best out of everything. This practice includes remaining calm in the face of success or failure. In this, the state of mind is not dependent on any external feedback or event. Tapa, means the art of discipline and spiritual life. This includes the willingness and discipline needed for doing whatever is necessary to reach a defined goal. This principle can explain the practice of determination to pursue a goal and any daily practices, the practice of enthusiasm for the spiritual path, and learning discipline in the duties of the outer world. In doing this one gains the ability to be disciplined in the inner world. Svadihyoga means the art of self-



education, contemplation and study that leads to self-realization. It involves the contemplation of the knowledge offered in teachings and scriptures, and an ongoing observation of oneself and the activities of the mind. This includes the practice of study and reflection on yogic texts, meditation and a desire to want to know the truth. Ishvarapranidhana means the practice of willingness to surrender, the letting go of righteousness, and the cultivation of faith, dedication and sincerity.

### 3. Asana (Postures)

Asana means the practice of postures. This third limb of yoga is often misunderstood to be what yoga is. In fact, it is only one of eight limbs. There are many different schools of yoga and the practice of asanas. Due to many factors such as age, physical condition, health, previous experience and many other things, the recommended practice of asanas would be different from individual to individual. The asanas should be modified to serve the highest good of the person rather than the person having to adapt to fit into the practice of the asanas. Asanas help develop stability in the body, elasticity in the lung fibers and in other parts of the respiratory system.

### 4. Pranayama (Controlled breathing)

Pranayama means voluntary control of breathing and control over the respiratory impulses. The word pranayama comprises of two roots of prana and ayama. Prana means vital energy or life force. Pranayama utilizes breathing to influence the flow of prana in the nadis or energy channels of energy body. Moreover, these practices also influence purifying, regulating and activate the nadis, thereby including physical and mental stability.

### 5. Pratyahara (Sensory withdrawal)

Pratyahara means to withdraw the senses from the object and to get inside or gain control over the senses. By withdrawing attention from the external environment and by focusing inwards on the breath and sensations, people ease the mind and become more aware of their body. With this awareness and focus they can move deeper into the practice of yoga, learning to move through limitations, fears and expectations. A key to the practice of pratyahara is the observing of the body, breath and sensations.

### 6. Dharana (Concentration)

Dharana means the art of focusing and practicing concentration. Dharana translates as the immovable concentration of the mind. The essential idea is to direct the concentration or focus of attention in one direction. This is not the forced concentration of, for example, solving a difficult mathematics problem. Dharana is a much deeper form of concentration.

### 7. Dhyana (Meditation)

Dhyana means deep meditation. Dhyana makes one forget the body and the world. It is perfect contemplation. It involves concentration upon a point of focus with the intention of knowing the truth about it.

### 8. Samadhi (Self-actualization)

Samadhi means complete absorption and union with our true selves, the in-dweller, and the union with higher consciousness. Samadhi literally means to bring together and to merge. In samadhi the personal identities completely disappear. At the moment of samadhi self does not exist anymore. It is a state of super

consciousness and perfect absorption of mind in yoga. Samadhi brings infinite bliss, knowledge, peace and liberation.

In conclusion, the initial disciplining of the people is yama and niyama which guide them for morals and ethical behaviors. Asanas help them to develop stability and balance in the body. Pranayama influences mental stability and nervous system. Pratyahara, dharana, dhayana, and Samadhi would bring the people to higher consciousness. The main philosophy of yoga is that the mind, body, and spirit are all one and cannot be clearly separated. According to the Yoga Sutras, the ultimate aim of yoga is to reach freedom. This is the experience of one's innermost being or soul. When this level of awareness is achieved, one becomes free of the chains of cause and effect which send the people to continual reincarnation.

### *2.3 Yoga and health*

Yoga is ultimately the discovery of the mystery and magic of our own daily lives. All of the techniques of yoga provide a total approach to life, health and healing. The tools of yoga are techniques for discovering the truth of life within ourselves. This truth is the water of life and, in order to share it with others, we need to drink fully and deeply ourselves. In order to be well, people need to live well, which includes opening the hearts to ourselves, to others and to life (Page, 2005). The integration of the person at all of these levels is the domain of yoga therapy. For many, the path of yoga opens up to the idea of a link between the body and emotion.

The heart of yoga therapy is addressing the various levels of healing of the whole person. This is achieved through an ancient psychological model of the human being called the five koshas. This model describes the person as multidimensional,

with the source and foundation of the person being the spiritual dimension. By using the five koshas as a starting point, yoga therapy addresses every level of the person individually and as an integrated whole. The nature of the five koshas is shown in detail as follows (Coombe, 2005; Nagarathna et al., 2002):

#### 1. Annamayakosha (physical body)

The first level to take into consideration is the physical body as understood by western science, including the anatomical structures and physiological processes. From the eastern standpoint, the body is considered from the perspective of the three ayurvedic doshas. These doshas describe the overall body type of the individual.

#### 2. Pranamayakosha (energy body)

From the eastern perspective, the body is an interconnected network of energy and intelligence. The proper flow of energy is necessary for maintaining good health. The energy body encompasses the pranavayus or patterns of energy within the body, the energy channels or nadhis, and the energy centers or chakras. The breath forms a bridge to the energy body and the breathing patterns are a window into it. Correcting breathing patterns can enhance energy flow.

#### 3. Manomayakosha (psycho-emotional body)

The third level to be addressed is the psycho-emotional body, including the dominant emotional and thought patterns that make up the personality. These patterns are assessed in relation to the three gunas: rajas, tamas and sattva. The gunas are states of mind. Rajas refers to an aggressive, fiery or volatile state of mind. Tamas is a dull or lethargic state of mind. Sattva is the balanced state.

#### 4. Vijnyanamayakosha (wisdom body)

The fourth level is the mind as witness. At the third level, the mind functions as stimulus/response. People are caught inside their own dramas and cannot see beyond themselves. At the fourth level, they are able to step out of their personal conditioning and, to some extent, look beyond their personal roles to see the larger picture as to who they are. This is the level of recognizing and de-conditioning their core beliefs.

#### 5. Anandamayakosha (bliss body)

The fifth level is most easily explained as the level of meditation in which the mind rests in a natural state of bliss and ease.

The practice of yoga involves activation of body chakra. Inside every human being there is a network of nerve and sensory organs that interprets the outside physical world. At the same time, within an individual resides a subtle system of channels (nadis) and centers of energy (chakras), which looks after the physical, intellectual, emotional, and spiritual being. Within the body there are seven chakras through which cosmic forces are manifested in individual beings according to the basic vibrations from the causal body. Each of the seven chakras has several spiritual qualities. The base chakra is located in the perineum between the anus and the genitals. It is the prana of elimination and generation, the element earth, the sense of smell and the nose organ. Close above it is the chakra that manifests the water element, the kidney and bladder, the sense of taste and the tongue organ. Next is the solar plexus manifesting the element fire; in digestion, the eyes and the sense of sight. Then air, in the chest, which manifests the lungs, hearing and the ear. The element ether is at the throat, the skin and the sense of touch. There are two chakras in the

head to do with higher consciousness, will and intelligence. The sixth is at the forehead known as the third eye, which is associated with the pineal gland and the moon. The seventh is associated with the sun and the pituitary, situated at the crown, which is depicted in figures and paintings of Buddha and as a halo or nimbus in Christian art. In brief, the seven major chakras correspond to endocrine glands of the physical body and are psychic centers of awareness and prana situated in specific areas of the body (Nagarathna, et al., 2002).

The chakras are sensitive to electro-magnetic fields, and other vibration therapies may also work on them. Each chakra is associated with an endocrine gland. It is in this way that the planets affect the evolution and feelings through astrological influences, for each chakra is tuned to the specific cosmic vibrations that were present when our first breath was taken. Each chakra has particular characteristic colours and mantras associated with it (Saraswati, 2004).

From the perspective of enhancing the processes of self-healing through integrating yoga practice, the health condition is a reflection of where this person is in relation to their lives, both internally and externally. The assessment will include an analysis of posture, breath, energy, movement, and mind. This description in itself is a critical part of the self-healing process because clarifying and becoming conscious of what is happening is the first and most fundamental part of the process of change. In fact, from the yoga perspective, this raising of consciousness or heightening of awareness is the ultimate definition of health. The meaning of illness is to point us back toward greater awareness and balance.

## *2.4 Branches of yoga*

There are many branches of yoga that aim at the goal of self-realization. Yoga realizes that individual needs, capacities and ways of expression vary, so no one way can be right for all. The different schools of yoga will be briefly described, starting with the better-known forms. Prakash (2005) explained the branches of yoga as follows:

### 2.4.1 Raja yoga

Raja yoga is considered the highest form of yoga. Raja means royal, and meditation is the focal point of this branch of yoga. This approach involves strict adherence to the eight limbs of yoga as outlined by Patanjali in the Yoga Sutras. Raja yoga is also known as classical yoga. The practice of raja yoga typically starts with hatha yoga, which gives the body the needed health and strength to endure the more advanced stages of training.

### 2.4.2 Karma yoga

Karma yoga is the path of service. The principle of karma yoga is that what we experience today is created by our actions in the past. Therefore, all of our present efforts become a way to consciously create a future that frees us from being bound by negativity and selfishness. We practice karma yoga whenever we perform our work and live our lives in a selfless fashion, and as a way to serve others.

### 2.4.3 Bhakti yoga

Bhakti yoga describes the path of devotion. Seeing the Divine in all of creation, bhakti yoga is a positive way to channel the emotions. The path of bhakti yoga provides people with an opportunity to cultivate acceptance and tolerance for everyone who comes into contact with.

#### 2.4.4 Jnana yoga

While bhakti yoga can be considered the yoga of the heart, jnana yoga is the yoga of the mind, of wisdom, the path of the sage or scholar. This path requires development of the intellect through the study of the scriptures and texts of the yogic tradition.

#### 2.4.5 Tantra yoga

Tantra yoga is probably the most misunderstood or misinterpreted of all the paths of yoga. Tantra yoga is the pathway of ritual. In tantric practice people experience the Divine in everything they do. A reverential attitude is therefore cultivated, encouraging a ritualistic approach to life.

#### 2.4.6 Combining yoga paths

The people need not be limited to one expression or path of yoga. They may practice hatha yoga, taking care of their physical body; simultaneously they may include raja yoga by adding meditation to their practice; they may perform karma yoga by engaging in selfless service to others; and by cultivating the lifestyle of a bhakti yogi they may express their compassion for everyone they meet.

#### 2.4.7 Hatha yoga

Hatha yoga is the most familiar kind of yoga practice. There are distinct and individual practices for the purpose of unifying both body and mind. Called the forceful path, this is the yoga of physical well-being. In the modern Western approach, hatha yoga is used primarily as a form of physical therapy. It consists of asanas (postures), pranayamas (breathing control), and meditation. Hatha yoga is a holistic yogic path, including moral disciplines, physical postures, purification procedures, yogic breathing pranayamas and meditation. Hatha represents



opposing energies: hot and cold (fire and water, following similar concept as yin-yang), male and female, positive and negative. Hatha yoga attempts to balance mind and body via physical postures (asanas), purification practices, controlled breathing, and the calming of the mind through relaxation and meditation. Asanas teach good posture, balance and strength and are practiced to improve the body's physical health and clear the mind in preparation for meditation in the pursuit of enlightenment.

In this study, Hatha yoga is the tool to help the persons with allergic respiratory symptoms to achieve self-healing. The main objective of Hatha yoga is to create balance between the interacting activities and process of the pranic mental forces. An important part of Hatha practices is awakening of kundalini through sushumna nadi, the central pathway in the spine to sahasrara chakra, thereby illuminating the higher centers of human consciousness.

## *2.5 Mind-body connection through yoga*

### *2.5.1 Mechanisms of psychoneuroimmunology*

Psychoneuroimmunology is a new science that studies the constant exchange and processing of information to enable the study of the nervous system, the endocrine system, and the immune system (Walling, 2006). It is identified by several mechanisms. It became known because of how the central nervous system and immune system interact, including direct anatomical linkages and soluble neuroendocrine derived products ( Zeller, et al., 1996). It investigates the relations between the psychophysiological and immunophysiological dimensions of living beings. The balance between health and disease, systematically and locally, is threatened by both intrinsic and extrinsic factors, including autoimmune aggression,

cancerous mutations, and external pathogens and environmental factors, as well as toxic substances (Prolo, et al., 2002).

Psychoneuroimmunology is concerned with the mechanisms of communication between the neuroendocrine and immune systems. These mechanisms may be activated by response to psychobiological stimuli, such as pain or stress. In addition, neurological fibers (sympathetic fibers) have been shown to directly innervate immune system tissues. These anatomical linkages may influence immunological integrity, functioning via specific receptors for neurotransmitters such as catecholamines, opioid peptides and dopamine on the surface of immune cells. Activation of the sympathetic adrenomedullary system results in the release of soluble products such as catecholamines and enkephalins, both of which are known to have complex immunomodulatory effects. Stimulation of the hypothalamic-pituitary-adrenocortical system leads to the elaboration of corticotrophin, endorphins and glucocorticoids (Prolo, et al., 2002; Zeller, et al., 1996). Some of these hormones have been reported to have immunopotentiating effects, whereas others are primarily immunosuppressive. Immune-derived products, with structural and biological properties identical to neuroendocrine hormones, may also be activated in response to certain psychobiological stimuli factors, such as interleukin-1, ACTH, and beta-endorphin, all of which have the potential to influence the behavior of the neuroendocrine system. Although a number of psychobiological stimuli have been reported to influence immune system functioning, stress has been studied most extensively in this regard. Recent psychoneuroimmunologic research has provided considerable evidence that psychological stress and illness are related through immunomodulation (Prolo et al., 2002; Zeller, et al., 1996).

Psychoneuroimmunology brings together researchers in a number of scientific and medical disciplines, including psychology, the neurosciences, immunology, physiology, pharmacology, psychiatry, behavioral medicine, infectious diseases, and rheumatology. All are scientists with profound interest in interactions between the nervous and immune systems, and the relationship between behavior and health (Prolo, et al., 2002). Although initial psychoneuroimmunologic research was focused on identifying mechanisms underlying neuroendocrine-immune system interactions, in recent years researchers have begun to emphasize the application of psychoneuroimmunologic knowledge to clinical populations. A number of biobehavioural strategies, including relaxation, imagery, biofeedback and hypnosis, have been used to modulate immune function and have generally been associated with positive immunological changes (Zeller, et al., 1996).

There are important regulatory interactions between the immune, nervous, and endocrine systems that attempt recovery from homeostatic imbalance. These are mediated by the autonomic nervous system, by the hypothalamic-pituitary-adrenocortical axis, and by a variety of regulatory peptides and pituitary hormones. The immune system also releases chemical messengers that affect the nervous system (Walling, 2006). This has great implication for therapeutic interventions for a direct treatment through the central and autonomic nervous system affecting the overall homeostatic function of the body. Treatment may be used without medication in some cases and as an adjunct to medication in others. For example, as acupuncture is placed in the context of being another environmental input of information to the psychoneuroimmune system, it becomes apparent that it has the possibility of affecting all functional systems in the body because the nervous system is intimately

connected to all systems of the body (Walling, 2006).

Yoga practice can influence psychoneuroimmunology functions, which are identified by the way numerous mechanisms interact through the central nervous system and immune systems. It includes direct anatomical linkages and neuroendocrine derived products. Yoga techniques may improve the individual's self-healing by direct actions promoting the homeostatic stabilization of the autonomic nervous system. It will not change the extent of the adverse effects that a person receives, but it will change the physiological response to them. The self-healing of each person can occur when the nervous system is in homeostatic balance. It leads to individuals feeling an enhanced sense of well-being, being more effective in coping with their conditions of living, and therefore being less susceptible to stress-induced illness. This mechanism was supported by several nursing interventions that integrate complementary therapies such as relaxation training, progressive muscle relaxation, acupuncture, guided imagery and touch therapy (Walling, 2006; Zeller, et al., 1996).

### 2.5.2 Quantum physics

Quantum physics is a branch of science that deals with discrete, indivisible units of energy called quanta as described by the quantum theory. The quantum theory proposes that reality emerges from the potentialities of the universe because a consciousness observed all possible potentialities and selected one (Slater, 2000). Quantum theory evolved as a new branch of theoretical physics during the first few decades of the 20th century in an endeavor to understand the fundamental properties of matter. It began with the study of the interactions of matter and radiation. Certain radiation effects could neither be explained by classical mechanics, nor by the theory of electromagnetism. Eastern philosophies agree in the point that

ultimate reality is indescribable and unapproachable, not only in terms of common language, but also in the language of mathematics. The ancient Eastern philosophy explained the essence of modern physics is comparable to the teachings of the ancient Eastern philosophies about energy (<http://www.thebigview.com/>).

### *2.6 Consequences of yoga practice*

The consequences of yoga practice are classified into three categories. (Feuerstein, 2004; Nagarathna, et al., 2002). They consist of physiological, psychological, and holistic consequences

#### 2.6.1. Physiological consequences

Yoga practices affect the human body in many of its systems. It seeks to bring into balance all disparate aspects of the body. There are several benefits to physiology treatment. The details can be described as follows:

1. Musculoskeletal system: the yoga postures involve stretching to maintain and enhance flexibility. Many asanas are a form of isometric strengthening exercise that involves the contraction of muscles without moving the joints. They involve movement and practice that are slow and focused (Payne & Usatine, 2002). Research shows the effects of hatha yoga practice on the health-related aspects of physical fitness, including muscular strength, endurance and flexibility (Tran, Holly, Lashbrook, & Amsterdam, 2001). Somsap, Kasetsoomboon, Krischareon, and Polain (2005) studied the effects of yoga on female adolescents' health by using yoga asana, pranayama, and relaxation. The participants spent 60 minutes on these each day, 3 days a week for 12 weeks. The results of the study showed that the scores on physical health, mental health, social health and spiritual health of the female adolescents who

practiced yoga were statistically significantly higher after the experiment than before the experiment.

2. Respiratory system: Breathing is life. It is one of our most vital functions. One of the five principles of yoga is pranayama or breathing exercises which promote proper breathing. Proper breathing, from a yogic point of view, is to bring more oxygen to the blood and to the brain, and to control prana or the vital life energy. Pranayama, the science of breath control, consists of a series of exercises intended to meet these needs and to keep the body in vibrant health. Yoga breathing can calm the mind and relax the body. Relaxed breathing stimulates the parasympathetic nervous system. Yoga breathing techniques teach people to make maximum use of oxygen for optimum health and vitality (Payne & Usatine, 2002). In addition, a research study reported the positive effect of yoga practice on the vital capacity of the lungs (Birkel & Edgren, 2000). Yadav and Das (2001) studied the effect of yogic practice on pulmonary functions. Sixty healthy young female subjects were selected to do yogic practices daily for about one hour. The observations were recorded in the form of FVC, FEV-1 and PEFR on day-1, and after 6 weeks and 12 weeks of their yogic practice. There was significant increase in FVC, FEV-1 and PEFR at the end of 12 weeks. A study of effect of yoga training for 6 months on handgrip, respiratory pressures and pulmonary functions indicated improved lung functioning (Mandanmohan, et al., 2003). Cooper et al. (2003) studied the effect of two breathing exercises (Buteyko and pranayama) in asthma. The results showed that the Buteyko breathing technique can improve symptoms and reduce bronchodilator use.

3. Cardiovascular system: practicing yoga postures can stimulate circulation to tissues of oxygen and nutrients, and bring waste products from tissues into circulation so they may be excreted from the body. It can decrease pulse rates, blood pressure, and increase the elasticity of blood vessels (McCaffrey, Ruknui, Hatthakit, & Kasetsoomboon, 2005; Selvamurthy et al., 1998).

4. Digestive system: Some yoga postures can promote better circulation, bring circulation to gastric areas and reduce acidity (Feuerstein, 2004). They can help gastrointestinal functions to work more effectively so that excretory functions can improve (Feuerstein, 2004).

5. Endocrine system: many yoga postures can normalize endocrine function. For example, the balancing cat posture which helps in improving overall balance and stability. Seated alternate arm raise also promotes circulation to the neck and shoulder. These postures can stimulate endocrine gland functions (Payne & Usatine, 2002).

#### 2.6.2. Psychological consequences

Regular yoga practice may create mental clarity and calmness, increase body awareness, relieve chronic stress patterns, relax the mind, focus attention and sharpen concentration.

1. Self-awareness: Yoga strives to increase self-awareness on both physical and psychological levels. Patients who study yoga learn to induce relaxation and then to use the technique whenever pain appears. Practicing yoga can provide chronic pain sufferers with useful tools to actively cope with their pain and help counter feelings of helplessness and depression (Feuerstein, 2004).

2. Mental performance: A common technique used in yoga is breathing through one nostril at a time. Electroencephalogram (EEG) studies of the electrical impulses of the brain have shown that breathing through one nostril results in increased activity on the opposite side of the brain. Some experts suggest that the regular practice of breathing through one nostril may help improve communication between the right and left side of the brain. Studies have also shown that this increased brain activity is associated with better performance and doctors even suggest that yoga can enhance cognitive performance (Feuerstein, 2004).

3. Mood change and vitality: Mental health and physical energy are difficult to quantify, but virtually everyone who participates in yoga over a period of time reports a positive effect on outlook and energy levels (Feuerstein, 2004). Yogic stretching and breathing exercises have been seen to result in an invigorating effect on both mental and physical energy, and improved mood.

### 2.6.3 Holistic consequences

Self-healing is the holistic consequences. Yoga practice appears to be facilitated the flow of energy through the dense physical body. The goal of yoga practice is an integration of body, mind, emotion, and spirit which lead to self-healing. Yoga is a psycho-philosophical-cultural method that induces relaxation and provides multiple health benefits to the person. It is a method of controlling the mind through the union of an individual's dormant energy with the universal energy. Moreover, yoga practice can influence psychoneuroimmunologic functions identifying as numerous mechanisms through the central nervous system and immune system interact. It includes direct anatomical linkages and soluble neuroendocrine derived products. These methods are practiced through yoga asanas, pranayama, and



relaxation. The outcomes of these practices that affect to the persons with allergic respiratory symptoms are decreasing in allergic respiratory symptoms, feeling relaxed, peace, calmness, cool, and mindfulness.

### *2.7 Yoga practice in persons with allergic respiratory symptoms*

Allergies are often aggravated by stress and heightened negative emotions and can often lead to chronic respiratory illnesses. Yoga improves strength, flexibility, and lung capacity (Bhattacharya, et al., 2002; Birkel & Edgren, 2000; Bousquet et al., 2006; Cooper et al., 2003), the three necessary components of overall fitness. Performing yoga's stretching and balancing movements or poses can lead to surprisingly quick improvement if done on a regular basis. Yoga may be ideal for people with exercise-induced asthma, in which more accurate exercise causes asthma to fade, because it emphasizes conscious breathing and includes relaxation (Halvorson, 2002; Kai-Hakon, 2004; Khanam, Sachdeva, Guleria, & Deepak, 1996). In addition, some medical studies have suggested that, for people with respiratory allergy, yoga even may lessen the symptoms and improve their quality of life (Halvorson, 2002). These effects included greater relaxation as measured by blood pressure, heart rate, respiratory rate, and temperature. Moreover, it can improve lung capacity, decrease symptoms, and increase the quality of life. Yoga can be helpful as an effective stress management technique in order to help people relax and control their mind and emotions. Thus yoga practice can facilitate controlling the allergic reaction. However, yoga only helps in managing allergies and should not be treated as the sole cure. Medicine is still needed. In conclusion, yoga practice that includes

asana, pranayama, relaxation, and meditation is helpful for persons with allergic respiratory symptoms.

Many studies have been undertaken to observe the effects of yoga. Most of them claim that almost all yoga practicing programs have had positive effects either psychologically, mentally, or both. However, whilst several randomized controlled trials done with patients with allergies or asthma have shown benefit from yoga postures and breathing, other studies have shown negative results ( Singh, Sinha, H. & Gupta, 2002; Visweswaraiah & Telles, 2004; Workman, 2002). This discrepancy can be explained by a variety of factors. Some studies were conducted more objectively, and controls were used for confounding variables. However, it is difficult to have controls for all subjects following the same practice. Other reasons may be related to the principles of yoga, which emphasizes it as a way of life. Thus people should practice it as their way of life. Most of the above studies measured only the outcomes and not the processes.

### *3. Self-Healing*

Self-healing is a concept that appears central to the phenomenon of energy-based therapies. It is one concept that appears prominently in the perception of complementary and alternative medicine therapies (Robb, 2006). In the East, the concept of healing presence is sometimes conceptualized as bio-energy, and is said to be accumulated, stored and transmitted between healer and healee ( Jonas, Chez, Duffy, & Strand, 2003). In most traditional healing practices, this energy is said to derive from spiritual sources and to arise from the cultivation of compassion and altruistic love (Jonas et al., 2003). Schneider, the author of many books and the

creator of courses on self-healing methods, states that self-healing is body-mind work. He defines self-healing as the process of accessing one's own innate power to create better health. Schneider believes that each person can learn techniques to empower themselves to achieve increased wellness (Self-Healing Research Foundation, 2004).

Healing is an experiential, energy-requiring process in which space is created through a caring relationship in a process of expanding consciousness. This results in a sense of wholeness, integration, balance and transformation which can never be fully known (Wendler, 1996). Healing is natural, not magical or mystical. It is a process occurring from within for the purpose of restoring balance. The healing process is composed of complex internal processes that occur in the absence of or in spite of external interventions. Healing is active. It is characterized by an energy flow resulting in some level of reintegration or improved function as balance is achieved.

Healing work is often described as time-consuming and strenuous. The five steps in healing that denote active participation are: awareness, appraisal, choosing, alignment and acceptance. Healing is multidimensional. It is a total and profound transformation emerging from within the individual. Healing is not just physical restoration of the body, but also the achievement of balance between the physical, emotional, mental, social and spiritual dimensions of injured individuals. Healing is creative, bringing forth patterns and connections that did not exist before. Healing does not necessarily lead to cures, prolonged life or pain reduction, but healing does enable the person to have the strength, knowledge and willingness to make changes that will lead to self-acceptance (Glaister, 2001).

In addition, subjective reports are helpful in understanding and measuring the occurrence of healing. Examples of subjective reports include reports of feeling

healed or changed, reports of feeling more connection between the mind and the body, and reports of feeling that the changes are ongoing and transformational. Moreover, healing appears to involve the balancing of energies through the interconnected chakras by allowing incoming energy at one chakra to be processed and sent to another (Patterson, 1998). There is a continual flow of energy. The process of healing through self-reflection is done to share insights (Thorpe & Barsky, 2001).

Many scholars have analyzed and identified critical attributes and outcomes of healing and have contributed several ideas. For example, critical attributes are natural processes, occurring from within, restoring balance to systems, and capable of self-diagnosis and repair without conscious effort, and are individual unique experiences (McKie as cited by Robb, 2006). Robb (2006) established the critical attributes of the concept of self healing. These attributes are as follows: they are an innate vital force which is present and exists in each person and is inherently available; and they can be learned by the individual. Practitioners can facilitate the process within each individual. McKie was in accord with Quinn (2000) in the identification of transcendence as an outcome of healing. She stated that self-transcendence gives the individual a deeper understanding and acceptance of the self, others, and situations they face; this aids in the healing process. In short, critical attributes and outcomes of healing were analyzed and identified as having several meanings.

According to the literature, self-healing is considered as a process and consequence. First, self-healing is defined as the process of bringing parts of one's self together at a deep level of inner knowledge. It is entering into transcendent, timeless connection with a divinity or the universe. Healing involves creativity, passion, love, and learning to trust life. It is seeking and expressing self in its fullness,

its light and shadow (Dossey, Keegan, & Guzzetta, 2005). In addition, self-healing describes a process that facilitates health and restores harmony and balance between the mind and the body (Glaister, 2001). Moreover, self-healing is an individualized process that happens over time. The healing process begins with acceptance and originates from within patients. Through the healing process, patients draw on their inner strength and have an innate sense of a personal capacity for self-healing. Jonas, et al. (2003) described self-healing as the dynamic process of recovery, repair, restoration, renewal and transformation done in order to increase resilience, coherence and wholeness; this includes physical, mental, social, spiritual and environmental factors.

Second, self-healing is considered as a consequence. Ward (2002) described a fundamental meaning of healing that includes holism, relationships, caring, and peace. A holistic approach includes the mental, physical, and spiritual needs of patients. In addition, a holistic viewpoint sees health as more than the absence of disease. It is also a way to view patients as having varying levels of well-being. Regardless of the cure, the purpose of self-healing is to alleviate suffering, promote well-being, or help patients adapt to or accept their level of well-being. Self-healing results are an integrated, balanced whole, with each part being of equal importance and value: inner peace is then attainable. Patients deepen their spiritual roots or achieve spiritual growth from their illness, even at the time of death (Ward, 2002). In short, the consequences or outcomes of self-healing are balance, wholeness, relaxation, and harmony.

### *Yoga and self-healing*

Yoga can be integrated with nursing to enhance the process of self-healing in persons with allergic respiratory symptoms. The specific postures of yoga are designed to strengthen and stretch the musculature to regain perfect balance. Moreover, asana, pranayama (breath control), and relaxation can motivate chakras in the body, which are described as energy centers that can only be opened by serious spiritual practice, including the awakening of energy. In hatha yoga, the practices of pranayama and asana are considered to be the highest form of purification and self-discipline for the mind and the body respectively. The practices produce the actual physical sensation of heat, called tapas, or the inner fire of purification. It is taught that this heat is part of the process of purifying the nadis, or subtle nerve channels of the body.

Yoga suggests that as long as the breath is still, prana is still, and hence citta is still. Because of this connection between breathing and consciousness, yoga has devised pranayama to stabilize energy and consciousness. This allows a more healthful state to be experienced and allows the mind to become calmer, balanced, and harmonious. Moreover, yoga practice can influence psychoneuroimmunologic functions, which are identified as numerous mechanisms through which the central nervous system and immune system interact. It includes direct anatomical linkages and soluble neuroendocrine derived products. This mechanism is supported in the publications relating to several nursing interventions, such as relaxation training, progressive muscle relaxation, guided imagery and touch therapy (Ader, 2001; Prolo et al, 1996.) It includes direct anatomical linkages and neuroendocrine derived products.

Yoga techniques may improve the individual's self-healing by direct actions that move toward homeostatic stabilization of the autonomic nervous system. It will not change the amount of struggle that a person experiences but will change the physiological response to them. The self-healing of each person can occur when the nervous system is in homeostatic balance. Individuals will feel an enhanced sense of well-being, be more effective in coping with their living conditions, and therefore be less susceptible to stress-induced illness (Walling, 2006; Zeller et al., 1996). In short, yoga is a system of natural self-healing that improves immune functions and involves controlling the subtle energy through the transformational methods of asanas, pranayama (breath control), and relaxation.

In terms of self-healing, energy healing is the process of healing and information carried within the electromagnetic field (Slater, 2005). The International Society for Study of Subtle Energies and Energy Medicine has identified energy healing as energy medicine and subtle energy. Energy medicine concerns all energetic and informational interactions resulting from self-regulation or brought about through other energy couplings in mind and body. The subtle energy is defined as chi, prana, homeopathic resonance and so on that appear to be facilitated by the flow of these subtle energies through the dense physical body by many therapeutic methods.

Energy healing is also defined as integrating the information that is stored, carried, and processed by the subtle energy system of aura, meridians, and chakras. The complementary alternative medicine practitioners explain subtle energy as four core essential elements: the subtle bodies or sheaths; the subtle energy centers or chakras; bio-energy; and the subtle energy channels. These concepts go by a variety of names across cultures and therapeutic systems. Based on Traditional Chinese

Medicine and India, energy is referred to as chi and prana. The energy gathered and distributed by the main channels is then regulated and distributed further by the chakras.

Within this system, numerous types of chi are posited, each with a specialized function. Chi flows throughout the human vehicle along a network of primary and secondary channels known as meridians. The meridian system is akin to the circulatory, lymphatic, and nervous systems of the gross physical body. This is because it constitutes a single open system of branching connections transporting and circulating chi to all points near and far. Chi has several physiological functions, including nourishing, warming, strengthening, and protecting the body. When chi cannot flow freely and unimpeded, physical pathology can result (Slater, 2005).

From Indian philosophy, prana is the sum total of all energy that is manifested in the universe. Breath is the external manifestation of prana. By exercising control over this gross breath, you can control the subtle prana inside. Control of prana means control of mind. Mind cannot operate without the help of prana. Prana is the sum total of all latent forces which are hidden in men and which lie everywhere around us. Prana is related to both mind and individual (Saraswati, 2004). Moreover, according to Indian philosophy of, the word nadi means flow or current. The ancient texts say that there are seventy thousand nadis in the body.

There are three particularly significant nadis; ida, pingala, and shushumna. The most important of these is known as the shushumna channel. The shushumna is situated in the energy field adjacent to the location of the spinal column in the physical body. It is flanked, on the left and right, by respective subsidiary channels known as the ida and pingala. These channels organize energy that creates and gives



form to separate energy centers, which in turn serve as distribution points for the energy gathered originally by the central channel. These energy centers are known as chakras.

The seven major chakras are lined up from root to crown. Each one is believed to be associated with an array of corresponding elements such as: an endocrine gland, a nerve plexus, a color, a tone, and an emotion. The chakras are differentiated by vibratory rates or higher frequencies as one goes upward along the chakra system. They possess different functions, analogous to major organs and their respective functions. Together, the chakras have much concern with the structure, function, and vitality of the body, emotion, and mind (Sivananda, 1999).

Energy (Sakti) polarises itself into two forms, namely static or potential (Kundalini) and dynamic (the working forces of the body as prana). Behind all activities there is a static background. This static center in the human body is the center serpent-power in the Muladhara (root support). This static energy is affected by pranayama and other yogic processes and becomes dynamic. The two poles are united in one and there is the state of consciousness called Samadhi. The polarization takes place in consciousness. The body actually continues to exist as an object for observation by others. It continues its organic life. But man's consciousness of his body and all other objects is withdrawn. This is because the mind has ceased so far as his consciousness is concerned, the function having been withdrawn into its ground which is consciousness. When awakened, kundalini energy ceases to be a static power which sustains world-consciousness, the content of which is held only so long as it sleeps. When once set in movement kundalini is drawn to that other static.

Kundalini has connection with subtle prana. Subtle prana has connection with the subtle nadis and chakras. Subtle nadis have connection with the mind. Mind has connections all through the body. Prana is the working force of the body. It is dynamic. This static energy is affected by pranayama and other yogic practices and becomes dynamic. These two functions, static and dynamic, are termed sleeping and awakening of the kundalini (Sivananda, 1999).

The prana that is controlled by the regulation of breathing is termed pranayama. This can control the circumstances and character and consciously harmonise the universal individual life with the cosmic life. Pranayama is used to practice for the awakening of kundalini. When people practice the pranayama, they concentrate on the muladhara chakra at the base of the spinal column which is triangular in form and which is the seat of the kundalini energy. The current is sent down the spinal column straight into the triangular lotus, the muladhara chakra.

The idea is that the nerve-current is striking against the lotus and awakening the kundalini. The practitioner slowly exhales through the right nostril and keeps counting. The process is repeated from the right nostril as stated above using the same units and with the same imagination and feeling. This pranayama will awaken the kundalini quickly. In this pranayama concentration on the muladhara chakra is the important thing, and kundalini will be awakened quickly if the degree of concentration is intense and if the pranayama is practised regularly (Sivananda, 1999).

Kapalabhati is a method used for the purification of skull and lungs. It cleanses the respiratory system and nasal passages. It ends spasm in bronchial tubes. Consequently asthma is relieved and also cured in the course of time. Consumption may be cured by this practice. Impurities of the blood are eliminated. The circulatory

and respiratory systems are toned to a considerable degree. When nadis are impure kundalini cannot pass from the muladhara to ahasrara chakra. The purification of nadis is effected through pranayama (Sivananda, 1999).

In terms of the energy of life, chi from Traditional Chinese medicine is the essential life force (Reid, 1989). Chi means breath and air as well as energy. It is the exact equivalent to the term prana in India. Chi is invisible, silent, and formless. It takes many different forms within human system. For example yang chi refers to vital energy in its volatile, kinetic, active form. It is absorbed directly from the atmosphere when breathing. The body produces forms of chi directly from the essential nutrients extracted by digestion from food and water. It is called yin chi or nourishing energy. When the chi of the earth extracted from the food and water meets with the chi absorbed from air, they blend in bloodstream. This forms the unique variety of vital energy that gives life to the human system. There the myriad ailments all begin with energy. The moment there is energy imbalance, any ailment might occur (Reid, 1989).

The main aim of yoga is to bring about a balanced flow of prana in ida and pingala nadis. When people practice yoga that consists of asana, pranayama, and relaxation, these nadis are purified and balanced, the mind is controlled then shushumna begins to flow. If pingala flows the body will be restless; if ida flows the mind will be overactive. When shushumna flows, kundalini awakens and rises through the chakras (Chidananda, 1999; Saraswati, 2004; Sivananda, 1999).

### *Self-healing and aura*

Since self-healing is related to energy balance, an aura is one method to understand more about energy. According to metaphysics, an aura is a colored

outline, or set of contiguous outlines, allegedly emanating from the surface of an object. It is an individual's bio-energetic field that surrounds all living things. It is bright and colored, with the colors reflecting the emotional/spiritual state (Fisslinger, 2005; Tim, 2004a). Its colors, textures and patterns give information about the physical, emotional, mental and spiritual states of its owner. Everything in the universe possesses an energy field which is around it. For human beings, this field of energy is sometimes known as the electromagnetic field. It is ovoid in shape and its width and color varies with each individual, depending on their level of spiritual growth and physical health.

Studies have indicated that illnesses begin to manifest in the human's aura long before they become apparent in the physical body. Therefore aura cleansing, which is used by most healers to remove sluggish negative energy from the being's energy field, is a necessary step towards the healing of the physical body. As the aura is cleansed, any denser negative energy in the physical body will be broken up and moved into the energy field, where it can be easily cleared (Slater, 2005).

#### *Aura and health*

The aura is filled with colors that are constantly changing in accord with physical and spiritual well-being. A healthy body's aura possesses a specific color pattern. Within the aura, the process of healing is a process that rebalances the energies in each body. When all the energies in each body are balanced, health occurs (Brennan, 1988). When a person experiences illnesses or changes in moods or emotions, distortions can be detected in the healthy color patterns. The aura, shaped by the constant interaction of mental, physical and spiritual factors, is very dependent

on and sensitive to inner and outer environments. The personality, health status, emotional and mental well-being, social factors and surrounding environmental conditions can all have a significant effect on an aura.

Negative emotional states assert a deteriorating effect on the body and drain the system of its energy. This explains why one's performance level tends to drop drastically during moments when experiencing emotional states such as fear, hostility and frustration. Similarly, low self-esteem and negative social interactions can weaken the aura and seriously diminish its energy supply (Fisslinger, 2005; Garson, 2005). When the auric field is bright, expanded and strong and the energy centers (chakra) are clean and light, the expanded auric field will radiate light and energy out toward individuals near them (Long, 2005).

Since the chakras achieve in order to encourage the body, they are directly related to any pathology in the body. Each chakra is associated with an endocrine gland and major nerve plexus. The chakras absorb the universal energy, break it up into component parts, and send it along nadis to the nervous system, the endocrine glands and the blood to cultivate the body.

The human chakra system is important and closely associated with the physical body. In the case of the major chakras, the glands, and organs of the endocrine system are closely linked to them. Each chakra has been put in charge of certain areas of the body. Each is responsibilities to keep its designated area in good health. For example, the heart chakra takes care of the arms, breasts, circulatory system, diaphragm, heart, lung, ribs, shoulders and thymus gland. Early health problems may include heartburn, shortness of breath, problems with the immune system, chest pain, pneumonia, bronchitis, aim and shoulder tension. If the related

issues are not addressed, the early health problems can turn into heart disease, lung cancer, asthma, acid reflux, and sunken chest.

Table 1

*Major chakras and the area of the body*

chakra	Endocrine gland	Area of body governor
Crown	Pineal	Upper brain, right eye
Head	Pituitary	Lower brain, left eye, ears, nose, nervous system
Throat	Thyroid	Bronchial and vocal apparatus, lung, alimentary canal
Heart	Thymus	Heart, blood, vagus nerve, circulatory system
Solar plexus	Pancreas	Stomach, liver, gall bladder, nervous system
Sacral	Gonads	Reproductive system
Base	Adrenals	Spinal column, kidneys

*Note.* From *Major chakras and the area of the body* by B. A. Brennan, 1988, *Hand of light: A guide to healing through the human energy field*, p. 48

When looking at a body aura, dark red or black may be seen in a specific area. If people have noticed any kinds of pain in that area in recent days or have ever had pain or discomfort there in the past it will show. This can be an indication of an issue that needs to be addressed so that the color can be turned back into a healthy color within the aura.

### *Measure of aura*

There are many ways to detect the aura, including: seeing it with the naked eye; by feeling the energy shifts; with thermographs; using Kirlian photography; through aura readings; and by dowsing. These tools are sufficient enough to test the energy level in individual chakras, and detect where blockages may be occurring (Garson, 2005). Although it is generally invisible to the untrained eye, this energy field or aura extends outward from the object.

Auras can be measured by an interactive multimedia biofeedback Aura Imaging Computer System (Fisslinger, 2005). The Aura Video Station is an interactive multimedia biofeedback system based on the principles of biofeedback, color psychology, energy and mind-body-medicine. It uses biofeedback sensors to measure, analyze and process the biofeedback data of the energetic and activity levels of the client. These bio data are correlated with specific emotional-energetic states and are displayed accordingly on the screen. This aura image is shown in full color and in real time motion and what appears on the computer monitor is a representation of the client's bio-energetic field. The bio sensors are connected to left hand and feed back in real time data to the computer which analyzes and correlates this information. The data is displayed as a representation of an aura in color and in real time on the

screen. Standard biofeedback uses the measured data merely to show reactions and changes through graphs and charts, similar to one of products called aura-in-motion.



Table 2

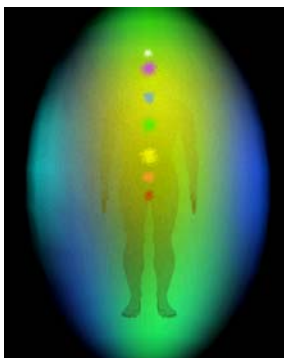
*Aura color and personality*

Aura color	Personality
Deep-red	Physical, hardworking, power, realistic, vital, grounded, strength, stamina
Red	Excitement, physical, energetic, competitive, winner, will-power, sexual, entrepreneur.
Orange	Productive, physical and creative expression, adventurer, business, enjoyment.
Orange-yellow	Analytical, intellectual, detail oriented, logical, structured, scientific.
Yellow	Playful, sunny, easy going, creative, intellectual, entertaining, curious, active.
Green	Social, natural, content, harmony, teacher, communicative, quick minded.
Deep-green	Quick minded, goal-oriented, social, material, communicative, organizer.
Blue	Caring, sensitive, loving, helpful, loyal, peaceful, desire to be of service, nurturing.
Indigo	Clarity, calm, deep inner feelings, loving, loyal, introverted, inner values, artistic.
Violet	Intuitive, artistic, sensual, theorist, futuristic, visionary, charismatic, innovative.
Lavender	Imaginative, mystical, fantasy, soft, fragile, sensitive, often spacy, etheric.
White	Transcendent, transformation, imaginative, quiet, higher dimensions, spiritual.

*Note.* From *Aura color and personality* by J. R. Fisslinger, 2005, *Aura chakra color analysis guide book*, p. 6.

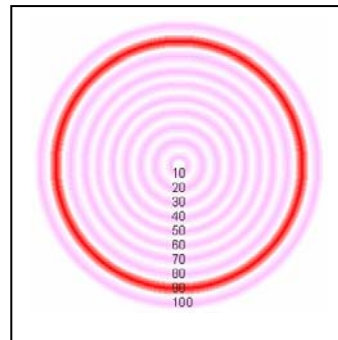
Aura video technology goes several steps further. In a research study a correlation was found between the measured biofeedback data and certain emotional and energetic states. For example, if the researcher measures a certain set of bio data then this set of information reflects a clearly defined emotional and energetic state (such as high emotional excitement, physical activity, or sensuality). Another set of bio data correlates with other states of mind-body and energy (such as low physical energy, high sensitivity, or detached emotional state).

The Aura Video Station can show energy centers or chakras and determines the correct process for creating greater balance and higher energy. The aura that is measured with the Aura Video Station shows not only the personality patterns but also the actual changes that are happening. People might see aura changes during a therapy or healing session, while talking to another person, after using different healing products or tools, during meditation or visualization or yoga. Basically an aura will change whenever people create emotional, mental or energetic changes within or around them. Therefore, it is used by healers to monitor and display what is called the mind-body connection (Fisslinger, 2005). The system provides an Aura Chakra Report that includes aura pictures, aura size, aura chakra balance, and yin-yang. Aura pictures show an aura base color which represents a person's aura type or personality color. This is the first essential step in each evaluation. It gives an in-depth look into a client's core beliefs, and physical, emotional, mental, and spiritual behavior and patterns.



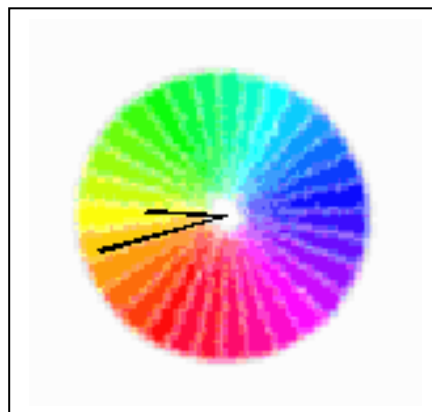
*Figure 2.* Aura picture

An aura should have a harmonious, round and balanced shape. All area should radiate with the same brightness and intensity. The size of the aura, extending almost to the edge, shows a large, high energy field. A small aura shows more introverted and internalized energy, low life energy, and other stresses. The lightness, brightness and intensity of the aura and all aura colors present are important. Normally bright, radiant aura colors reflect a positive, harmonious meaning for each color. Dark, muddy aura colors usually reflect disharmonious aspects of each color. For example, dark muddy red is connected with physical, emotional and mental stress. Bright red is related to power, high energy, and action. The aura size could be indicated by the red cycle of an aura graph's overview. It is an important indicator of how much energy radiates around the client. This is shown in the picture below:



*Figure 3. Aura size*

The large aura (75-100%) indicates a strong and powerful radiance. The middle aura (40-75%) indicates a strong presence and radiance. The small aura (0-40%) indicates low energy.



*Figure 4. Yin-Yang balanced*

The color wheel or yin-yang is the bio data graph and reflects important parts of the energetic body system. Yin-yang gives an overview of the complete aura color range. The graph indicates yin-yang balance, the short needle reflects the yin-female-left qualities, and the long needle the yang-male-right qualities of the energy system. If the needles are close together, yin-yang is balanced and the male-female energies

seem to be in harmony. An unbalanced Yin-yang  $\nabla$  means a disharmonious energy system, and the left-female and right-male energies need balancing. A very unbalanced  $\nabla$  means one body side might feel tense or stressed, and energy balancing is needed (Fisslinger, 2004). The balance paradigm is epitomized in many of the oriental healing practices that balance yin and yang and the harmonious flow of chi. Chi is defined as matter on the verge of becoming energy, or energy at the point of materializing (Engebretson and Headley, 2005).

#### *Measuring self-healing outcomes*

Self-healing as outcomes is one way to evaluate whether the signs and symptoms of disease are still present. This is because the purpose of self-healing is to improve suffering, promote well-being, or help patients adapt to or accept their level of well-being. One indicator whereby persons with allergic respiratory symptoms can achieve their goal is by decreasing their symptoms. There are many ways to measure their symptoms such as by a self report of the occurring symptoms or a total symptom score (Van & Juniper, 2000). These instruments help participants to know the condition of their symptoms.

The quality of life is now recognized as a crucial aspect in assessing the impact of a given disease on the general well-being of patients (Graham & Blaiss, 2000). Allergic respiratory symptoms may significantly impair the quality of life, and therefore it is important to evaluate the effectiveness of the available treatments on such a parameter. The quality of life is how an individual make a subjective appraisal of their own lives. They identify their satisfaction with their lives as it pertains to the physical, psychological, and social domains of their life (Bloom & Petersen, 2005).

This can measure holistic health which provides a link with self-healing outcomes. Life may be seen as an integrated, balanced whole, with each part being of equal importance and value, and inner peace prevails.

The consequences of self-healing are balance, wholeness, relaxation, and harmony. When integrating yoga practice for self-healing, the specific postures are aimed at perfect balance. Asanas, pranayama (breath control), and relaxation can motivate chakras in the body. These are described as energy centers and can only be opened by serious spiritual practice, including the awakening of energy. The aura reflects an energy field or life force that permeates all things. Human auras allegedly emerge from the chakras. Under ordinary circumstances, auras are only visible to certain people with special psychic powers. In terms of energy, an aura is a unique field of energy that surrounds all living things, reflecting the energy of the spirit in that body.

In conclusion, self-healing refers to an intuitive knowledge about how to go about existing in harmony to create better health. It is a process that facilitates health and restores harmony and balance between the mind and the body. Self-healing is natural, active and appears central to the phenomenon of yoga practice.

#### *4. Holistic Nursing*

Holistic nursing is nursing practice that aims to heal the whole person from birth to death (Dossey & Guzzetta, 2005). Holistic nursing is also defined by the American Holistic Nurses' Certification Corporation as all nursing practice which cares for the person as an integrated, holistic human being, inseparable and integral with the environment. It requires nurses to integrate self-care into their own lives.

Dossey & Guzzetta (2005) describes that the American Holistic Nursing Association's (AHNA) defined a holistic nursing as follows:

Holistic nursing embraces all nursing that has the enhancement of healing the whole person from birth to death as its goal. Holistic nursing recognizes that there are two views regarding holism: first, identifying the interrelationships of the bio-psycho-social-spiritual dimensions of the person, recognizing that the whole is greater than the sum of its parts; second, understanding the individual as a unitary whole in mutual process with the environment (p. 28).

Holistic nursing practice draws on nursing knowledge, theories, expertise and intuition to guide nurses in becoming therapeutic partners with people in their care. The American Holistic Nursing Association's (AHNA) Standards of Holistic Nursing Practice also defines the ways to accomplish this goal, describing the scope of holistic nursing practice and the level of care expected from a holistic nurse. Nurses can reduce the devastating effects of crisis and illness in individuals by using the AHNA standards of practice. As nurses integrate interdisciplinaries into their work and think at the intersections, the human story unfolds in a new way, and health moves into the domain of healing (Dossey & Guzzetta, 2005). The holistic nurse is an instrument of healing and a facilitator in health and healing processes. Holistic nursing practice honors the patient's subjective experience about health, health beliefs, and values. To become therapeutic partners with individuals, families, and communities, holistic nursing practice draws on nursing knowledge, theories, research, expertise, intuition and creativity (Dossey & Guzzetta, 2005).

According to the AHNA (Dossey & Guzzetta, 2005), the holistic caring process is a core value of holistic nursing practice. This process consists of a number

of components. In assessment, the client is assessed holistically using appropriate traditional and holistic methods. In the therapeutic care plan, each client engages with the holistic nurse to mutually create an appropriate plan of care so that the person is as independent as possible. Implementation is a process whereby each client's plan of care is prioritized, and holistic nursing interventions are implemented accordingly. Evaluations are regular and the processes systematically evaluated, and so the continuing holistic nature of the health process is maintained.

Holistic nurses may integrate complementary/alternative modalities (CAM) into clinical practice to treat people's physiological, psychological, and spiritual needs. Doing so does not negate the validity of conventional medical therapies, but serves to complement, broaden, and enrich the scope of nursing practice and to help individuals access their greatest healing potential. Holistic nursing is the most complete way to conceptualize and implement these challenges into the practice of professional nursing. Dossey, et al. (2000) identifies two emerging challenges in nursing. The first challenge involves the integration of technology, mind, and spirit into nursing practice. The second is to create and integrate models of health care that guide the healing of the self and others. Many holistic nurses use a variety of approaches to provide holistic care such as healing touch, therapeutic touch, Reiki, reflexology, guided imagery, biofeedback, aromatherapy, massage, nutritional counseling, cognitive therapy, life-style counseling, breathing and relaxation techniques, music and sound therapy, and acupuncture (Keegan, 2001). Holistic nurses, through their knowledge and understanding of complementary and alternative medicine (CAM) therapies can guide their clients in safely integrating them into their healing process.



### *5. Participatory Action Research*

There are several reasons why participatory action research was chosen as most appropriate for this study. The principal reasons the researcher employed participatory action research as an approach were as follows. Participatory action research helped the researcher develop knowledge on self-healing using yoga as a mean, and improve the practice of yoga for self-healing in persons with allergic respiratory symptoms. This study was intended to enable persons with allergic respiratory symptoms to become analytical about their practice, thus they might have viewed their yoga practice in a different light and could develop ways of improving it. Moreover, participatory action research decreased the gap between curing and symptoms management in persons with allergic respiratory symptoms as they participated. A final reason was that participatory action research allowed the researcher to include considering the cultural context in the study as a factor.

#### *Critical social sciences*

The critical social sciences provide the philosophy which guided the participatory action research and formed the methodological framework of this study. The critical social sciences include feminist, grassroots and emancipatory movements. The perspective of these social sciences assume that truth exists as part of the taken for granted realities shaped by social, political, cultural, gender and economic factors that, over time, are considered real (Fulton, 1997). Within the critical theory paradigm, research becomes a means for taking action and a theory for explaining how things could be. A desired focus is praxis, or the combination of reflection and action to effect transformation (Fulton, 1997; Kim, 1999). Habermas (1962 as cited in

Fulton, 1997) was critical of the positivistic view because he noted that the basis of all knowledge was supposed to be within ordinary science. According to Habermas, the issues examined by critical science involve power, a preoccupation with freedom, and that self-reflection is a fundamental methodological approach.

A critical theory is a reflective theory producing knowledge relating to enlightenment and emancipation (Kim, 1999; Manias & Street, 2000). Enlightenment, empowerment and emancipation are the processes that create the practical intent of critical theory. Enlightenment, or raising the consciousness of the oppressed, is used by critical theorists to explain why people are dissatisfied with their lives. Using this process, critical theorists work collaboratively with individuals to develop alternate ways of understanding themselves and their social context. Enlightenment by itself is not enough for individuals to become liberated from a social order. Critical theorists must provide a motivating resource for individuals, thereby empowering them. Empowerment encourages people to undertake activities by which they work to improve their situation. Meanwhile, emancipation is the goal of empowerment through which new arrangements replace oppressive ones, allowing individuals to relate and act in more satisfying ways (Manias & Street, 2000).

### *5.1 Definition of participatory action research*

Participatory action research can be defined as "collective, self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social practices" (Kemmis & McTaggart 1988, p.5). Research that uses participatory action research as its method will take place in the four moments of action research, including reflection, planning, action and

observation. These research moments exist interdependently and follow each other in a spiral or cycle. Kemmis and McTaggart (1988) see participatory action research as “The approach is only action research when it is collaborative, though it is important to realize that the action research of the group is achieved through the critically examined action of individual group members” (p5).

McTaggart (1989) defined participatory action research as an approach to improving social practice by changing it and learning from the consequences of change. It involves a continuing spiral of planning, acting (implementing plans), observing (systematically), reflecting and then re-planning, and it thus goes round the spiral again. It is collaborative, and includes involving and improving. The collaborating group is expanded from those affected by the practices concerned. In addition, participatory action research is a systematic learning process in which people act thoughtfully through remaining open to surprise and are responsive to opportunities. It is a process of using critical intelligence to inform action, and developing it so that social action becomes praxis. It involves people in theorizing about their practices. This involves them in being inquiring about and coming to understand the relationship between situations, action and consequences in their own lives.

Participatory action research involves participants through them objectifying their own experiences. This can be done by keeping a personal journal in which participants record their progress and their reflections about two parallel sets of learning. Participatory action research is a political process because it involves people in making changes that will affect others. It sometimes creates resistance to change, both in the participants themselves and in others. Participatory action research

involves making critical analyzes of the institutionally structured situations in which people work. This critical analysis will help the participatory action researcher to act politically by: (a) involving others collaboratively in the research process and inviting them to explore their practices; and (b) by working in the wider institutional context towards more rational understanding, more just processes of decision-making, and more fulfilling forms of work for all involved (McTaggart, 1989; 1991a; 1997).

Participatory action research starts small by working on minor changes which individuals can manage and control, and then working towards more extensive patterns of change. These might include critiques of ideas of institutions which might lead to ideas for the general reform of projects, programs or system-wide policies and practices. Participants should be able to present evidence on how they articulated the thematic concern which holds their group together, and on how they established authentically shared agreements in the group. It starts with small cycles of planning, acting, observing and reflecting which can help to define issues, ideas and assumptions more clearly so that those involved can define more powerful questions for themselves as their work progresses. Participatory action research starts with small groups of collaborators but widens the community of participating action researchers so that it gradually includes more and more of those involved and affected by the practices in question (McTaggart, 1989).

According to Kemmis & McTaggart (1988) participatory action research allows and requires participants to build records of their improvements. Researchers have records of their changing activities and practices: the changes in the language and dialogue in which they describe, explain and justify their practices; the change in the social relationships and forms of organization which characterize and constrain

their practice; and records of the development of their expertise in the conduct of action research. They must be able to demonstrate evidence of a group climate where people expect and give evidence to support each other's claims. They have to show respect for the value of rigorously gathered and analyzed evidence and be able to show and defend evidence to convince others. Moreover, participatory action research allows and requires participants to give a reasoned justification of their social work to others because they can show how the evidence they have gathered and the critical reflection they have helped them to create a developed, tested and critically examined rationale for what they are doing. Having developed such a rationale, they may reasonably ask others to justify their own practices in terms of their own theories and the evidence of their own critical self-reflection.

Empowerment is achieved through dialogue with participants and their rightful representatives throughout the research process. To demonstrate real respect for communities priorities, interests, and values, collaboration with participants must begin with identifying health concerns and continue in developing research questions, targeting participant groups, incorporating cultural practices, protecting human subjects' rights, data collection, analysis, and dissemination of results, completing the circle with the community as new needs are identified (Marincowitz, 2003). This intensity of involvement has positive implications for the appropriateness and sustainability of interventions (Knightbridge, King, & Rolfe, 2006).

In conclusion, many principles of participatory action research can be useful for researchers as a method or process to produce new knowledge from the collaboration of participants in order to enhance the processes of self-healing through integrating yoga practice in persons with allergic respiratory symptoms.

## *5.2 Types of action research*

Action research was classified by Grundy (1982) into three modes: technical, practical, and emancipatory.

5.2.1 Technical action research: the goal of this mode is to test a particular intervention based on a pre-specified theoretical framework; the nature of the collaboration between the researcher and the practitioner is technical and facilitating. The researcher identifies the problem and a specific intervention, then the practitioner is involved and they agree to facilitate the implementation of the intervention (Grundy, 1982).

A project guided by technical action research will have certain characteristics. The project would be instigated by a particular person or group of people who, because of their greater experience or qualifications, would be regarded as experts or authority figures. Technical action research promotes more efficient and effective practice. This action research results in the accumulation of predictive knowledge, where the major thrust is on validation and refinement of existing theories, and it is essentially deductive (Grundy, 1982; Holter & Schwartz-Barcott, 1993).

### 5.2.2 Practical action research

Practical action research focuses on individual autonomy. This mode of action research allows for a more flexible approach, not available in the positivist paradigm. The goal of practical action research is understanding practice and solving immediate problems. The researcher identifies the problems, underlying causes and possible interventions. The problem is defined after dialogue and mutual understanding. Practical action research seeks to improve practice through the

application of the personal wisdom of participants (Grundy, 1982; Holter & Schwartz-Barcott, 1993).

### 5.2.3 Emancipatory action research

Emancipatory action research promotes a critical consciousness that exhibits itself in political as well as practical action to promote change. There are two goals for the researcher using this approach. The first aim is to increase the closeness between the actual problems encountered by practitioners in a specific setting and the theory used to explain and resolve the problem. The second aim is to assist practitioners in identifying and making explicit fundamental problems by raising their collective consciousness (Grundy, 1982; Holter & Schwartz-Barcott, 1993).

### *5.3 Process of participatory action research*

Participatory action research is a research method consistent with the critical processes of critical theory (Lindsey, Shields, & Staduhar, 1999). Critical theory is a way to develop knowledge that is free, undistorted, and unconstrained (Habermas, 1962 as cited in Speziale & Carpenter, 2003). The goal of critical theory is to enable people to free themselves from all unnecessary control and to encourage self reflection (Agger, 1991; Bohman, 2005; Kellner, 2006; Kincheloe & McLaren, 1998). Participatory action research shares a similar philosophical foundation to critical theory, in particular the emphasis on self reflection and processes that assist in raising participants' and researchers' awareness (Holter & Schwartz-Barcott, 1993; Robertson, 2000; Seng, 1998). They become more aware of their surroundings, able to identify and examine their problems, and take action to free themselves from their constraints (Holter & Schwartz-Barcott, 1993). Thus, both critical theory and

participatory action research seek to enable people's participation, their empowerment and ability to solve their problems (Kemmis & McTaggart, 1988). Moreover, they facilitate a process of democratic decision-making; one which facilitates mutual understanding within a group of people, as well as identification of shared goals and interests (Kincheloe & McLaren, 1998; Speziale & Carpenter, 2003). In conclusion, critical theory is an important theory that underpins and guides participatory action research in a critical way.

In order to enhance the process of self-healing through integrating yoga practice in persons with allergic respiratory symptoms, the researcher was aware that practice has to be continued by the participants themselves. To achieve this, the researcher needed to adopt a mutual approach to the study; working with persons with allergic respiratory symptoms to learn their perspectives as well as the factors related to their symptoms. Therefore, participatory action research in this study was based on critical theory and included mutual intentions concerning the actions and goals of individuals, as well as of groups. The basic assumptions of participatory action research formed the foundation of the study. All the participants were seen as active and aware individuals who were self-directed and responsible for their own learning (Hughes, 2003). The development of knowledge was seen to be an ongoing process. Its aims involved the researcher working with participants to understand them, and to provide opportunities for the participants to better understand themselves rather than the researcher imposing his/her own views.

This is an approach to improving practice by changing it, and learning from the consequences of change through the spiral of reconnaissance, planning, acting and observing systematically, reflecting, revising the plan and then going round the spiral



again (Kemmis & McTaggart, 1988; McTaggart, 1997). In addition, participatory action research is a systematic learning process in which people act thoughtfully through remaining open to surprise and responsive to opportunities. It is a process of using critical intelligence to inform action, and developing it so that social action becomes praxis. It involves people in theorizing about their practices. This involves them being inquiring about and coming to understand the relationship between situations, action and consequences in their own lives. Each step is based on a principle of critical social science. Details of each step are as follows:

1. Reconnaissance in participatory action research is that moment where the research participants examine and construct, then evaluate and reconstruct their concerns. The participants need to bring their personal experience of healing to discuss this with the researcher (Holter & Schwartz-Barcott, 1993). A crucial assumption of critical social sciences is that with the consequence of consciousness raising people become aware of their own situations. In this process, it is assumed that people are able to identify and understand the root causes of their problems. The researcher contributes theoretical and practical information relative to the problems raised; then both researcher and participants work together. Enlightenment, or raising the consciousness of individuals, is used to explain why people are dissatisfied with their lives. Using this process, the researcher works collaboratively with individuals to develop alternate ways of understanding themselves and their social context.

2. Planning in participatory action research is constructive and arises during discussions among the participants (Kemmis & McTaggart, 1988). The plan must critically examine the action of each of the participants and includes evaluation of the

change. Finally, the researcher and participants will plan reflection for improving practice.

3. Acting and observing happens when the plan is put into place and the hoped for improvements to the social situation occur. This action will be deliberate and strategic. It is here participatory action research differs from other research methods, in that the action or change is happening in reality and not as an experiment just to see if it works.

4. Reflection in participatory action research occurs during implementation. Self-reflection is central to understanding the nature of critical practice (Kincheloe & McLaren, 1998). The participants reflect about how the practice is affecting them. Group discussions, interviews and field notes help in this process to make sense of the issues to revise the plan (Kemmis & McTaggart 1988). Reflection is undertaken each time there is a meeting and the data is used to improve the process of self-healing. Emancipation is the goal of empowerment through which new arrangements replace less acceptable ones, allowing individuals to relate and act in more satisfying ways (Manias & Street, 2000).

Participatory action research is a relatively spontaneous, intentionally shaped response to real situations involving an inquisitive outlook on the part of the participants in collaboration with committed, versatile, and creative professional researchers. The benefits of participatory action research are realized through its collaborative, trust building capacity. First, with direct community input, participatory action research projects are credible and can respond to emerging changes in social, political, and economic contexts. Second, through consciousness-raising, participatory action research has the potential to produce community level outcomes. Third,

participatory action research brings about the developments to maintain health promotion and disease prevention structures within communities, in line with collective social and political goals (Koch & Kralik, 2006; Stringer, 1999).

In this study, the researcher planned to enhance the processes of self-healing through integrating yoga practice in persons with allergic respiratory symptoms. The aims of the study were improvement and involvement through using participatory action research. The aim of improvement focused on self-healing in persons with allergic respiratory symptoms by using yoga practice. The aim of involvement meant including all participants in the process of planning, acting, observing, and reflecting to achieve the aim of improvement.

Knowledge development and enhancement of health are goals of both the traditional empiricist and participatory action research approaches to self-healing in persons with allergic respiratory symptoms. Central to participatory action research are the conscious efforts made to nurture and strengthen continuing relationships and interpersonal processes within particular communities that will enhance long-term prospects for healing. The key to participatory action research is not found in particular methods, although qualitative techniques like those used in this project have been found to be well suited to community empowerment projects. Rather, the strengths of participatory action research reside in innovatively adapting methods for use in diverse contexts, exploring local knowledge and perceptions, engaging community members as active contributors, and aligning power within the research process so that people are regarded as agents capable of analyzing their own situations (Reason, 2006; Speziale & Carpenter, 2003).

## **CHAPTER 3**

### **METHODOLOGY**

This chapter describes the design and methods used for the study. This section is organized into the following topics: roles of the researcher, the research design, research process, participants, research setting, instrumentation and data collection and data analysis, protection of human subject's rights and trustworthiness.

#### *Roles of the Researcher*

The researcher in this study took two important roles; the researcher as a research tool, and the researcher as a nurse. As a research tool, she collected, collated, and analyzed data and wrote the completed research paper. As a nurse, she assessed the participants holistically in order to understand their meaning of illness, background, social context, experience of yoga practice, and experience of integrating yoga into daily life. She educated the participants about allergic symptoms and yoga practice to help them manage their symptoms. She provided the participants training to practice yoga for self-healing including, asanas, pranayama, and relaxation. She also supported, provided consultation, empowered to continue yoga practice, and helped them integrated yoga into daily life.

#### *Research Design*

The research methods and procedures that were employed in this study were based on participatory action research (PAR) which is informed by the critical social

sciences paradigm. The reasons for using PAR were that this study required continuous collaboration between the researcher and participants in order to enhance the process of self-healing through integrating yoga practice in persons with allergic respiratory symptoms. PAR emphasizes the importance of the researcher and participants working together in order to achieve an understanding of the participants' interests, meanings and constraints within the context in which the research was occurring. This method was useful for the researcher as a facilitator to produce new knowledge from the collaboration with the participants. To achieve the goal, the researcher needed to adopt a mutual approach to the study. This meant working with persons with allergic respiratory symptoms to learn their perspectives as well as factors related to their symptoms. This study enabled persons with allergic respiratory symptoms to become analytical about their practice. Thus, they might view their yoga practice in a different way and develop strategies to improve it. Moreover, PAR could decrease the gap between curing and symptoms management in persons with allergic respiratory symptoms in the time available. It also allowed the researcher to consider the cultural context during the study. Therefore, the research process suggested by the PAR method was used for this study in order to understand the process of enhancing self-healing and illustrate new nursing knowledge that integrates yoga into daily life.

### *Research Process*

This study was divided into two phases: preparation and the participatory action phases.

### *1. Preparation phase*

The main objective of the preparation phase was the development of the tentative of enhancing the process of self-healing through integrating yoga practice that was expected to be appropriate for persons with allergic respiratory symptoms. The tentative of enhancing the process of self-healing included reviewing yoga books to find postures that would help benefit the participants. A pilot study was undertaken in order to develop the process of self-healing through collaboration between the researcher and the participants. The details of these processes are explained as follows.

#### 1.1 Reviewing the literature and developing skills for practicing yoga

In order to develop a tentative self-healing process through yoga practice, a review of the literature about yoga, with specific reference to persons with allergic respiratory symptoms, was conducted. This involved reviewing yoga books in libraries and at the Thai Yoga Institute in Bangkok, Thailand. From these, the researcher selected a set of postures that were reported to be beneficial to the respiratory system and well-being. She then consulted experienced yoga teachers from the Thai Yoga Institute to confirm that these postures would be beneficial and not harm to persons with allergic respiratory symptoms.

The researcher had also been trained by an experienced yoga teacher at the Thai Yoga Institute in Bangkok. The course provided her with advanced knowledge of yoga and its practice that enabled her to be a leader/trainer for a yoga training course. The yoga practice for this study took place at the Center for Holistic Health and Eastern Wisdom, Faculty of Nursing, Prince of Songkla University one

hour and a half three times a week. The practice provided training in yoga for persons with allergic respiratory symptoms and also allowed healthy individuals to take part in the practice. This experience of practice, the literature review, and consultation with experienced yoga teachers were used to help select yoga postures for persons with allergic respiratory symptoms. This yoga practice consisted of a set of yoga postures, pranayamas (sets for breathing control), and relaxation techniques. The postures included: a set of postures to exercise joints (the warm up), a set of standing postures, a set of sitting postures, and a set of lying postures. The breathing exercises were abdominal breathing, breathing for cleansing, alternate nostril breathing, and relaxation techniques, including meditation.

The yoga practice postures obtained from reviewing were as follows:

1. A set of postures to exercise joints in order to warm up for 15 minutes.
2. A set of standing postures (25 minutes) consisting of the Sun Salutation posture (Surya Namaskara), the Mountain posture (Standing asana), the Tree posture (Vrikshasana), the Triangle posture (Trikonasana), and the Wheel posture (Chakrasana).
3. A set of sitting postures (20 minutes) composed of the Sit posture/Easy position (Sukhasana), the Psychic union posture (Yogamudasana), Abdominal Breathing, Cleansing Breathing (Kapalabhati), Alternate Nostril Breathing (Anuloma Viloma), the Head-to-knee posture (Shanusrisana), the Camel posture (Ushtrasana) and the Spinal Twist posture (Vakrasana).

4. A set of lying postures (15 minutes) consisting of the Corpse posture (Savasana), the Fish posture (Matsyasana), the Half Plough posture (Ardha Halasana), the Bow posture (Dhanurasana), the Crocodile posture (Makarasana), the Locust posture (Shalabhasana), the Cobra posture (Bhujangasana), and the Cat posture (Marjariasana). The last posture was for deep relaxation with the Corpse posture (Savasana) for 15 minutes (Feuerstein, 2004; Gharote, 1999; Guthrie, 2005; Krishnan, 2003).

The researcher used these postures with two volunteers who were willing to participate in the pilot study for considering and selecting a set of postures that suitable with the persons with allergic respiratory symptoms.

#### 1.2 Pilot study

A pilot study was conducted with two persons experiencing allergic respiratory symptoms (Nat and Nui) as part of the cycle of PAR. The PAR cycle included planning, action and observing, and reflecting. This phase took place between May to July, 2006. Interview data was collected using a set of questions regarding the participants' health history, medical treatment, and ways of managing allergic respiratory symptoms. Other data collected before the commencement of the study included the Aura test, Total Symptom Score (TSS), and Quality of Life (QOL) score.

After collecting this data, the researcher and both volunteers analyzed the data in order to understand any associated problems. They reflected on their sufferings from symptoms, social context, risk factors and the other ways they sought to manage their symptoms. They believed that yoga could help them. Nat, Nui and the



researcher collaborated to plan practicing yoga for self-healing. After that they decided to attend sessions and practice yoga one and a half hours for three times a week at the Center for Holistic Health and Eastern Wisdom, Faculty of Nursing, Prince of Songkla University.

For the next step, reflection, the participants reflected such as: “What happened when practicing yoga?”; “How do you feel about yoga practice?”; “What does it mean for improving?”; “How have you reached your goal in practicing yoga?”; and “How can you perform yoga better?”. They reflected individually and were tape recorded by the researcher. Data from reflection, self daily reports on the perceived results of their yoga practice, field notes, aura tests, and TSS were collected again after one month. Data were analyzed by the researcher and confirmed with the participants to establish the significance of the findings including:

1. The strategies that participants and the researcher used for practicing yoga, such as empowerment, supporting, and motivating.
2. The roles of the researcher as a nurse including assessors, facilitators, educators, and trainers.
3. The roles of participants including giving information, attending and practicing yoga, observing the process of using yoga, and reflecting what they were learning, and collaborating in all research process.
4. Some postures were a little different from those in the initial proposed plan. The Camel posture, the Bow posture and the Psychic union posture were excluded because it was found that these postures were difficult to do. The Fish posture was modified by stretching both legs straight in front of the body instead of

sitting in the lotus posture. In addition, the duration of practice was modified by increasing the time for the set of sitting postures from 20 to 25 minutes, and decreasing the set of standing postures from 25 to 20 minutes. All postures were practiced with combinations of breathing. The data from the pilot study was used to adjust the tentative process for the method used in the participatory action process phase.

5. The self-healing of persons with allergic respiratory symptoms emerged in this step including: reducing allergic respiratory symptoms; and feeling peace of mind.

### 1.3 Tentative self-healing process through integrating yoga practice

The tentative self-healing process through integrating yoga practice was developed from a pilot study, and consisted of a handout of yoga practice for persons with allergic respiratory symptoms, a set of yoga postures, and an audio CD. The details are follows:

1. The handout of yoga practice for persons with allergic respiratory symptoms consisted yoga practice based on hatha yoga, which was used to guide participants in daily practice. In particular, they used Yama, which means the principles of right relationship to the world and universal ethics, and Niyama, which means the principles of right relationship with self, disciplines, and observances. The benefits of each yoga posture and the technique of yoga practice were included in the handout.

2. A set of yoga postures for persons with allergic respiratory symptoms was developed which consisted of a set of postures to exercise joints, a set

of standing postures, a set of sitting postures, a set of lying postures, and a deep relaxation with the Corpse posture.

3. An audio CD of yoga practice for persons with allergic respiratory symptoms was produced.

4. The researcher, a practicing nurse, extended her role to holistic assessor, educator, trainer, supporter, and empower person.

5. The participants' roles were seen as important in the study and included giving information, participating, observing and reflecting.

The researcher developed the tentative self-healing process through yoga practice from two cases. Many points needed to be further clarified and changed in accord with the participants. The study then moved to the participatory action process phase.

## *2. Participatory action process phase*

The tentative self-healing process through yoga practice resulting from the pilot study was modified and used in the participatory action process phase.

### *2.1 Participatory action research cycle*

The participatory action process phase of this study was explained to the participants in detail. The aim of the study in enhancing the process of self-healing through integrating yoga practice, the roles and activities of researcher and participants were described. The study was conducted through the four steps of participatory action research, which are shown in figure 3.

## 2.2 Reconnaissance

To understand each individual, the experiences of the problem of persons with allergic respiratory symptoms were examined by the participants. The researcher encouraged the participants to identify their problems and to begin to understand meaning of the illness, background, and social context. The participants brought their personal experiences of healing to be discussed with the researcher. The researcher established relationships with the participants by using informal conversation techniques, spending time with and paying attention to them. Moreover, the researcher shared information about knowledge of respiratory allergy and yoga practice, and discussed issues related to general information about participants' health problems. These methods were used to develop trust and lessen the gap between the participants and the researcher for the next step of the study. In addition, the researcher assessed the participants' experiences relating to self-healing and the management of allergic respiratory conditions (see Appendix A). TSS, aura tests and QOL were monitored to explain the baseline before starting yoga practice, and again at one, two, and three months after yoga practice. The data from this phase were analyzed and interpreted to gain understanding of the health conditions of the participants. These data were used to plan each planning step.

## 2.3 Planning

To achieve the objectives of this first step, the tentative self-healing process through integrating yoga practice was developed in the preparation phase. It consisted of yoga practice, strategy, and the roles of both the participants and researcher were presented and explained to the participants. The plan included yoga

practice and activities to achieve goals, a workshop for yoga practice, and strategies. Finally, the researcher and participants reflected individually on strategies to improve their practice. The researcher encouraged the participants to follow their plans.

#### 2.4 Acting and observing

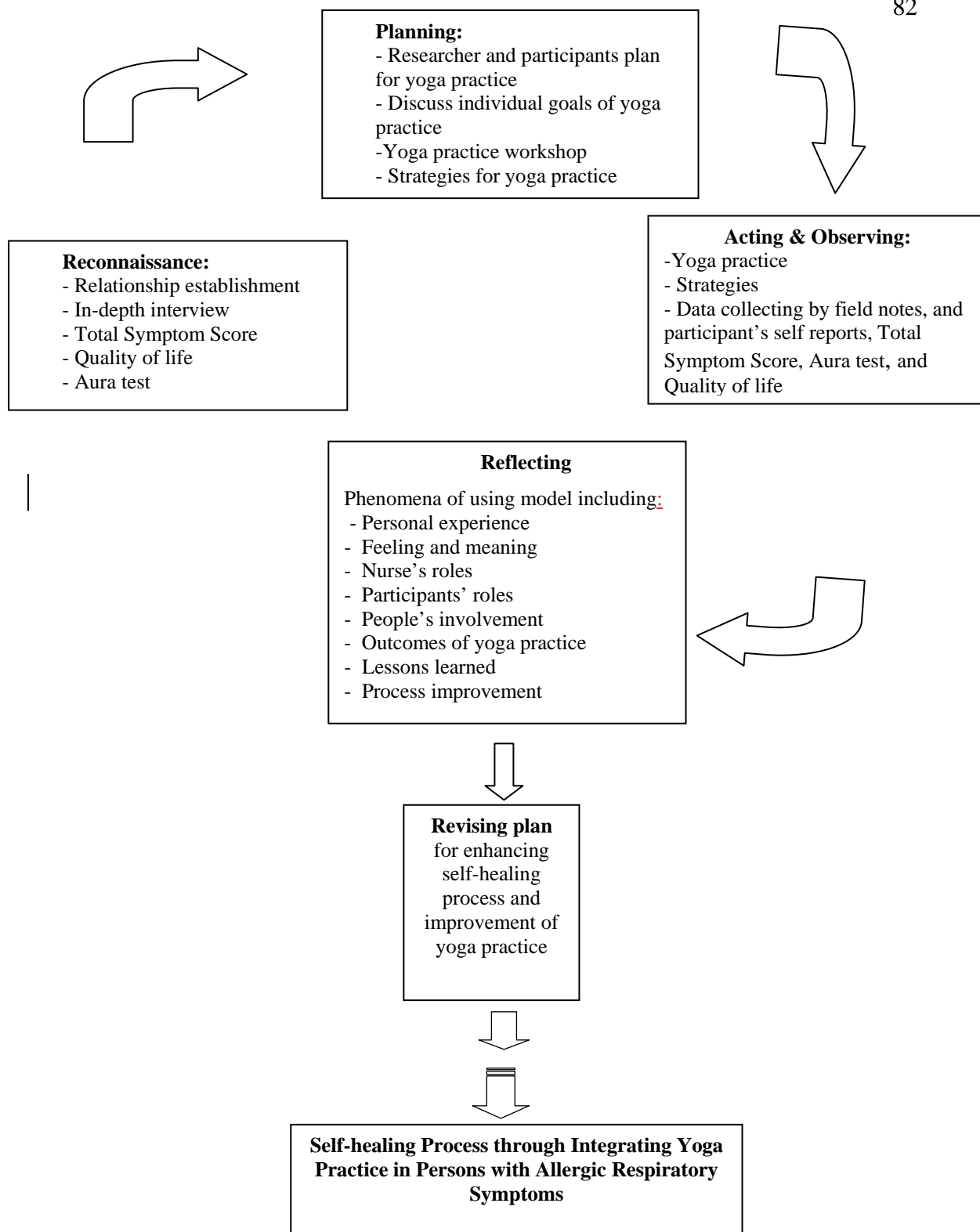
In this step of the participatory action research cycle, the researcher conducted activities, a workshop and practicing yoga. These followed the plan mentioned in the prior step, to develop self-healing process. The researcher provided yoga lesson for the participants. The yoga lesson was given by the researcher both in groups and individual practice. The practice sessions offered to participants were one and a half hours per day, three times a week. Instruction was also based on the principles of yoga and the researcher developed a handout that was used for home yoga practice.

Each participant was encouraged to monitor their improvement in physical, psychological, and spiritual health by using Self-Report and Personal Diary Forms. In this phase the researcher closely observed the participants and took field notes that dealt with their behaviors, comments, interactions, situations and their own personal insights. The field notes were used to formulate a context for interpreting data. Moreover, field notes were used to document events that occurred to participants, and methods that were used to motivate the practice that each person followed. In addition, theories from the literature were also used to support and guide the participants reaching their goals. These, such as the Yoga Sutra, guided participants to a state of balance.

## 2.5 Reflecting

The researcher encouraged the participants to reflect on their practice every day individually and every week as a group. This was done to obtain further information on how the participants used yoga for the self-healing of their symptoms and to find out the results of their practice. Moreover, the barriers to practice, supportive factors, and lessons learned were discussed in their reflection. Questions were used to guide this reflection (see Appendix D). The data from this step were used to improve the development of the model in the next cycle and were used with the later participants.

After action, observation and reflection, the development plan was revised for use in the next cycle. Some yoga postures were included and others excluded. The strategies used to encourage participants were modified to be more in accord with the specific individual. The details of this process are shown in figure 3.



*Figure 5.* Participatory action process for enhancing self-healing process through integrating yoga practice in persons with allergic respiratory symptoms

*Participants of the Study*

The participants in this study were persons with allergic respiratory symptoms. They were volunteers from Hatyai district, in Songkhla province. The study was conducted from May, 2006 to February, 2007. The recruitment of participants took place through advertising for volunteer participants. The researcher announced the study by using posters at the Faculty of Nursing, Prince of Songkla University. These invited participation to the persons who had allergic respiratory symptoms and were interested in using yoga for managing their symptoms and health. It was to take place at the Center for Holistic Health and Eastern Wisdom, Faculty of Nursing, Prince of Songkla University. The snowball technique was used to recruit friends or relatives of those who saw the announcement, as potential participants.

Nat and Nui agreed to volunteer in developing self-healing process through yoga practice. Three new cases participated in this study in July (Noy, Muk, and Malai). Five cases (Sa, Aree, Nee, Kai, and Pat) participated in August. Kai ended her participation after two weeks because she had to work in another district. Four cases (Am, Ya, Pom, and Na) agreed to participate in September. Ya stopped after three weeks because the time. In October, 2006, there were five participants (Ja, Ging, Toto, Pa, and Porn) who agreed to take part in developing the model. Ja stopped after three weeks because she had to take care of her sick husband. Pa felt that her symptoms got worse after she practiced for two weeks in participating in the study. Finally, there were 15 participants at the end of the study. These participants were selected by using the following criteria: they were diagnosed as having allergic respiratory symptoms by a physician; they were 15–60 years old at the time of the



study; they were able to read, write, and understand Thai; and no other chronic diseases, such as diabetes mellitus, hypertension, heart disease, or renal disease.

### *Research Setting*

The study was implemented at the Center for Holistic Health and Eastern Wisdom, Faculty of Nursing, Prince of Songkla University. This center has a yoga hall equipped with a tape and VCD/DVD player, microphone and yoga mats for the participants. Pictures of yoga postures and some yoga books were also available to the participants in the hall. The hall was quiet, private, and well ventilated. In addition, the aura computerized machine was in a nearby room.

### *Instrumentations and Data Collection*

The following instruments were selected to collect the data. In keeping with the philosophy of PAR, many of these activities and data collection instruments also served to inform and engage the study participants. They also provided information for the development of the therapeutic model. These included:

*In-depth interviews:* An interview guide for in-depth interviews was used to collect general information including symptoms, causes, impacts of symptoms, and their managements (Appendix C).

*A demographic background sheet:* This was developed by the researcher for collecting information including age, sex, education level, marital status, income level, occupation, and where they lived (Appendix A, B).

*Diary writing:* The participants were encouraged to write a self diary report about their experiences. It was used to reflect their experiences of yoga practice, feelings, and obstacles to reach their goal.

*Aura test:* The Aura Video Station, an interactive multimedia biofeedback system, was used in this study. The aura measures biofeedback data through biofeedback sensors. The data was analyzed and processed with the energetic and activity levels of the client. In this study the researcher used the data of aura pictures, level of energy, and ying-yang balance of the participants because it related to energy balance and improving allergic respiratory symptoms. Aura monitoring was conducted at the beginning and at one, two, and three months in order to motivate them to practice.

*Total symptom score (TSS):* This instrument was adapted from Van Cauwenberge & Juniper (2000). TSS was defined as the sum of the five individual symptom scores assessed by the participant for: (1) sneezing, (2) rhinorrhea, (3) itchy nose, palate and/or throat, (4) nasal congestion, and (5) itchy, watery and/or red eyes. Each of these symptoms was evaluated on a five-point scale: 0 - absent; 1 - mild (symptom present but not annoying or troublesome); 2 - moderate (symptom frequently troublesome but not interfering with normal daily activity or sleep); 3 - severe (symptom sufficiently troublesome enough to interfere with normal daily activity or sleep); 4 - very severe (symptom severe enough to warrant an immediate visit to the physician). The TSS was used to encourage participants to understand and monitor the effect of practicing the yoga techniques. The TSS was measured at the beginning and at one, two, and three months to encourage participants to know their

health condition and monitor the effect of yoga practice.

*Quality of life score:* The Quality of life (QOL) was assessed by using a visual analog scale from 1 to 10. It was used to inform participants about the level of their quality of life before and after practice yoga, and to motivate them to continue practice. It was not used to provide a comparison using statistical analysis.

*Critical reflection:* critical reflective inquiry was necessary because it was possible to discover and compare usual modes of practice throughout the inquiry. Critical reflection was conducted weekly after implementing the previously developed plan by using the interview guide for individuals (Appendix D). It was particularly suited to the collection of qualitative data.

*Participatory observation:* The researcher performed as an active participant observer over the period of the study in order to get closed to the participants and understand their experience. The researcher's observations included symptoms and yoga practice.

*Taking field notes:* Observations were recorded about their practice of yoga. The content of the field notes included personal notes, methodological notes, and theoretical notes. The researcher used these field notes to formulate a context for interpretations.

### *Data Analysis*

Content analysis was used to analyze qualitative data from the audio-tape recordings of interviews and field notes. The interview data from the participants and all stories were transcribed verbatim. This information was submitted to and discussed

with the thesis advisors in order to confirm and verify the data interpretation. Data from daily report, Total Symptom Score, and aura test were analyzed by descriptive statistic and used to support the interpretation of themes that emerged at each phase. The analysis consisted of an understanding of the whole text and then moved to the development of more specific themes from the textual data. The turning points experienced by the participants that reflected changes enabling them to see themselves in a different way were identified. The important strategies that supported the participants in reaching their goals were identified. All the analyzed data was used to develop the process of self-healing.

#### *Protection of Human Subjects' Rights*

1. Permission to involve the participants was obtained from the Institutional Review Board Committee, Faculty of Nursing, Prince of Songkla University.

2. A complete explanation and written description about the objectives of the study, the research method, potential risks and benefits to participants were given to the participants. They were allowed to ask questions and to decline or accept participation in this study or to withdraw from the study at anytime they wished. If any participants had allergic or respiratory problems when practicing yoga they were provided with necessary nursing care and referred to appropriate services.

3. Verbal or written informed consent was required from each participant before the beginning of the study.

4. Confidentiality was ensured by having the audio-tapes transcribed by the researcher with no personal identifiers. All the data records were kept in a locked cabinet and were destroyed after five years following completion of the study.

### *Trustworthiness*

Procedures recommended by Lincoln and Guba (1985) were used to ensure trustworthiness. The strengths of this study depend on trustworthiness; the reliability and validity of the results. This also relates to the presentation of the results, and the process used to carry out the study. The specific procedures used to ensure trustworthiness in this study were as follows.

### *Credibility*

The researcher built relationships with the participants and gained trust by prolonged exposure to the participants. The study process was conducted from May, 2006 to February, 2007. This extended period not only helped the researcher build trust, it also helped her to understand the participants and their situations.

Prolonged engagement gave the researcher opportunities to observe participants closely and to understand their problems better. The researcher had the opportunity to meet the participants frequently. For example, the researcher organized group reflection every week, and discussions after practicing yoga three times a week until data saturation occurred. These meetings helped the researcher to confirm interpretations. The experiences from the previous yoga practice were used for the next practice, next case or later groups. The findings from prolonged engagement provided increasing credibility of knowledge.

Triangulation in this study involved the use of multiple methods of data collection (participant observations, interviews, group discussions) and multiple theoretical explanations of the study phenomenon. For example, Sa reported that her health condition was getting worse at the eighth week after practicing yoga. It was confirmed later that the cause of the deterioration of her health was not her yoga practice, but was a lack of sleep in that week due to having much homework to do. This information was reinforced in her self-report.

The researcher carried out checking by members such as presenting the findings and interpretations to the participants, and gathering feedback regarding the validity of the data and the researcher's conclusions. When the participants met the researcher after practicing yoga, the researcher observed their outcomes and evaluated her perceptions of the previous activities with participants. Moreover, group meetings were organized for them to reflect on their experience as well as to validate the data and data interpretation. Each group meeting consisted of 3-5 participants. The checking by members of this study occurred during each phase of the project.

#### *Transferability*

To facilitate the transferability of this study the researcher conducted detailed documentation in all phases. The researcher reported the context of the study, including the setting, the participants' background and the research process. The findings of the study were reported in a style that gave an enriched picture by using the participants' accounts. Understanding situations, learning to cope with allergic respiratory symptoms, and integrating yoga into daily life, all were presented as the phenomena of participants' learning about their self-healing processes. Themes and

sub-themes included quotations, commentaries, and stories which added to the richness of the report and to the understanding of the experiences and contexts where they occurred.

### *Dependability*

Dependability is the criterion of applying rigor to ensure the consistency of qualitative findings (Lincoln & Guba, 1985). It seeks ways of taking into account both unstable and unusual factors. An audit trail is the primary technique for assessing the dependability of qualitative findings (Lincoln & Guba, 1985). It includes details of all procedures related to data collection, analysis, and synthesis.

In order to increase the dependability of this study, the researcher managed all the documents relating to the study. The researcher's reflective journals, which provided ongoing documentation of the researcher's role, reactions, and influences on data collection and analysis, were available for audit at all times. Rich information on the research process was explained.

The researcher used the triangulation method for data collection, including in-depth interviews, field notes, self-reports, aura testing, TSS, and QOL to measure self-healing outcomes. These methods were conducted by obtaining both objective and subjective data. The data was used to support the weaknesses and strengths of the other modes of collection. For example, the TSS showed the increased levels of the severity of the processes followed. In turn, the reflections obtained from in-depth interviews and self-reporting showed data that supported the results from the TSS, thus further supporting the evidence. Moreover, group and individual reflection were

used to collect data to achieve multidimensional perspectives on experiences and to understand participant phenomena.

### *Confirmability*

Confirmability is a process criterion. The technique used to assess confirmability is the audit trail (Lincoln & Guba, 1985). It involves keeping detailed records of all the procedures relating to data collection, analysis, and synthesis. An audit trail provides a mechanism for tracking and replicating the research process, determining methodological consistency and objectivity over time and investigators, and developing the rich description of the study (Lincoln & Guba, 1985).

An audit trail was available throughout this study. The process followed in this study was presented in detail so that a clear account of the methodology of the project was provided. Raw data were systematically recorded and noted. Audiotapes, transcripts, and the products of data analysis were arranged and sorted. Field notes were recorded on a regular basis and reflection was undertaken to address issues that arose. All data, including categories, themes, sub-themes, related details, and the final reports, were kept in files.

The recorded materials could be demonstrated as adequate when the data were analyzed and interpreted. This refers to referential adequacy (Lincoln & Guba, 1985) which is one of the techniques concerning an activity that makes it possible to check preliminary findings and interpretations.



## **CHAPTER 4**

### **FINDINGS AND DISCUSSIONS**

The findings of this study consist of two main parts: participant descriptions, and the three steps of enhancing the process of self-healing through integrating yoga practice by persons with allergic respiratory symptoms. Since this study used participatory action research, the findings and discussions in this paper were integrated. The details of the findings as follows.

#### *The Context of the Setting at the Center for Holistic Health and Eastern Wisdom*

The Center for Holistic Health and Eastern Wisdom, where the study took place, is an academic nursing center of the Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla Province in southern Thailand. This center aims to apply knowledge integrated with eastern wisdom for teaching and providing health services to optimize the well being of individuals and society. There are many services provided for people both in the University and those living nearby, such as meditation, reiki healing, yoga, tai-chi, and massage. These services are offered all the year round. Most of the services are provided by the nursing faculty and through support from networking in the community. In addition, there is an annual conference on holistic nursing and Eastern Wisdom that allows people to participate in topics based on their own interest.

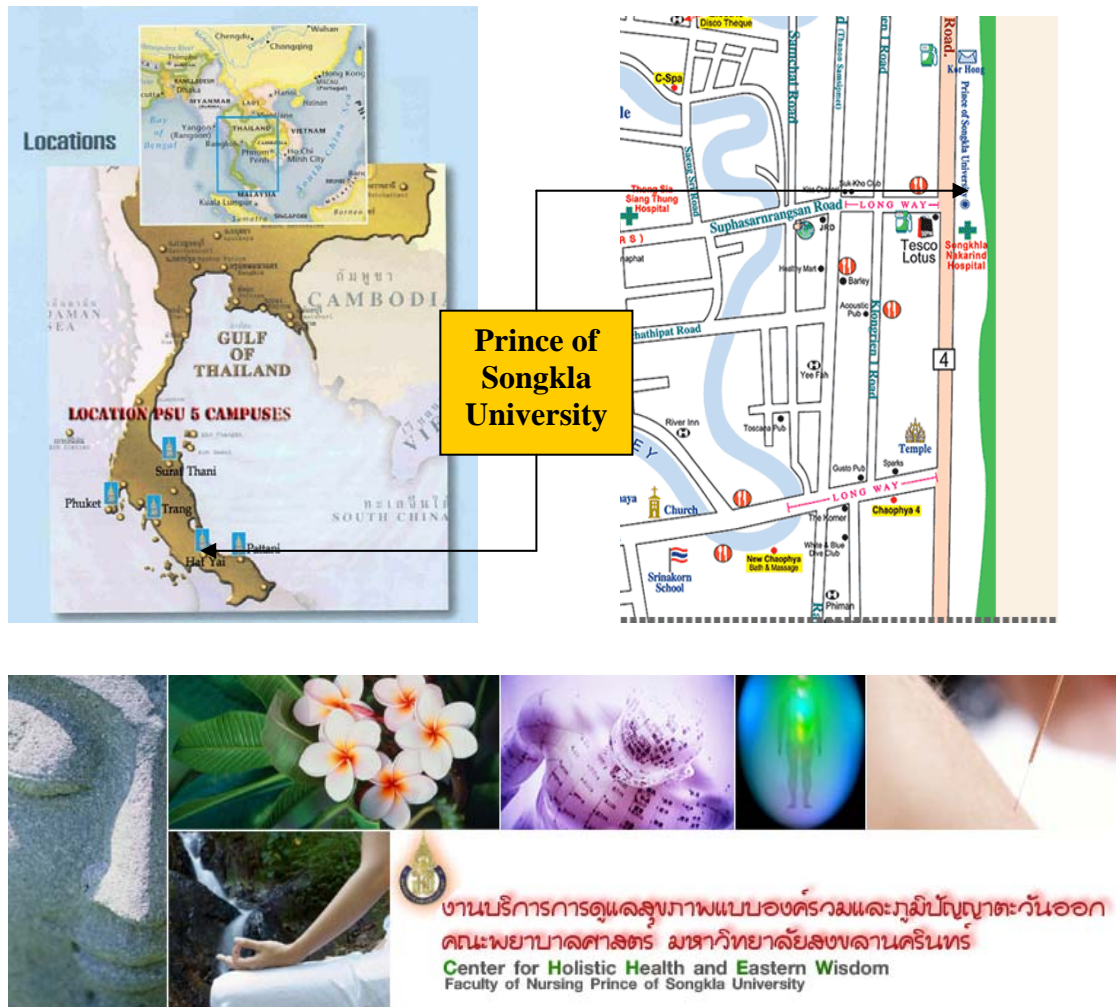


Figure 6. Map showing the Prince of Songkla University and Center for Holistic Health and Eastern Wisdom

### Participant Descriptions

The demographic data were collected and translated from Thai to English. Nineteen participants were recruited with 15 participants completing all steps covered by the study. One of the participants was male. Those that did not complete (four) dropped out in the second and third weeks. Symptoms reported by most of the participants included: sneezing; rhinorrhea; an itchy nose, palate and/or throat; nasal

congestion; and itchy, watery and/or red eyes. They attributed the causes of their symptoms to a variety of sources including smells, mosquitoes, cockroaches, dust, cigarette smoke, lotion, dust, wool, and weather change. The characteristics of the participants are shown in Table 3.

#### *Gender, Religion, and Age of Participants*

Fourteen participants were females and one of them was a male. The data showed that females were more interested in seeking an alternative way to manage their symptoms than males. Twelve participants were Buddhist and three of them were Muslim. The ages of five participants were less than thirty; all were students in the University. Ten participants were 31-60 years old and they still worked as teachers, employees, or owned their businesses.

Table 3

*Age, gender, religion, education level, since diagnosed (years), symptoms, and self-management of participants*

Age	Gender	Religion	Education level	Since Diagnosed (years)	Symptoms	Management
19	F	M	BSS	8	sneezing, rhinorrhea, itchy nose, nasal congestion, watery and red eyes	drug inhalation, drank warm water, kept warm
19	F	B	BSS	15	sneezing, rhinorrhea, itchy nose, nasal congestion, itchy and watery eyes	oral medicine, drug inhalation, kept warm, avoided drinking cold water, and drank juice
20	F	M	BSS	5	sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes	oral medicine, kept warm, aerobic exercise, avoided allergen, and drank juice
20	F	M	BSS	3	sneezing, rhinorrhea, itchy nose, nasal congestion, itchy, watery and red eyes	oral medicine, jogging, kept warm, avoided drinking cold water, and avoided allergen
21	F	B	BSS	10	sneezing, rhinorrhea, itchy nose, nasal congestion, itchy and watery eyes	oral medicine, drug inhalation, aerobic exercise, avoided allergen, and drank warm tea
32	M	B	BS	6	sneezing, rhinorrhea, itchy throat, nasal congestion, watery and red eyes	drug inhalation, sometimes oral medicine, and exercise
35	F	B	BS	3	sneezing, rhinorrhea, itchy nose, nasal congestion, itchy and watery eyes	oral medicine, aerobic exercise and sleep
38	F	B	BS	4	sneezing, rhinorrhea, itchy nose and throat, nasal congestion, itchy, watery and red eyes	drug inhalation and aerobic exercise

Table 3 (continued.)

Age	Gender	Religion	Education level	Since Diagnosed (years)	Symptoms	Management
39	F	B	MS	2	sneezing, rhinorrhea, itchy nose, palate and throat, nasal congestion, itchy, watery eyes	oral medicine, exercise by walking, drank juice, drank warm water, and avoided allergen
43	F	B	BS	1.5	sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes	oral medicine, jogging or aerobic, rest and sleeping, drank warm water, and avoided allergen
48	F	B	MS	10	sneezing, rhinorrhea, itchy nose and throat, nasal congestion, itchy and watery eyes	oral medicine, kept her body warm, aerobic exercise, and avoided allergen
50	F	B	MS	10	sneezing, rhinorrhea, itchy nose, palate and throat, nasal congestion, itchy, watery and/or red eyes	oral medicine, drug inhalation, kept her body warm, and aerobic exercise
51	F	B	BS	10	sneezing, rhinorrhea, itchy nose and throat, nasal congestion, itchy and watery eyes	oral medicine, kept warm, drank tea
55	F	B	BS	5	sneezing, nasal sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes	drug inhalation, drank warm water, and avoided allergen
60	F	B	HS	10	sneezing, rhinorrhea, itchy nose and throat, nasal congestion, itchy and watery eyes	drug inhalation, and walking

*Note.* B = Buddhist, M = Muslim, BSS = Bachelor's Student, HS = High School, BS = Bachelor of Science, MS = Master of Science

*The level of severity of symptoms*

There were two groups of participants and each group was categorized by their perceived symptoms (moderate and severe symptoms). The symptoms were defined as the severity perceived by the individual participants through sneezing, rhinorrhea, itchy nose or palate and/or throat, nasal congestion, and itchy, watery and/or red eyes. These symptoms were perceived to be either moderate or severe.

1. On the moderate group, there were nine participants who perceived they had moderate symptoms. Their symptoms were frequently troublesome but did not interfere with normal daily activities or sleep. The criteria for identifying moderate symptoms were frequently having the following symptoms: sneezing; rhinorrhea; itchy nose, palate and/or throat; nasal congestion; itchy, watery and/or red eyes. They sometimes used oral or inhaled drugs and had some side effects from the drugs.

Ging categorized herself as one of the moderate group. She worked as a teacher in a high school. She was married but had no children and lived with her husband. Her income was adequate. Changes in the weather were the causes of her symptoms. She was interested in practicing yoga because her friend suggested she should try it. She believed that yoga might help her to improve her allergic respiratory symptoms, and thought that she could do yoga alone by herself at her home if it worked.

Muk was a Thai Buddhist woman who worked as a government officer. She was not married and lived with two family members. Her income was adequate. She had been diagnosed with allergic respiratory symptoms by a physician ten years ago. A change in weather, dust, and wool were the causes of her symptoms. She felt very bad, exhausted, anxious and uncomfortable when she had allergic respiratory

symptoms. She perceived that she had moderate symptoms and was unhappy when she worked. When she had these symptoms she took medicine. She did aerobic exercises, avoided the places where there were allergens, and kept her body warm when she was attacked by the symptoms. She knew about yoga and was interested in using it for health and fitness, but she did not think that yoga could help her manage her allergic respiratory symptoms. She wanted to try practicing yoga and hoped that it might work in helping her to improve her symptoms.

Malai was a Thai Buddhist woman who worked as an employee. She was married but had no children and lived with four family members. Her income was not adequate. She had been diagnosed as having allergic respiratory symptoms by a physician four years ago. Changes in the weather were the causes of her symptoms. She felt very uncomfortable and exhausted when she had symptoms. She felt fearful of her symptom's impact on others who needed to take care of her job at work when she took a sick leave. Moreover, she suffered from her symptoms and felt that she was a burden to her family and friends. When she had these symptoms she used inhalant drugs. At the initial stage she thought yoga was a kind of exercise. She was interested in practicing yoga because she believed that yoga as an exercise could help her to manage her allergic respiratory symptoms.

Sa, Aree, and Nee were Thai Muslim women studying in a University. They also perceived their symptoms as moderate. Sa stayed at home with six family members. Aree and Nee stayed in a dormitory with their friends. They had been diagnosed as having allergic respiratory symptoms by a physician three years ago. Dust, pollen, and weather changes were the causes of their symptoms. They felt fearful, uncomfortable and anxious when they had these symptoms. They sometimes

could not do their homework or study when they had the symptoms. They were interested in practicing yoga because they believed that yoga exercises could help them to manage their symptoms better.

Am, a Thai Buddhist woman, had her own business. She was married but had no children and lived with two family members. Her income was adequate. She had been diagnosed as having allergic respiratory symptoms by a physician ten years ago. Changes in the weather caused her symptoms. She perceived her symptoms as moderate. She felt fearful and anxious when she had allergic respiratory symptoms. She sometimes did not sleep enough, and had headaches and migraines. She felt very anxious about her symptoms getting worse or developing into other severe respiratory conditions. She could not work and sleep, and sometimes she was unhappy when she worked. She had tried to seek alternative ways to help her manage her symptoms, such as through Tai chi and using herbs, but they did not work. She knew about yoga practice from many media sources and was interested in yoga because she believed that yoga could help her to improve her allergic respiratory symptoms.

Pom, a Thai Buddhist woman, worked as a teacher. She was not married and stayed at home with five family members. She had been diagnosed with allergic respiratory symptoms by a physician two years ago. Dust and changes in weather were the causes of her symptoms. She felt very bad and uncomfortable. She had symptoms immediately when she stayed in a place where there was a lot of dust, and she felt very anxious when she had these symptoms. These symptoms made her feel irritated. She took some medicines when she had these symptoms. She did exercises by walking every evening, kept her body warm when attacked by the symptoms and avoided dusty places. She drank warm water and juice and ate many kinds of fruit.



She was interested in practicing yoga because she believed that yoga could help her to manage her symptoms.

Na, a Thai Buddhist woman, worked as a teacher in the high school. She was divorced and lived with her daughter. Her income was adequate. She had been diagnosed as having allergic respiratory symptoms by a physician one year ago. Change in the weather and lack of rest were the causes of her symptoms. She sometimes lacked sleep and had headaches when she had symptoms. She felt anxious and unhappy when she worked. When she got these symptoms she took medicine for her allergy. She did exercises, such as jogging or aerobic exercises every day, kept her body warm when was attacked by symptoms and tried to have enough rest and sleep. She avoided drinking cold water and drank hot water, but her symptoms still persisted. She was interested in practicing yoga because she believed that yoga could help her to improve her management of her symptoms and she thought that she could do it by herself.

2. There were six participants in the group that perceived they had severe symptoms. They had symptoms that were sufficiently troublesome to interfere with normal daily activities or sleep. They always had the following symptoms: (sneezing; rhinorrhea; itchy nose, palate and/or throat; nasal congestion; and itchy watery and/or red eyes). They had negative feelings (uncertainty, fear and anxiety) and always used oral or inhalant drugs, which caused many side effects.

Nat, who perceived herself to have severe symptoms, was a Thai Buddhist woman working as an employee. She was married but had no children and lived with six family members. She had been diagnosed with allergic respiratory symptoms by a physician about three years ago. The causes of her symptoms were foul odors,

mosquitoes, cockroaches, dust, smoke from cigarettes, and lotions. She felt very bad when she had allergic respiratory symptoms. She could not work and felt like a useless person. When she had these symptoms she took medicine and slept.

Nui and Pat were Thai Buddhist women studying in a University. They stayed in a dormitory with their friends. They had been diagnosed with allergic respiratory symptoms by a physician ten years ago. Dust, wool, and weather changes were the causes of their symptoms. They felt like they could not breathe, and experienced fear and anxiety when they had symptoms. When they got these symptoms they took medicine and used drug inhalers. Sometimes Pat went to the emergency department at the hospital when she had severe symptoms.

Noi was a Thai Buddhist woman who worked as a teacher in a University. She was married but had no children and lived with two family members. She had been diagnosed with allergic respiratory symptoms by a physician ten years ago. Weather changes caused her symptoms. She felt difficulty in breathing, and experienced fear and anxiety when she had allergic respiratory symptoms. She had headaches, migraines, and did not have enough sleep. She could not work, felt unhappy, and used drug inhalants when she got these symptoms.

Toto was a Thai Buddhist man and worked as an employee. He stayed at home with his friend. He had been diagnosed with allergic respiratory symptoms by a physician six years ago. Dust and weather changes were the causes of his symptoms. He was very tired when he had these symptoms. He could not breathe when he stayed in a place where there was a lot of dust, and felt anxious when he had severe symptoms. He could not work and used drug inhalants or sometimes took some medicine when he had severe symptoms. He had tried many kinds of exercise but his

symptoms did not decrease. He avoided places where there was dust and avoided drinking cold water. He was interested in practicing yoga because his friend suggested he should do it and he believed that yoga could help him to manage and improve his symptoms.

Porn was a Thai Buddhist woman and worked as a teacher in a high school. She was married and lived with four family members. Her income was adequate. She had been diagnosed with allergic respiratory symptoms by a physician five years ago. Dust, pollen, and cold weather were causes of her symptoms. She felt fearful and anxious when she had allergic respiratory symptoms. She often used drug inhalers at the emergency room in the hospital. She did not have enough sleep and felt powerless when she had severe symptoms. When she suffered these symptoms she used drugs for inhaling. She exercised by walking but not often. She was interested in practicing yoga because she believed that yoga could help her to manage her allergic respiratory symptoms.

Four participants dropped out (Kai, Ya, Ja, and Pa). All of them were female and had been diagnosed as having allergic respiratory symptoms by physicians 5 years ago. Their age range was 30 to 53 years. They had many symptoms such as itchy eyes, sneezing, runny noses, and stuffed-up noses. The four dropped out for the following reasons: the working hours did not fit in with the program; a commitment to care for a sick husband; the difficulty experienced in performing some yoga postures; and feeling worse after practicing yoga for two weeks.

*Model of Enhancing the Process of Self-Healing through Integrating Yoga Practice in Persons with Allergic Respiratory Symptoms*

The model of enhancing the process of self-healing through integrating yoga practice by persons with allergic respiratory symptoms involved collaboration between the researcher and the persons with the allergic respiratory symptoms. This collaborative effort focused on sharing information and knowledge, identifying problems, influencing factors, and enhancing self-healing process through integrating yoga in the practice. Each cycle included a reconnaissance phase, planning, acting, observing, and reflecting. Three steps in the model of enhancing the process of self-healing emerged. These steps included: understanding the situations; learning to cope with allergic respiratory symptoms; and integrating yoga into daily life. These are shown in Figure 7.

<b>Step1</b> Understanding situation	<b>Step2</b> Learning to cope with ARS		<b>Step3</b> Integrating yoga in daily life
	Severe symptom	Moderate symptom	
<u>Themes emerged in this step</u> Living with suffering from allergic respiratory symptoms and side effects from drugs Living with uncertainty Living with fear and anxiety Depending on drugs Continuing seeking ways for self-management	<u>Condition</u> - Always have following symptoms (sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes) - Perceived severe symptoms - Negative feeling (uncertainty, fear and anxiety) - Always have to use oral or inhalation drugs - Have many side effects from drugs	<u>Condition</u> - Often have following symptoms (sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes) - Perceived moderate symptoms - Negative feeling (fear and anxiety) - Sometimes use oral or inhalation drugs - Have some side effects from drugs	<u>Condition</u> - Sometimes have following symptoms (sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes) - Perceived mild symptoms
	<i>Learning from living with suffering symptoms to an increasing sense of control(perceived severe symptom group)</i> - Learning the way to practice yoga from deep relaxation and alternate nostril breathing - Perceived positive effects of yoga  <i>Learning from increasing sense of control to self-healing (perceived moderate symptom group)</i> - Learning the ways to practice yoga by understanding yoga principle and yoga techniques - Perceived positive effects of yoga - Perceived inner changes and other objective evidence as a result of yoga practice		<i>Learning from self-healing to integrating yoga into daily life</i> - Learning the way to incorporate yoga in their daily life - Practicing yoga anytime and anywhere - Achieving a state of balance and harmony - Understanding themselves - Understanding others - Positive thinking - Promoting spiritual growth
P: giving information	P: giving information, observing, reflecting, self-management: - Holistic assessment - Managing allergic factors - Rest, deep relaxation - Alternate nostril breathing - Using oral or inhalation drugs - Go to hospital for advance treatment	P: giving information, observing, reflecting, self-management: - Holistic assessment - Managing allergic factors - Practice yoga for moderate symptoms - Using some medicines	P: maintaining practice, observing, reflecting, self-management: - Holistic assessment - Managing allergic factors - Select practicing some postures of yoga in daily life - Practice follow handout when having symptoms - Integrating ways of yoga into daily life
N: holistic assessing	N: holistic assessing, educating, training, supporting, empowering		N: holistic assessing, supporting, empowering
S: supporting	S: supporting, empowering		S: empowering, supporting
F: belief in yoga practice	F: trust, social support, hope		F: knowledge, skill
St: relationship, trust	St: reflection, mind-body connection, nurse yoga healing skill		St: reflection, mind-body connection
I: time	I: severity of symptoms, time, daily living		I: daily living, environment
	<u>Self-healing outcomes</u> - decrease severity of symptoms and frequency of symptom occurring - decrease negative feelings (fear and anxiety) - feel relaxed, peaceful, calm, cool		<u>Self-healing outcomes</u> - Decrease frequency of symptom occurring - Balance and harmony - Increase positive feelings - Ability to manage symptoms into daily life

Note N = nurse’s roles, P = participant’s roles, S = social supporter’s roles, St = strategies, F = facilitating factors, I = Inhibiting factors

Figure 7. Model of Enhancing the Process of Self-Healing through Integrating Yoga Practice in Persons with Allergic Respiratory Symptoms

### *Step 1 Understanding situations*

Understanding situations emerged as a step from the reconnaissance phase of the first cycle of PAR to understand how an individual experiences the problem they had with allergic respiratory symptoms. Five themes emerged in this step. These included: living with suffering from allergic respiratory symptoms; living with uncertainty; living with fear and anxiety; dependence on drugs and suffering the side effects of drugs; and seeking ways of self-management of the symptoms. The details of themes and sub themes are presented as follows.

Living with suffering from allergic respiratory symptoms and side effects from drugs

Data was obtained from interviews in the reconnaissance phase. Living with suffering from allergic respiratory symptoms and the side effects of the drugs emerged as a theme. These findings included two sub-themes; suffering from allergic symptoms; and being a burden for the family and colleagues.

#### 1. Suffering from allergic symptoms

The participants reported that they experienced many allergic respiratory symptoms. The findings revealed the important symptoms to be sneezing, rhinorrhea, an itchy nose/palate or throat, nasal congestion, and itchy and/or watery red eyes. The participants had different perceptions of the severity of their symptoms. This finding showed that six cases perceived they had severe symptoms while the Total Symptom Score (TSS) of these was 12 to 14. Nine cases perceived themselves as having moderate symptoms and their TSS was 10 to 12.

Most participants who perceived that they had severe symptoms were in agreement with the TSS except Noi. Her TSS was 12 which was rated moderate level. But she perceived herself as having severe symptoms because she felt it very difficult to breathe, and experienced fear and anxiety. In this study, the TSS was used as objective data to encourage participants to confirm their symptoms. They stated that these symptoms affected their daily lives. Participants revealed that there were many factors which accelerated the symptoms. The causes of the allergic respiratory symptoms were smells, mosquitoes, cockroaches, dust, smoke from cigarettes, aroma from lotions, dust, wool, and weather changes. Some participants thought that not only did these factors aggravate their symptoms, but they also affected their state of their immunity. One expressed the view that:

*“I thought that immunity in my body was not normal. I tried to avoid everything that was possibly caused me to allergic symptoms but it did not work. I still got symptoms” (Nat, 06/15/2006).*

Participants reported that they had to be patient in facing their chronic symptoms. Most participants thought that their symptoms made them suffer states including; feeling terrible; feeling exhausted; being sleepless; and being anxious and having other physical problems. The following are examples of a participant’s statement about her condition:

*“When I had allergic respiratory symptoms I felt very bad. I felt exhausted and bored. After 30 minutes after taking medicine I did not get better, I could not do anything, if I still worked the symptoms were still not better. I felt like I could not breathe, I felt fearful, anxious and was not getting enough sleep. I got a headache and migraine” (Nee, 08/17/2006).*

In addition, participants revealed that their experiences from suffering these symptoms decreased the quality of their lives. They perceived that the level of the quality of their lives was between three and six out of a maximum of ten. (Table. 4)

The Aura Chakra Report included an aura picture, aura size, aura color, and yin-yang balance. These results were used to confirm the state of the participants and showed that when they suffered from their symptoms the holistic balance, shown by a decrease of energy. For example Muk, Am, and Na suffered symptoms to the degree that the results showed low energy and a very unbalanced yin-yang. The aura size of twelve participants was an average aura (40-70%). Three of them had a wide aura (80-90%) indicating a strong and powerful radiance. The outcomes of the aura test are shown in Table 4.

## 2. Being a burden on family and colleagues

The participants reported that their symptoms did not only affect them but also their family's members, friends and colleagues. These made them feel they were a burden and useless people, as reflected by the following participant's statement:



*“I felt that I was a burden to my family and my friends. I felt I was a useless person. It affected myself, my family and my colleagues when I got these symptoms” (Aree, 08/15/2006).*

The participants reported that when they experienced allergic respiratory symptoms they were unable to work effectively and they felt unhappy working. The following statement is an example offered by Muk, 07/10/2008:

*“When I got allergic symptoms I could not work. I had to sleep and leave everything behind. If I was working I had to stop. I was not happy when I worked. My colleagues had to work for me. Some good friends would care for me but I felt unhappy that they had to take responsibility to work for me”.*

Table 4

*Aura test report, Total Symptom Score (TSS), and quality of life score at the beginning*

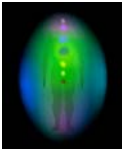
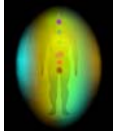
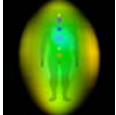
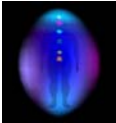

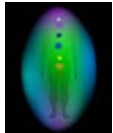

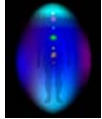
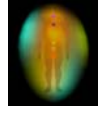

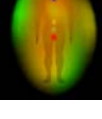
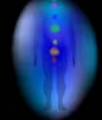
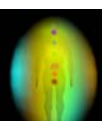
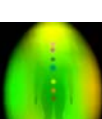
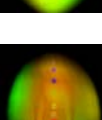
Case	Aura Picture	Aura Size	Aura color	Yin-Yang	TSS (15)	QOL (10)
Nat		40%	Deep green	balanced	14	5
Nui		60%	yellow	unbalanced	13	6
Noi		60%	Green yellow	unbalanced	12	4
Muk		60%	Indigo	very unbalanced	12	4
Malai		50%	Orange	balanced	11	4
Sa		40%	Deep green	balanced	12	5
Aree		80%	Orange	balanced	13	4

Table 4 (continued.)

Case	Aura Picture	Aura Size	Aura color	Yin-Yang	TSS (15)	QOL (10)
Am		70%	Indigo	very unbalanced	11	4
Nee		40%	Orange	balanced	11	5
Pat		70%	Orange	balanced	14	3
Pom		40%	Orange	balanced	12	4
Na		40%	Indigo	very unbalanced	11	5
Ging		60%	Yellow	unbalanced	10	6
Toto		80%	Green yellow	balanced	13	5
Porn		40%	Orange	balanced	14	4

### Living with uncertainty

The participants reported that they lived with uncertainty in their lives. The allergic symptoms had many impacts on them. They realized that the control of their symptoms relied on drugs, and they felt that they could not live without drugs. They could not expect what would happen when symptoms attacked them. Both the participants' experience of allergic symptoms, and the thought that their immunity was abnormal, gave them a feeling of uncertainty. They looked like healthy and normal people but they always felt unhealthy. Porn expressed her feelings:

*“I don't know what to expect when I get allergic symptoms. I cannot make plans to do things like my friends. If my symptoms attack I have to cancel everything. I try to think that my immunity is not normal like others. I live with a feeling of uncertainty” (Porn, 12/10/2006).*

### Living with fear and anxiety

Living with allergic respiratory symptoms brought the participants fear and anxiety. Participants in this study were afraid that their symptoms were increasing in severity and this might cause other lung diseases. Moreover, they placed stress on the side effects of drugs that they always used, which impacted on their daily living and work. They could not work effectively with both their allergic symptoms and the side effects of drugs. This anxiety affected their emotional health, living with others, and the quality of their work. Noi shared her story:

*“I was afraid that I would have other lung diseases as a result of my abnormal lungs. At that moment I was afraid that it would be difficult to be cured. This affected my emotions, living with others, and I could not work effectively” (Noi, 09/15/2006).*

#### Depending on drugs and suffering the side effects of drugs

Some participants perceived that they needed to rely on medicine to relieve their symptoms. They felt they suffered from the disease and the treatment received. The participants who used medicines for allergic respiratory symptoms experienced many side effects from the treatment, including feeling sleepy, migraines, drowsiness, dizziness, and headaches. Noi felt that she felt that she had to increase using drugs and felt she suffered from the side effects. Muk described her experience:

*“I had to take medicines for relieving allergic symptoms. I had drowsy all the time. It bothered me in my daily life. I tried to stop using them but my symptoms were getting worse. These made me feel like I was suffering” (Muk, 07/10/2006).*

#### Continuing seeking other ways for self-healing

The findings showed that the participants hoped to have an absence of symptoms. They tried to seek other alternative methods of management to help them get better and have a happy life. These alternative managements included doing aerobic exercise, avoiding contact with allergens, drinking warm tea, and keeping

their bodies warm. The participants' experience was that these methods did not work well. They still had symptoms. Noi (07/ 09/2006) reported that:

*“When I got these symptoms I had to take medicine and then sleep. I did aerobic exercise in a health club in order to excrete sweat from the body. When I did aerobic exercises I could breathe smoothly but my allergic respiratory symptoms were not better. I tried everything such as: drinking warm tea, keeping my body warm, and avoiding going to the place where there were allergens, but I still had symptoms”.*

The findings from interviews described the feelings of participants regarding yoga practice. They believed that yoga could be an alternative way for self-healing. Most of the participants had different reasons for practicing yoga. The findings showed there were three main reasons:

1. Belief in yoga science

Participants believed that yoga was good. They had known about yoga for a long time and tried to learn yoga from other sources, such as TV, health clubs and self study from books or CDs. Na explained that her friend, who had experience in yoga, suggested that she practice yoga to help her to manage her allergic symptoms. After that she was curious about yoga practice and was willing to be a participant in this study. Moreover, participants expressed the view that yoga practice was appropriate for them because they could do it by themselves, and believed that yoga could benefit them more than other exercises.

*“I think yoga practice can help me in managing my allergic respiratory symptoms. The first time, I really thought yoga was one kind of exercise but now I know that it was not just an exercise. I believe it is good. It is more than exercise. It also helps promote relaxation. I believe and wish I could have a chance to learn it” (Porn, 10/10/2006).*

## 2. Trust in the yoga teacher and institute

Participants were not only interested in yoga practice, but they also trusted in the yoga teacher (the researcher) and her institute because they were knowledgeable about yoga. Moreover, after the researcher informed them about and allowed to try to practice yoga they felt good and confident about the yoga teacher. They believed that she could help them when they had some problems while practicing yoga.

*“I believe in the yoga teacher (the researcher). I think she has a lot of knowledge about yoga and she can train people to practice it safely. Since she is a nurse and yoga teacher, she cannot only care for the people but also apply the good things of yoga into her care as well. She can help me when I have problems from my symptoms while I am practicing yoga” (Pom, 09/10/2006).*

## 3. Yoga practice may be a good choice for self-healing

Five participants reported that they tried to seek many kinds of alternative management but they were not satisfied with them. They thought that yoga practice might be a good choice for them. After they received information and tried to practice it, they found that it was non-invasive, and that they could do it

anytime, anywhere. Since yoga moves slowly, this allows the training of both their bodies and minds. One participant shared stated her opinion as follows:

*“I tried to do several types of management.....whatever that was supposedly good for managing my symptoms but I was not satisfied with the results. I thought that yoga was a good choice for me. Yoga is beneficial to the body and min” (Toto, 12/10/2006).*

The participants expressed the view that they were interested in yoga practice and wanted to use this practice as an alternative management. They knew yoga from many sources of media. At first they thought that yoga only brought benefit to health, as with other exercises. After they were informed about yoga practice by the researcher, and heard about direct yoga experiences from their friends, they opened their mind to the practice of yoga. One participant stated that:

*“I thought yoga was an exercise that helped people keeps healthy and slim. I watched yoga on TV and it was interesting. Now many people know about yoga and are interested in using it in health clubs. I thought I should try it because it was non-invasive. My friends could do it, so I thought I could do it as well” (Am, 09/10/2006).*

#### Lessons Learned

Informal conversation was very useful for building relationships between the researcher (a nurse) and the participants. As a nurse she was able to pay attention and listen attentively to the participants' stories. A nurse is also able to treat participants as friends so that they could share their feelings with her anytime.



The researcher learned from the findings that the participants tried to use many ways to manage their symptoms. These included aerobic exercise, walking, jogging, and taking different kinds of herbs.

The researcher found that the participants hoped to live harmoniously with their symptoms. They accepted that they could not avoid living with respiratory symptoms. They hoped that there would be some way for them to become comfortable with them.

The participants understood more about the disharmony in their lives from the results of the Aura, TSS, and QOL tests. They had suffered from symptoms which were confirmed by the results of these tests. They believed that yoga practice could bring them health and a harmonious life.

Assessment brought about understanding of the disharmony brought about by allergic respiratory symptoms and the feelings of being a burden to a family and colleagues. Their then current management strategies did not help them solve all their problems, so they looked for other ways to deal with their symptoms.

The experiences of persons with allergic respiratory symptoms helped other participants to understand yoga practice on self-healing and to make the decision to practice yoga. Learning about the direct experience from others with the same conditions encouraged them to use yoga to improve their health.

Persons with allergic respiratory symptoms had many problems and concerns. All of them were suffering from their symptoms and had different reasons for their decision to use yoga for self-healing. The findings of this stage showed that females

were more interested in yoga practice than males. In this study there were fourteen females and one male participant.

#### Nurse's Roles

In order to gain more of the participants' understanding and encourage them to participate in this program, first of all the researcher tried to build relationships with the participants in order to develop trust. She talked with them informally in order to learn about their primary problems. Then she asked permission before giving information. Normally, in the study site context, participants did not come alone. They usually had a friend or family member with them to join the yoga group, although they were already healthy. In this step the nurse's role was identified as an assessor. The details of this process were as follows:

##### Holistic assessing

In this step, the researcher took the role of an assessor in order to assess the participants. The nurse used assessment guidelines to explore physical, psychosocial, and spiritual aspects in order to understand the situation of the participant. These included the meaning of their illness, its background, and its social context. Aura, TSS, and QOL tests were used to assess and confirm holistic problems. The researcher focused on and paid attention to problems that impacted on their lives, risk factors, and management. The findings from these assessments were explained to participants. The researcher discussed any contradictions with the participants and explored their past health management, which covered the types and outcomes of the management they used.

### Participant's roles

The participants were very important persons who made this program possible and successful. They also had an important role in building up a relationship of trust between the researcher and the participants. Moreover, in this step providing information was an important role of each participant. The details of this role were as follows:

#### Giving information

The participants gave information about the risks of their allergic symptoms, the causes of symptoms, and the effects of symptoms on their lives. They shared their past methods of symptom management. They reported the outcomes of their managements to be both satisfactory and unsatisfactory. This information was very useful for the researcher and the participants for drawing up plans to reach their goals.

#### Social supporter's role

The findings of this study showed that friends and family members, such as spouses or daughters, provided very important support for the participants. They encouraged the participants to get started.

#### Supporting

Participants were supported by their friends and their family members and encouraged to try this method for improving their health conditions. They searched for information on yoga practice, and gave and shared the information with

the participants. Porn was of the opinion that if her husband had not encouraged her and helped her with transportation, she could not have attended the yoga group.

### Strategies

The researcher found that there were important strategies used in the step to understand the situations of persons with allergic respiratory symptoms. These included the relationship and trust between the participants and the researcher. The researcher had to build good relationships with participants by talking and listening to them attentively. In addition, she had to give enough time and useful information to them in order to help them to make the decision to join the study. If they had good relationships, trust would develop between them, which could enable them to collaborate and work together smoothly.

### Facilitating factors

Belief in the yoga system was a facilitating factor in this step. The belief of each person was a very important factor influencing each participant to decide to practice yoga for their health. Yoga is an old complementary therapy that involves helping people strive for perfect union of body, mind, and spirit, through a system of postures, breath control, sounds, relaxation and meditation. The participants believed that practicing yoga could help them manage their symptoms.

### Inhibiting factors

Time was an inhibiting factor in this step. Many participants hoped to practice yoga to improve their health and reduce their symptoms, but they often did not have enough time to do this. They found out that they had many roles to perform. They did not have time to practice yoga even though they wished they could.

### Discussion

In this step, in-depth interviews, TSS, QOL, and aura tests were used for holistic assessment. These methods were holistically appropriate for assessing each person. This step helped the researcher to gather holistic information systematically. Data from this study indicated that there were many symptoms that occur from allergic reactions. Common symptoms found from the data were: sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes. These findings were supported by Bousquet et al. (2008). These symptoms were the results of reactions by the immune system (Koreck, et al, 2005).

The reconnaissance phase revealed the feelings of persons with allergic respiratory symptoms about the effect of their symptoms. TSS and QOL tests presented information perceived by participants. The Aura test presented objective information obtained from instruments. In this step the researcher and the participants identified contradictions together. From the findings of this study, the participants indicated that they had many experiences including feeling sleepy, migraines, drowsiness, dizziness, and headaches. Most of them reported that their symptoms made them suffer. This included: feeling terrible; feeling exhausted; being sleepless;

and being anxious and having physical problems. Leynaert and colleagues (2000) found that the quality of life was impaired for young adult patients with allergic rhinitis. Moreover, allergic rhinitis was associated with impairment in the quality of life and reported problems with social activities, difficulties with daily activities as a result of emotional problems, and poorer mental well-being (Leynaert et al., 2000).

The findings found that allergic respiratory symptoms had social impacts. The cost of treatment impacted on their families. They had to continue using drugs all their lives and the costs were expensive. They were unhappy at work and burdened their colleagues when they had symptoms. Some participants could not work when they experienced symptoms so they lost income. When they had symptoms their family members had to take care of them. These findings were supported by Bousquet et al. (2008) who reported allergic rhinitis was a major chronic respiratory disease because of its prevalence, impact on quality of life and work/school performance, and being an economic burden.

## Step 2 Learning to cope with allergic respiratory symptoms

In this step fifteen participants collaborated to enhance the self-healing process through integrating yoga practice into the process. All participants were diagnosed in hospital and were treated with oral drugs and/or inhalant drugs. The findings reported that the participants had differences in the severity of their symptoms. Six participants perceived their symptoms to be severe. Their symptoms were sufficiently troublesome to interfere with normal daily activity or sleep. Nine participants perceived their symptoms to be moderate, whereby their symptoms were frequently troublesome but did not interfere with normal daily activities or sleep. The details about learning to

cope with allergic respiratory symptoms were different at the initial stage of this step according to the perceived severity of the symptoms as follows:

Severe group: From living with suffering symptoms to an increasing sense of control (see figure 8).

Conditions during this stage; The persons with allergic respiratory symptoms who perceived they suffered severe symptoms always used medicines. They constantly suffered symptoms (sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, and itchy, watery and/or red eyes). These symptoms were sufficiently troublesome to interfere with their normal daily activities or sleep. Six participants perceived they had severe symptoms. They always used oral medicines and/or inhalant drugs when suffering symptoms. Some participants had to go to the emergency department in the hospital for advanced treatment. When they had symptoms they could not work, or when they could, they were not effective. In the reconnaissance phase they suffered from allergic symptoms and the side effects of drugs, and felt they were a burden for their families and colleagues. For example, the participants showed the conditions of this stage as follows:

*“I felt I suffered from the allergic symptoms that I had. I had sneezing, rhinorrhea, and nasal congestion, but with high severity. (Nat, June12, 2006). I could not study and do anything when I had symptoms. I felt like I could not breathe. I had to go to the emergency room at the hospital to receive some drugs for inhalation and oxygen therapy” (Pat, August5, 2006).*

*“When I went to some places that had dust I knew suddenly that my symptoms were worse but I could not avoid that situation. I felt anxious every time when going outside” (Nui, June15, 2006).*

*“I work in an air conditioned room all the time. It made me have chronic allergic respiratory symptoms. I didn’t feel sure how to manage my symptoms because I had to stay in that room all day long. I always get worse every morning when I work. I felt fearful that I would develop other severe conditions” (Porn, October11, 2006).*

The researcher and the participants analyzed and reflected on the problems together and concluded that the problems for this severe group were as follows:

1. Symptoms are severe and difficult to manage

The participants reflected that they felt their symptoms were advanced and difficult to manage. They met the doctors and received many kinds of drugs and they thought their symptoms might develop into other diseases. Nat and Pat reported that when they had severe symptoms they felt like they would nearly die. Pat said that she could not breathe and she had to go to hospital immediately. Toto said that his severe symptom was rhinorrhea. He could not do anything and felt heavy in his head. Porn always had to meet her doctor when suffering her severe symptoms. She felt that she suffered so much and was very unhappy.



Severe group

From living with suffering symptoms to an increasing sense of control

Conditions

- Always having symptoms (sneezing, rhinorrhea, itchy nose, palate and/or throat nasal congestion, and itchy, watery and/or red eyes)
- Perceived severe symptoms
- Always using oral or inhalant drugs

Problems

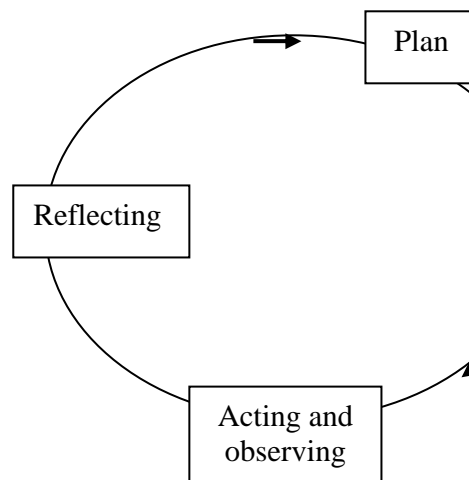
- Lack of knowledge of allergy and yoga
- Lack of confidence to manage symptoms and allergic factors
- Negative feeling (Uncertainty, fear and anxiety)
- Have many side effects from drugs
- Allergic factors increased symptoms

Outcomes

- Self understanding
- Learning to manage severe symptoms 1-2 weeks
- Relieving allergic symptoms from severe to moderate levels
- Feeling of relaxation, peaceful, calm, cool
- Avoiding allergic factors
- Still depending on drugs and tried to bear the side effect of the drugs
- Adjusting handout for knowledge of allergy, languages for yoga practice, and time for practice

Lesson learned of this stage was:

- Severity of symptoms would decrease after relaxation (body and mind)
- Still relied on medicine in combination with yoga practice (rest, deep relaxation, alternate nostril breathing)



Acting and observing

- Holistic assessment
- Workshop (knowledge of respiratory allergy and yoga)
- Allergic factors management
- Rest, deep relaxation,
- Alternate nostril breathing
- Oral or inhalant drugs
- Emotional support
- Go to hospital for advance treatment

Plan

- Holistic assessment and TSS
- Workshop (knowledge of respiratory allergy and yoga)
- Training for yoga practice
- Emotional support

Strategies

- Reflection (understand self and situations )
- Mind-body connection (relaxation, calm, mindfulness)

Facilitating factors

- Trust in nurses and yoga science (allergic respiratory knowledge, skill of yoga practice, and participants' understanding)
- Support from family and friends

Inhibiting factors

- Severity of symptoms: unable to practice many postures

Revised plans

- Allow family's members to join in the program
- Adjusted handout

Figure 8. PAR cycles of severe group

## 2. Lack of knowledge of allergy and yoga

There were different causes and conditions concerning the participants' symptoms. Some of them tried to search for knowledge that related to their symptoms but they stated that they could not understand it. Sometimes they found that the information gained from books did not seem the same as their symptoms. Noi said that she did not understand some technical terms that she had read in some books. Pat tried to find information about her symptoms but, before she believed what she read, she wanted to confirm what she found with someone who had experience her symptoms. Most of them believed that yoga was simply one kind of exercise. They did not understand the principles of yoga and the ways of practicing yoga.

## 3. Lack of confidence to manage symptoms and allergic factors

The members of the group with severe symptoms believed that only drugs could help them manage their symptoms. They carried drugs with them all time. They were not confident about managing their symptoms in other ways, such as without drugs. Pat and Nui thought that if they forgot to bring drugs with them they would be anxious and unhappy all day. Pat said that when she had symptoms and no drugs with her, she would get worse and would recover her normal condition slowly.

## 4. Negative feelings (uncertainty, fear and anxiety)

The severe symptom level had several impacts on participants' feelings. All participants in this group felt anxious about how to manage their symptoms and how to prevent them. Nui, Noi, and Pat felt fearful that their symptoms might get worse and that there might be an impact from the side effects of the drugs they used. Nat feared that she could not breathe when she had severe symptoms. Toto and Porn felt uncertainty if they had severe symptoms; they could not work effectively. They did

not know when these symptoms would occur so this meant that they lived with uncertainty.

#### 5. Suffering from the side effects of drugs

In order to manage severe allergic respiratory symptoms, it was important to participants to use many kinds of drugs to control the symptoms. All of the participants in the severe group had experienced suffering side effects from drugs. Nat, Toto, and Porn believed that they could not work effectively. Nui and Pat said that they could not study after taking drugs.

#### 6. Allergic factors increased the severity of symptoms

The participants reported that allergic factors caused their symptoms to be more severe. Noi said that when she had severe symptoms in the rainy season her symptoms got worse and she had to take more time to manage them. Nat reported that dust made it difficult for her to manage her symptoms.

In this stage the researcher emphasized that the participants manage on their own in order to relieve their symptoms. This was done by using drugs and practicing some yoga postures until the severity of symptoms decreased.

The management process practiced by this group followed the cycle of PAR for enhancing self-healing process through integrating it with yoga practice. The process was as follows:

**Planning:** Holistic assessment was used to assess the participants who were in the severe symptom group. The planning for yoga practice was developed to fit each individual's condition and ability. The researcher planned to share information about knowledge of allergic respiratory symptoms and yoga practice. The researcher

presented and explained the yoga practices followed to the participants. The training plans included: knowledge of allergic respiratory symptoms; yoga and a yoga practice workshop; and activities to be conducted as a result of the practices. Because the participants were in the severe stage, emotional support was necessary to plan appropriate support for each of them.

Action and observation: This study was conducted for the purpose of enhancing the self-healing process through integrating it with yoga practice in persons with allergic respiratory symptoms. The researcher and participants followed their plan by assessing the participants' problems holistically. A yoga practice workshop was provided for the participants either as individuals or as a group. The handouts, based on yogic principles and an audio CD of yoga practice for allergic respiratory symptoms, was given to every participant. The researcher took field notes about what took place. Because of the severity of their symptoms, at this stage they could not practice every posture that they had been planned together. They could do some yoga postures, such as deep relaxation and alternate nostril breathing. They had to use medicine at times and sometimes went to hospital. The participants were encouraged to make self reports about their symptoms. The total symptom and aura scores were assessed after the fourth week. This was done to monitor the state of holistic balance, which was shown by aura pictures, aura sizes, and the yin-yang balance.

Reflection: The participants reflected on their experience of practicing yoga for self-healing. The personal experience, meaning, outcomes, roles, and lessons learned from practicing yoga for self-healing were reflected upon and were used to improve the self-healing process. This reflection was analyzed and again worked

through as part of the reconnaissance phase, and the planning was then revised before entering the next cycle.

The findings in this step indicated that they could understand themselves and their symptoms. They stated that they could learn to manage severe symptoms for 1-2 weeks. They perceived decreasing severity of symptoms from the severe to moderate, and felt relaxed and at peace. They tried to avoid allergic factors, and thought that they still depended on drugs and had some side effects from the drugs. For this step the handout was revised with respect to knowledge of allergies, languages used for yoga practice, and the time needed for practice. After one month, the TSS of 13 participants declined. The aura sizes of five of them were large, another five were a middle size and those of the other five participants were small. The yin-yang of six participants was balanced while that of nine of them was unbalanced.

Moderate group: Learning from increasing sense of control to self-healing (see figure 9)

Conditions of this group: The persons with allergic respiratory symptoms who perceived their symptoms as moderate often used medicines. They frequently had symptoms; sneezing, rhinorrhea, itchy nose and palate and/or throat, nasal congestion, and itchy, watery and/or red eyes. These symptoms were frequently troublesome but did not interfere with normal daily activities or sleep.

There were fifteen participants. Nine of the participants who started the program were perceived as having moderate symptoms. Six of them had developed from the severe to the moderate group. They still often used medicine to manage the symptoms. The researcher and the participants analyzed and reflected on the problems

together and concluded that the problems faced by this moderate group were as follows:

1. They still had some side effects from the drugs that they used. In their management of moderate group, they often used drugs in order to control these symptoms. Most of them suffered the experience of side effects from drugs.

#### 2. Lack of knowledge of allergy and yoga

In this step nine participants enrolled on this study had perceived their symptoms to be at the moderate stage. However, six of them moved from the severe stage after they practice yoga for self-healing at the severe stage. All participants had different experience and knowledge. On their reflecting about this, participants' symptoms had different causes and conditions. Most of them tried to find information that related to their symptoms but were not able to understand about allergic respiratory symptoms. They still did not understand the principles of yoga and the ways of yoga practice.

#### 3. Negative feeling (fear and anxiety)

This group knew about their symptoms and how to prevent them. Muk, Pom, and Na feared their symptoms would get worse and become severe. They also feared the impact of the side effects of drugs when they had to work. Am, Sa, and Nee felt anxious that if they had symptoms they could not work effectively.

#### 4. Allergic factors and increased severity of symptoms

All participants reported that allergic factors made their symptoms more severe. Malai stated that when she had symptoms in the rainy season her symptoms increased severely. Aree reported that dust in the room made her symptoms worst and she then developed severe symptoms.

In this stage the participants concentrated on learning to manage for themselves. This was done in order to relieve their symptoms by practicing the yoga postures until the severity of the symptoms decreased. The management by this group followed the cycles of PAR for enhancing the process of self-healing through integrating it with yoga practice as follows:

Moderate group

Learning from increasing sense of control to self-healing

Conditions

- Often having symptoms (sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes)
- Perceived moderate symptoms
- Sometimes use oral or inhalation drugs

Problems

- Have some side effects from drugs
- Negative feeling (Uncertainty, fear and anxiety)
- Lack of knowledge of allergy and yoga
- Allergic factors increased symptoms

Outcomes

- Self understanding
- Learning to manage moderate symptoms 1-6 weeks
- Decrease severity of symptom from moderate to mild level
- Decrease negative feeling (fear and anxiety)
- Could manage allergic factors
- Eight participants sometimes using drugs and six of them stopped using drugs
- Learning effect of yoga to physical and mind
- Learning how to practice yoga by themselves and friends who had experience
- Practice yoga follow handout but could not integrating in daily life
- Adjusted handout excluded some difficult postures and modified some postures

Lesson learned of this stage was:

- Starting yoga practicing from easy to difficult

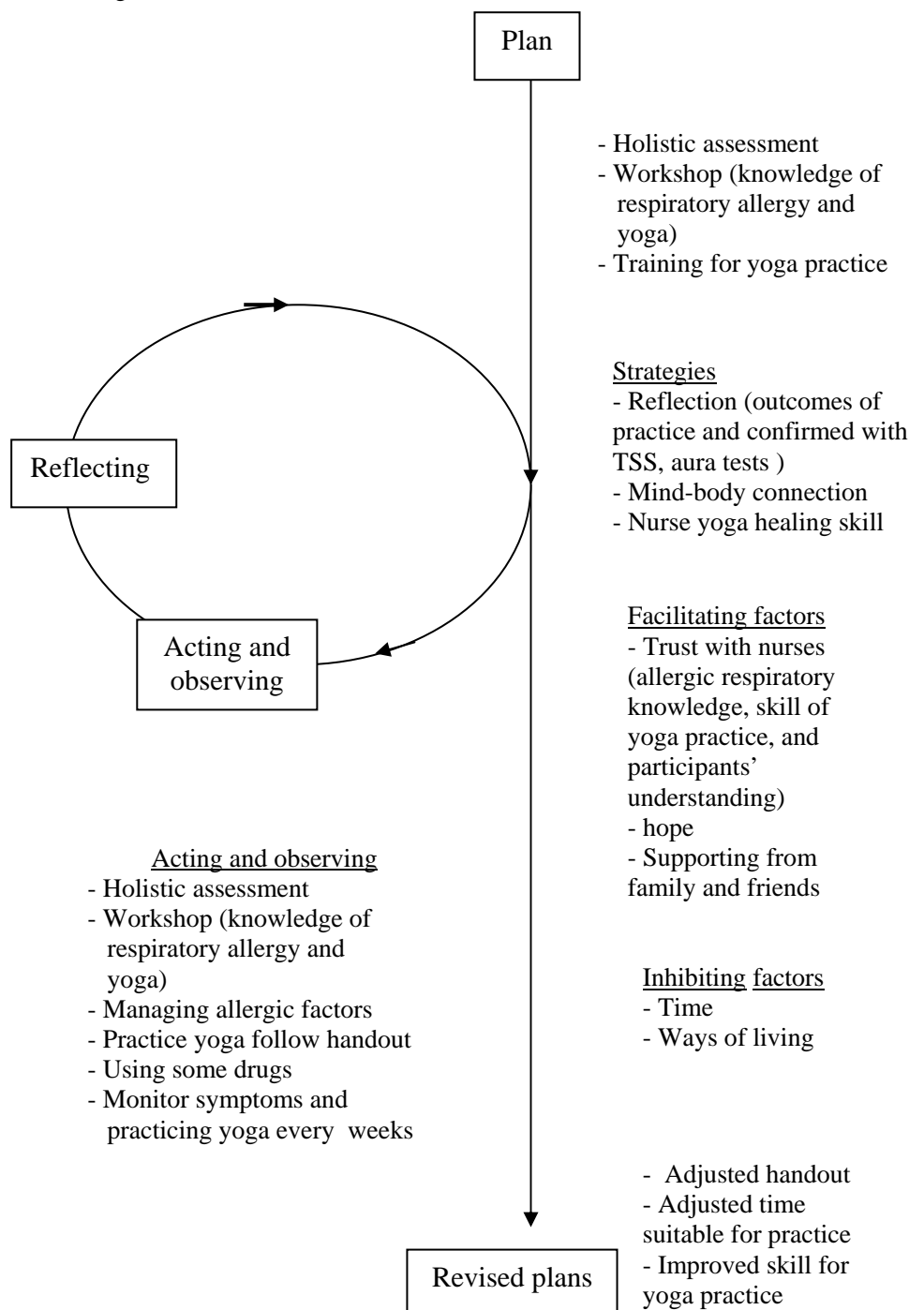


Figure 9. PAR cycles of moderate group



Planning: Holistic assessment was used to assess the participants in the moderate group. The planning for yoga practice was developed to fit each individual's condition and ability. The researcher planned for workshop dealing with knowledge of allergic respiratory symptoms and yoga practice. The training plans included knowledge of allergic respiratory symptoms, yoga principle and a yoga practice workshop.

Action and observation: The researcher and the participants followed the plans by assessing the participants' problems holistically. A yoga practice workshop was provided for the participants as individuals or as a group. The handouts were based on yogic principles, and an audio CD of yoga practice for allergic respiratory symptoms was given to the nine participants with moderate symptoms. The researcher kept field notes about the events that took place. The participants could do all the yoga postures. On occasion they had to use medicine and sometimes went to hospital. They were encouraged to make self-reports about their symptoms. The TSS and aura were assessed after the fourth week in order to monitor their state of holistic balance which was reflected by aura pictures, aura sizes, and aura chakra balance.

Reflections: The participants reflected on their experience of practicing yoga for self-healing. The personal experience, meaning, outcome, roles, and lessons learned from practicing yoga for self-healing were considered. These were used to improve the enhancing of the process of self-healing through integrating yoga practice in it. These reflections were analyzed and again worked through in the reconnaissance phase and plans were revised before entering the next cycle.

The findings from this step showed how the participants thought about their understanding of themselves and their symptoms. They knew about the causes of their symptoms and learned to manage those causes. They also understood the nature of their symptoms. Na thought that she had not thought about her symptoms, as the causes of her symptoms and the environment were related. Now she knew that everything was correlated. Sa and Pat stated that they understood the processes of the symptoms so they felt that their anxiety decreased. Most participants (thirteen) from both groups could learn to manage moderate symptoms over 1-6 weeks whereas the rest still often had symptoms. Moreover, they perceived a decreasing severity of their symptoms, from moderate to mild, and a decreasing frequency of in the occurrence of their symptoms. The participants had experienced fear and were anxious when they had symptoms. However, they felt that these negative feelings were also decreasing these. They could control the allergic factors. Eight participants still sometimes used drugs. During this step the handout was adjusted by excluding some difficult postures and modifying some other postures After two months, the TSS showed that nine of them had the same score they had after one month, the score of three of had gone down while another three had increased scores. The aura sizes of six of them were large, seven participants had a middle size, and two were small. The yin-yang of four participants was balanced, ten of them were unbalanced, and one was very unbalanced.

This step indicated that the researcher tried to help participants learn how to practice yoga, and a yoga training workshop for was introduced. This step provided individual and group training. Some participants moved from the group with severe symptoms to the group with moderate ones, while others with moderate symptoms

started to take part in this study. However, as they started with different symptoms they were able to reflect on how they learned to cope with their symptoms.

The turning point experienced by the participants who had severe symptoms was the move from learning to live with the symptoms of suffering to having an increasing sense of control. Two themes emerged in this group: learning the way to practice yoga by using deep relaxation and alternate nostril breathing; and perceiving the positive effects of yoga practice.

Learning the way to practice yoga using deep relaxation and alternate nostril breathing

Four participants who had severe symptoms tried to practice postures as much as they could. They reported that many postures were difficult for them when they had severe symptoms. At the beginning they felt after doing yoga they experienced more symptoms. Their bodies were not flexible, and so they felt more pain and were not relaxed. Moreover, they sometimes felt their symptoms were more severe than in previous times. They made efforts to do yoga practice. This is shown in the following statements by participants:

*“It was very different from other exercises. After the first time I thought I got more symptoms that were more severe. I thought that because of my severe symptoms I could do some postures and I felt relaxed, such as during deep relaxation. I could do it many times a day” (Porn, 10/28/2006).*

*“For me, I think if I got severe symptoms I could start with Anuloma-Viloma (alternate nostril) and deep relaxation. I could not do some difficult postures. The last time when I tried to do the Sun salutation posture I felt that my symptoms got worse”. (Nui, 09/18/2006).*

*“I felt my head was heavy when I did some postures such as when I had to bend forward until the fingers or palms of my hands touched the floor on either side of my feet. I think when I got severe symptoms because of this I could not do any postures except breathing control and deep relaxation” (Pat, 08/28/2006).*

The participants reported that they agreed to start with alternate nostril breathing and deep relaxation in the first week, and those who had severe symptoms added some simple postures the following week. They felt that starting from easier postures might be better. When they were familiar with these postures and their severe symptoms decreased, then they could go on to other postures.

*“ I think yoga practice should go from easy to difficult postures. My symptoms were important factors that limited my ability to practice. So I agreed with others to start with breathing and relaxation, and added other postures when this was practical” (Porn, 10/25/2006).*

Four participants learned the ways to practice yoga that were appropriate for them. They learned which method was suitable and what could help them do it, and they began to perceive the benefit of their practice. They thought that they understood themselves better. Their fear and anxiety decreased when they understood and could

manage their allergic factors. This is exemplified by the following participants' statements:

*“At first when I started with deep relaxation I felt good after I did alternate nostril breathing. I could get more air and felt peaceful in my mind. I felt comfortable, relaxed and relieved from the symptoms” (Noi, 08/10/2006).*

*“When I practice deep relaxation I feel relaxed. This allows me to learn and understand myself. I understand why my symptoms got worse. I was not aware and concerned about the factors causing the allergic symptoms. I thought that medicine could help me solve the problems. Now I know that I should pay more attention to my health” (Toto, 10/14/2006).*

#### Perceived positive effects of yoga practice

Four participants in the group with severe symptoms learned ways to practice yoga that were appropriate for them. Even though the postures that the participants could practice were limited, they could still experience the benefits of practice. They could manage their allergic factors. They stressed that they felt comfortable, and relaxed. They gained more sense of control. Thus the feelings of fear and anxiety decreased. This is exemplified by the following statements by participants:

*“At first when I started with deep relaxation I felt good after I did alternate nostril breathing. I could get more air and peace in my mind. I felt comfortable, relaxed and relieved from the symptoms” (Noi, 08/10/2006).*

*“When I practice deep relaxation I feel relaxed. This allows me to learn about and understand myself. I understood why my symptoms got worse. I was not aware and concerned about the factors causing the allergic symptoms. I used to rely heavily on medicines. Now I know that I should pay more attention to myself” (Toto, 10/14/2006).*

The turning point experienced by the participants with moderate symptoms was learning from an increasing sense of control to self-healing. There were three themes that emerged from this group.

Learning the ways to practice yoga by understanding yoga principles and yoga techniques

The participants who had moderate symptoms reported that all of information about respiratory allergies and yoga that they received in this study was very important to them. It made them more understanding about their condition. Nat and Porn stated that they tried to find information about their diseases but they did not understand what they found. Some books used difficult words so they thought that knowledge about their disease was the responsibility of physician and nurses. When they understood their condition they could manage it easier. In addition, they could understand the principles of yoga, which they could not previously understand. They understood more about yoga practice in term of practice techniques and benefits. They learned more about the techniques of yoga practice and this helped them to manage their symptoms. They stated that yoga helped them connect their minds with their bodies. For example, the participants observed:

*“After I joined the yoga workshop I could understand the objective of yoga more and understand about awareness when I did yoga postures. I thought one thing that was difficult for me was trying to focus my mind on my body when I did these postures. Now I thought I could do it well” (Am, 10/05/2006).*

*“I could not do some postures well, such as the tree posture. I could not stand on one leg and balance my body. When I focus now by looking on a fixed point in front of the body at the eye level, I can balance my body and mind more easily” (Sa, 08/26/2006).*

The participants thought that the sequence for yoga practice was suitable. This program started with warm up sessions, postures, and finished with relaxation. Moreover, in the case of the severe group when they improve and became a moderate group, they agreed with their tentative sequence of processes. They could follow the model well. In addition, they reported that practicing in a group was helpful for them. One participant shared her experience by saying that:

*“I thought the sequence of this yoga practice was suitable. It started with a warm up session and continued with the postures and finished with deep relaxation. I liked to practice at the center. I did not like practicing alone in my home because at the center I could talk and share experience of yoga practice with other participants. I thought I could learn many things from the group” (Ging, 11/15/2006).*

They reported that they learned slowly about practicing. The participants shared their stories:

*“When I practiced yoga I was encouraged to focus my mind on postures and did it slowly. When I first joined the class I didn’t know why I should be doing it slowly. I felt that I had to pay attention a lot. I felt very tired” (Aree, 09/12/2006).*

*“I could not do abdominal breathing well. When I did it I felt like I forced the movement of inhaling and exhaling so I felt tired and not relaxed. In Kapalbhathi (cleansing breath) I also felt tired at the beginning” (Na, 10/15/2006).*

*“Now my symptoms were relieved I could work normally. I did not take medicine. I could follow this yoga practice and my friends in the group could help support each other” (Sa, 09/28/2006).*

The participants believed that they needed more time to learn and practice this program. Some of them wanted to practice some postures more in order to remember them as they could do them by themselves. The following statements illustrate this:

*“Sometimes the nurse led the practice very quickly; I could not follow. Some postures were difficult for me the first time but when I practiced more and more I liked it” (Na, 10/15/2006).*

*“I thought there was not enough time for the deep relaxation session. If it was possible to arrange more time for this session, it would be better” (Porn, 12/08/2006).*



### Perceiving positive effects of yoga

Learning about the effects of yoga encouraged the participants to continue practicing yoga for self-healing. Even though some of them thought that some postures of yoga were difficult, they still tried to continue practicing it.

#### 1. Perceived positive effects of respiratory functions

At this stage most of them still had allergic respiratory symptoms. Some felt that they could not practice yoga correctly as it made them tired. After four weeks most of them practiced it well, and had experienced the positive effects on their breathing. They felt their breath flowed more easily and their bodies were more flexible after doing these postures. The participants stated that:

*“I felt I could balance my body and mind. Some postures stimulate respiratory functions which make me clear my respiratory tract, such as Fish Posture (Matsyasana), Locust posture (shalabhasana), and Cobra (Bhujangasana). I felt I could do it well” (Na, 11/10/2006).*

Most participants reported that many yoga postures did improve their respiratory functions. They reported that the respiratory tract was clear and they were able to get more air into their lungs. The examples of improvement in the respiratory functions are reflected in the following:

*“Some postures can stimulate circulation and internal abdominal organs. I felt that they helped improve the breathing, such as the Fish Posture (Matsyasana), Locust Posture (shalabhasana), and Cobra (Bhujangasana). I sometimes did not need medicine to relieve my respiratory symptoms” (Am, 09/11/2006).*

After four and eight weeks the aura chakra reports showed results, such as the aura pictures, aura sizes, aura colors, and yin-yang balance. These results helped them to understand their condition better. Nui, Am, and Noi felt excited that their aura results confirmed what they thought about their yoga practice. Examples of the aura reports are shown in Table 5. The aura results provided scientific evidence of human body energy. They demonstrated that a state of balance in the human body's system brought about a human aura of normal state, with the rights size, color, and the yin-yang in balance. The rest of the participants did not show positive results with respect to their auras, but they still thought that their yoga practice had some positive effects. These aura results indicated that these participants were at the stage of learning and developing.

## 2. Reduction of allergic respiratory symptoms










The participants reported that their allergic respiratory symptoms decreased even though most of the symptoms still existed. However, they tried to use yoga to manage their symptoms. This is shown in the following example:

*“I still have symptoms but not as often as before, and with less severity than previous times. I feel good and relaxed. Sometimes I do not use medicine. After practicing some postures and relaxation technique for thirty minutes I feel better” (Ging, 10/12/2006).*

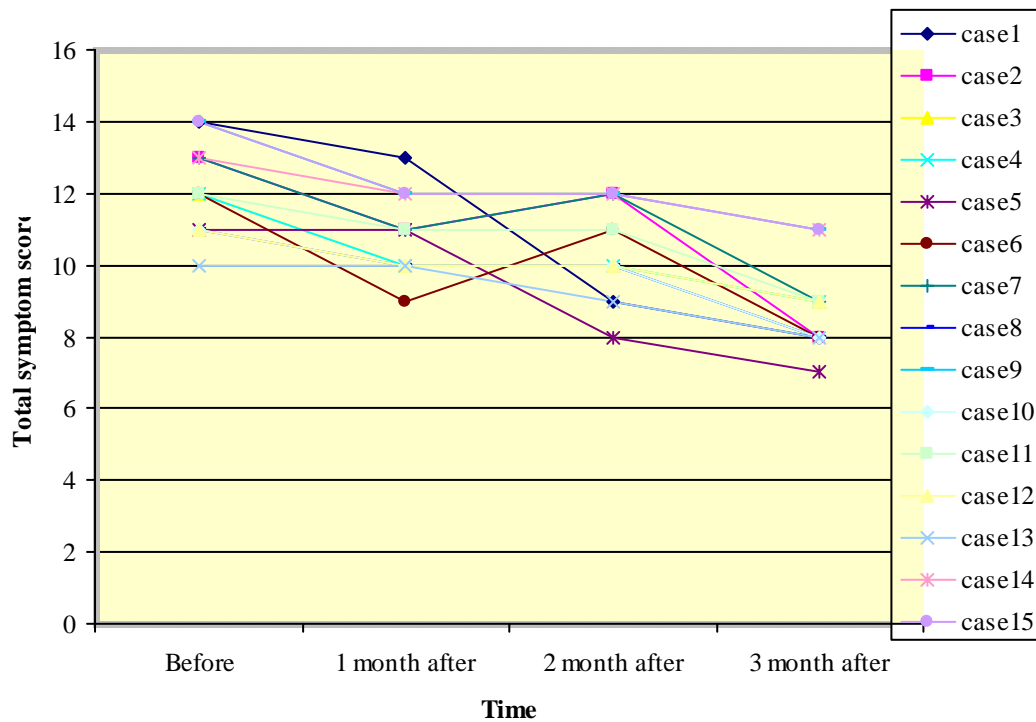
Porn (12/04/2006) shared her experiences and said that she felt that her symptoms decreased. Some days she felt very good because she did not have any symptoms and she worked happily.

Table 5

*The aura of the participants at before, one and after two months*

Case	Yoga practice	Aura Picture	Aura Size	Aura color	Yin-Yang
Nui	Before		60%	Yellow	unbalanced
	After 1 month		50%	Green	unbalanced
	After 2 months		80%	Yellow orange	balanced
Am	Before		70%	Indigo	very unbalanced
	After 1 month		40%	Deep green	unbalanced
	After 2 months		60%	Yellow	unbalanced
Noi	Before		60%	Yellow	unbalanced
	After 1 month		80%	Green yellow	balanced
	After 2 months		70%	Orange yellow	balanced

The total symptom score of the participants after one, two, and three months showed that the symptoms of most participants decreased. The participants' TSS is shown in figure 10.



*Figure 10.* Total Symptom Score comparing the scores before the yoga practice at one month, two months, and three months after the yoga practice

### 3. Mindfulness and self awareness

The participants found that they were more mindful and self aware after practicing yoga. Yoga practice did not only engage the body in movement,, it also brought about concentration of the mind along with the body movement. As a result, mindfulness and self awareness were developed. Muk stated that in her practice she did yoga slowly. Her mind was then able to follow together with her body; that helped cultivate mindfulness, as illustrated in the statement below:

*“I loved Sun Salutation postures so much. It was so excellent for me because each of the postures combines the movement and breathing and I could do them continuously. I thought that it could affect me in both on my body and mind. I had more concentration and I thought that it led me to a peaceful mind while I was practicing” (Sa, 09/02/2006).*

The participants used yoga principles to guide their practices and to cope with other problems. Concentrating the mind during the yoga practice allowed the participants to gain greater self awareness. They realized and understood much more about the self. The participants reported that they had greater awareness during their practice. Self awareness helped the participants could gain more understanding of the self and their situations. They learned how to practice yoga it safely. They tried to apply their awareness at work and when doing other things. They reported that self awareness could guide them to a state of balance. Some participants made statements about this:

*“Yoga taught me to think before taking action and I was quite mindful all the time. I thought that yoga led me to change of my inner self. My thought began to change and I understood more my feelings and attitudes. I thought it made me happy. I observed that I was not anxious about my symptoms. I understood the causes of them when it occurred to me and I tried to manage and live with these symptoms naturally” (Toto, 12/12/2006).*

*“I now did not feel fearful or anxious. I understood my symptoms. I thought I had more confidence to manage them and was ready to face them when I had an attack” (Pat, 09/14/2006).*

*“I thought after I monitored the aura the results stimulated me to be aware of my condition of health and guided me to maintain a balance. I was excited every time when I saw the results after the test” (Toto, 12/12/2006).*

All participants reported that yoga made them relaxed. Feelings of relaxation always arose after yoga practice. This was the consequence of a complete merging of their physical bodies and minds while practicing yoga. The participants believed that during their yoga experiences they felt something was changing. In addition, they sometimes sensed that these changes made them feel fresh, relaxed, and at peace in their minds and bodies.

*“I am not sure or I don’t know how to explain what I feel. When I tried to focus my mind with my body it made me understanding myself better. For example, I focus my mind on my breathing (inhale and exhale). I could follow my breathing continually. I did not think about anything. I felt more awareness while practice yoga. My mind turned from anywhere toward practicing (Pat, 09/27/2006).*

*“I liked the sessions on deep relaxation. I feel what it is to be charged with energy in my body and I felt no tiredness after practicing it. I feel relaxed and peaceful in my mind and body” (Na, 09/27/2006).*

*“I felt relaxed when I did these lying postures especially Corpse Pose (Savasana). Yoga was a type of meditation in my view” (Malai, 09/27/2006).*

*“The breathing control postures (pranayama) made me peaceful and I felt I could get more air. I did not feel tired after the practice or after work. So I felt happier. Now I could do this set of the program well” (Nat, 09/22/2006).*

#### 4. Perceived inner energy

Twelve participants expressed their inner feelings. They perceived that they had more energy after doing some postures such as the Wheel posture, Sun Salutation posture, and Fist posture. They reported that they were fresh and felt more powerful to do anything. These ideas are shown by the following participants' statements:

*"I felt energy flowing in my body and felt my tiredness was gone after deep relaxation. The results of aura test let me know about myself. I could understand my inner energy which I never did before (Malai, 10/15/2006).*

*I felt that it occurred in my body but I could not express in words that I felt energy moving through my both hands" (Noi, 11/02/2006).*

Perceived inner change and other objective evidence as a result of yoga practice

The participants learned to use aura tests, total symptom scores, and self reports to encourage them to reach their goals. They thought this objective evidence would help them know about their inner selves. They understood their energy. These tests could stimulate them to practice by themselves.

*“I thought the aura test helped reflect my inner self. I could understand my inner energy which I did not know about before. This test could be used to monitor the progress of my practice leading to a balanced and healthy life. I was excited every time when I saw the aura result after taking the test” (Noi, 09/20/2006).*

*“I could learn to look back inside myself and know about being peaceful in my mind when I practiced breathing postures (pranayama). I felt like energy was running in my body. I thought yoga was suitable for me and I thought I could do it well. It was not difficult” (Nui, 08/27/2006).*

Most of participants obtained positive benefits. They reported that they could remember all postures after practicing for a month. They learned the outcomes that were beneficial to both their bodies and minds. They learned that their respiratory functions and other physical functions were improved. Participants stated the following:

*“I tried to practice and remember all yoga postures. After four weeks of continuing practice I began to learn the outcomes. For example I thought the set of joint exercises is good for me. This set of postures made me feel flexible in my joints and muscles .....” (Aree, 09/15/2006).*

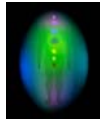
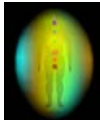
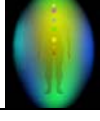
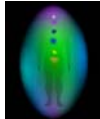
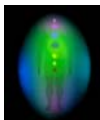
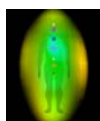
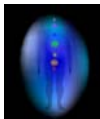
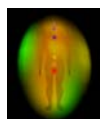
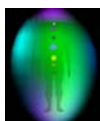
*“I still had symptoms but not often and less severely than the previous time. I felt good and relaxed. Sometimes I did not use medicines. I felt my body was flexible after practicing yoga. I could feel my body energy flowing throughout the body.....It meant that after the practice it I was still fresh and could continue working, and was not tired” (Na, 11/20/2006).*



After two months the aura chakra reports showed the change of aura pictures, aura sizes, aura colors, and yin-yang balance. The aura results of some participants showed that they were still at the unbalanced stage. Thus three of the participants' experienced negative effects after two months of yoga practice and this was confirmed by the test. Nat stated that she went to work outside her office and was in contact with dust for some weeks so sometimes her symptoms came back. Sa (a student) had much homework and had not had enough sleep. Na said that her symptoms came back because of to a weather change. Examples of the aura reports are shown in Table 6.

Table 6

*The aura of participants before, after one and after two months of the practice*

Case	Yoga practice	Aura Picture	Aura Size	Aura color	Yin-Yang
Nat	Before		40%	Deep green	balanced
	After 1 month		60%	Yellow	unbalanced
	After 2 months		90%	Yellow	unbalanced
Sa	Before		40%	Deep green	unbalanced
	After 1 month		60%	Deep green	unbalanced
	After 2 months		60%	Green yellow	Very unbalanced
Na	Before		40%	Indigo	unbalanced
	After 1 month		40%	Orange	balanced
	After 2 months		90%	Green	unbalanced

In stage two the participants were in the process of learning to cope with their allergic respiratory symptoms. As a result some of them were not consistent in their

practice or the way their behavior changed. All the participants in the group with severe symptom shifted from having severe to having moderate symptoms. However, the change took place over different lengths of time, from between one week and six weeks. This depended on how well each individual practiced, and how focused they were. However, some of the participants in the group with moderate symptoms faced problems. Their state of health condition might shift to and fro between them having severe and moderate symptoms. This was so until their condition settled and their symptoms were moderate. They then moved to stage three, the one concerned with integrating yoga into their daily life.

#### Lessons Learned

From their reports the participants in the severe group should start with relaxation and *pranayama* (alternate nostril) given their severe symptoms. They could not do many postures at the beginning. The findings in this step showed that some difficult postures were not appropriate for persons with severe allergic respiratory symptoms. They could not do these postures. Some of them felt uncomfortable or had muscle pains. Other participants reported that they had to force their bodies and their minds very much when they practiced these postures. They thought that they could not relax their bodies and their minds were not at peace. This information was usually obtained from participants during the first and second weeks. If they moved on beyond this period they felt better. In this step, the participants experienced some of the effects of yoga on their symptoms after practicing for four weeks. These experiences were reported by the participants and were confirmed by the TSS and

aura tests. The severity of six participants in the study had changed and they moved from the severe group to the moderate group.

The participants who reported moderate symptoms could practice most of the yoga postures. They reflected that they learned to practice by going from easy to difficult postures. Some difficult postures such as the Camel posture and Psychic Union posture were excluded. Noi, Aree, Muk, and Pat thought that they would prefer to start to practice from the easy to the difficult postures and suggested that the pictures of yoga postures should be added in the handouts for every step. This handout should be simple and easily understood.

After the yoga workshop all participants could practice yoga for self-healing. The researcher provided yoga lesson for them at the study site at least three times a week and allowed them to share their experiences with friends. As the participants were from 19 to 60 years old and had different levels of symptoms, they had different experiences to share during the discussion sessions with their friends. The experiences gained from their groups encouraged and increased their confidence to undertake yoga practice relating to allergic conditions and self-healing.

#### Nurse's roles

The nurse took many activities in this step in order to help and encourage participants to manage and participate in yoga practice. In this step researcher's role as nurse were identified. The details were as follows:

### Holistic Assessing

The nurse had to assess them holistically in order to gain more understanding of their situations and to plan together with the participants. She assessed the participants regarding the meaning of their illness, their background, and their social contacts. The experience of yoga practice was assessed concerning the participants who moved from experiencing severe symptoms to moderate after practicing yoga.

The nurse explored their situations and identified their problems. The interviews covered physical, spiritual and psycho-social aspects. She used aura tests to assess the state of balance and energy levels. She encouraged the participants to use the total symptom score to assess their present symptoms. The quality of life score was also used to assess the participants at the time of the first meeting. The nurse explored the participants' past experience of symptoms management. The discussion covered the use of complementary therapies and the outcomes of practice, including the limitation of those they previously practiced. The nurse and the participants established good relationships throughout the study. She guided the participants to use yoga as a means of understand the self with regards to the ability to practice yoga, and to use aura tests to reflect their holistic health.

### Educating and training

The nurse provided information about the principles of yoga, and yoga practice which consisted of physical postures, breathing control, and relaxation. She explained about the benefits of yoga practice to the body, mind and spirit. She used research evidence to ensure their willingness to practice in order to relieve allergic

respiratory symptoms (Bhattacharya, et al., 2002; Birkel & Edgren, 2000; Bousquet et al., 2005; Cooper et al., 2003). Many studies have reported that yoga practice could improve pulmonary functions, promote relaxation, decrease the use of medication, and increase the quality of life in persons with allergic respiratory symptoms. For the participants who had severe symptoms, the nurse helped select yoga sets appropriate to their health condition, and it was agreed to use alternate nostril breathing and deep relaxation to start.

The nurse affirmed how yoga was helpful for persons with allergic respiratory symptoms. In addition, some participants, after their experience of yoga practice in the pilot study, had reduced their severe symptoms to moderate. The nurse encouraged them to share their experiences with friends to make them more confident about practicing yoga for self-healing. She enabled those with allergic respiratory symptoms to practice with the study participants in order for them to understand the yoga practiced in this program.

The nurse provided ways of using yoga for self-healing on the part of persons with allergic respiratory symptoms. The principles of yoga, yoga practice, the benefits of yoga, and general instructions for yoga practice were provided for support to the participants. Handouts and an audio CD were introduced and modified after the initial stage. These focused on self-healing by persons with allergic respiratory symptoms.

The nurse provided workshops on yoga for self-healing for individuals and groups of participants. Five participants received individual training. Ten participants had group training with two and three participants in each group. This

workshop training consisted of: lectures on respiratory allergies; knowledge of yoga; demonstrations and repeat demonstrations; practicing yoga, reflecting on experiences; and discussing the practices followed. The nurse trained the participants to observe their feelings and the changes that occurred after each practice and allowed them to consult with the nurse at all times.

### Supporting

The nurse provided support to the participants for them to continue practicing yoga for self-healing, especially emotional support. She discussed with the participants their emotional problems, such as their suffering from symptoms, uncertainty, fear, and anxiety. Moreover, the researcher took up the role as a supporter to the participants in order to help them gain sufficient knowledge and skills for yoga practicing. She provided yoga classes for participants of one hour and a half three times a week. She provided them with a clean and quiet room for this practice. There were yoga posters, yoga books, and an audio CD available in this room. She offered to discuss relevant matters with participants at any time both at the practice site and by telephone. The nurse consulted with persons who had experience of yoga practice, so that she could share their experiences with the participants. This helped them understand more about the concept and practice of yoga. She also coordinated with the participants' friends and family members to help empower the participants to practice yoga.

### Empowering

After four weeks all of the participants had learned to practice yoga. The nurse used her role to empower the participants to continue practicing yoga by using many strategies.

The nurse encouraged the participants to share their experience of yoga practice with their friends at the practice site after their yoga practice. She also encouraged successful participants to share yoga practice with other participants who had some problems or obstacles related to the practice. For example, the nurse empowered Muk to share her experience with Sa and Noi regarding ways of practicing yoga, the benefits to be gained and to encourage them to continue their practice.

The nurse empowered the persons with allergic respiratory symptoms through their families' members. She allowed and facilitated them to join the class when the participants practiced yoga. Na explained that her daughter practiced yoga with her in this program. Her daughter's presence encouraged her to practice. This was very helpful and allowed her family to understand her condition. Porn reported that from the time the nurse allowed her husband to join the workshop and yoga class, she had received encouragement from her husband. Thus she was able to continue with her practice.

The nurse empowered the persons with allergic respiratory symptoms through their friends who were healthy and had experience of yoga. She encouraged them to share their experience from the practice of yoga with the persons with allergic respiratory symptoms and allowed them to join in the class.



The nurse empowered the participants for practicing yoga in the early stage (the first two weeks) because this stage required them to make the decision to continue using yoga for self-healing. If they did not enjoy or succeed in their practice at this stage they might have stopped participating in the program. Furthermore, the researcher allowed the participants' friends and family's members who were not participating in this study to join in the yoga practice. This was in order to empower and encourage them to continue this practice.

#### Participant's role

The participants were very important persons who made this program successful. At this stage the important participant's roles were identified. The roles were as follows:

##### Giving information

The participants gave information about their symptoms, feelings, and yoga. They expressed their understanding of their situation, the meaning of their illness, and their perception of their symptoms which covered physical, psycho-social and spiritual aspects. They also gave information about their past experience in managing their symptoms. They believed that yoga practice might give them relief from their symptoms. They made the decision to use yoga for self-healing for several reasons. Some of them believed in and appreciated the practice of yoga, while others used it as a supplementary treatment because it was non-invasive. The rest had faith in their yoga teacher. After they received information about yoga, practiced it and

believed it was helpful to them, they made the decision to continue using yoga to improve their health. For example, Muk reported that:

*“I did not believe that yoga could help and benefit the persons with allergic respiratory symptoms at first. After I tried practicing it for the first week I felt better; I did not know how to describe the feeling. I thought that after I practiced yoga I felt relaxed. I thought that I had met the best thing that was suitable for me. I will continue my practice”*

#### Participating

This role is very important because this program is activity based. The participants' were involved in the activity and practiced yoga themselves. They joined the workshop in order to learn the concepts of yoga and be trained in the practice. They participated at every step including: making plans with the researcher; practicing yoga at least three times a week; reporting their feelings and the effects of the practice; reflecting on what they were doing; and revising their plans with the researcher. This is reflected in the following statements by participants:

*“It is my responsibility to do something to be healthier. I think that we should not rely on others. I should practice yoga for improving my health. I could understand myself better. I learned more when I discussed yoga with my friend and the nurse about what had happened to me” (Na, 08/20/2006).*

#### Observing and reflecting

The participants observed the effects of using yoga for coping with their symptoms; they learned about positive changes in their bodies and minds. They observed and recorded these changes in their self-reporting. Noi reported that she

observed the effects of her practicing yoga, so she reflected and discussed with the researcher what was happening to her body. She reflected on the effects of relaxation on her symptoms. The participants also thought about their learning and developing effective strategies that they used as they continued to practice yoga.

#### Self-management

Self-management by the participants in this stage consisted of: holistic assessment, managing their allergic respiratory symptoms; practicing yoga postures, including alternate nostril breathing and deep relaxation; using oral or/and inhalant medicine; and going to the hospital when suffering severe symptoms (this applied to participants with severe symptoms). For the participants who suffered moderate symptoms self-management consisted of: yoga postures, including *asanas* and *pranayama*; relaxation; and occasional use of oral or/and inhalant medicine.

Holistic assessment, which covered the physical, psychological, social, and spiritual dimensions, was used to assess the participants. The participants and the researcher collaborated as follows: assessing the symptoms; assessing the causes of the symptoms; and assessing the effects of symptoms. The following were also dealt with: the meaning of their illness, their backgrounds; and the social context of the participants. These were considered in order to help the participants understand themselves, their state of health, and any related factors. The experience of learning to use yoga was appropriately assessed at this stage in order to apply yoga practice for self-healing in a suitable way.

Management of the allergic respiratory risk factors was carried out to avoid the onset of the allergic symptoms. The management processes they usually

used included avoiding the places where there were allergic factors and keeping the body warm when suffering from symptoms. The participants could manage the allergic factors in order to relieve symptoms and could manage to prevent suffering from the symptoms (see appendix G).

A set of yoga postures for the persons with allergic respiratory symptoms was prescribed for the participants who suffered severe symptoms. The following sequence was prescribed:

1. Start by resting and sitting with the legs stretched out, feet apart, hands behind the buttock;
2. Lean slightly backward, support the weight with both hands, and keeping the back straight;
3. Relax the whole body or lie on the back with hands extended along the body, keeping the feet apart and allowing the toes to point outside;
4. Place both the hands on the sides at a distance from the body, with the fingers in a semi-flexed condition;
5. Keep the head in the most convenient position, close the eyes and start moderately deep abdominal breathing, paying attention to the flow of the breath at the nose;
6. Relax deeply with an awakening mind.

The lying posture relaxes the body and mind, relieves stress and anxiety, and makes the mind quiet. The participants then closes their eyes and breathe deeply, then simply breathe and relax; and breathe through alternate nostrils (*pranayama*) by inhaling through one nostril, retaining the breath, and exhaling through the other nostril. The left nostril is the path of the *nadi* called *ida*, and the

right nostril is the path of the *nadi* called *pingala*. Alternate nostril breathing restores, equalizes and balances the flow of *prana* in the body. (see appendix G). This set of yoga posture allows the heart chakra to open. Breathing the universal energy contained within the lungs starts to affect the whole body by recharging the circulatory system with this energy. The aura or human energy field starts to expand. In this way people start to become more relaxed.

The following set of yoga postures were used for the participants with moderate symptoms. First a set of postures were followed to exercise the joints (a warm up of 10 minutes). The following were then done in sequence: a set of standing postures (25 minutes); sitting postures (25 minutes); lying postures (15 minutes); and deep relaxation with the Corpse Pose (*Savasana*) (15 minutes). This yoga practice lasted one hour and a half and took place three times a week (see appendix G).

*Using oral or /and inhalation medicines to manage symptoms:* the participants usually took antihistamine, decongestamine, and/ or steroid inhalation.

*Go to hospital when having severe symptoms and could not manage:* the participants would go to the hospital to receive advanced treatment such as inhaling with bronchodilator drugs, or injected drugs. Nat, Pat and Porn reported that they often went to hospital when they suffered severe symptoms.

#### Social supporter's role

The findings of this study show that the participants' friends and family members were very important supporters for them as they continued practicing yoga. Normally participants did not come alone to the study site, and they asked the

researcher if healthy friends or family members could come and join in this project. Their roles were identified as: supporting, facilitating, and empowering.

### Supporting

Friends and their family members of the persons with allergic respiratory symptoms were encouraged to come to the group in order to learn how to practice yoga in this program. The participants indicated that they could share with them ideas about the ways of practicing yoga and the effects of yoga practice. The participants could support each others because sometimes they faced similar problems so they could share their experiences in solving problems. Some participants might feel tired, suffer muscle pains, or be unable to do the postures. The encouragement they had received from their families and their friends was crucial in boosting them in order to continue with the program.

### Empowering

Some participants might sometimes feel tired, experience muscle pains, or be unable to do the postures. The encouragement they received from their families and friends was a crucial factor in getting them to continue on the program. Friends and their family members gave information about alternative ways of helping the participants to manage their allergic respiratory symptoms. They also encouraged the participants to join the group in order to learn the how to practice yoga.

## Strategies

The researcher found that the strategies used at this stage were reflection, mind-body connection, and using a nurse's yoga healing skills.

Reflection in this stage emphasized the ways of practicing yoga. When they started to practice the exercises, the participants with severe symptoms could not follow all the postures in the program. Some of them thought that they got worse after they practiced, so it was necessary to select the postures that were appropriate for them. The participants learned to practice yoga in order to gain more understanding about the techniques used in practice and their benefits. They thought about their experiences in order to manage their symptoms by using yoga practice. They had different experiences and they shared their experiences and techniques with others.

The mind-body connection was an important strategy that helped lead to self-healing. The researcher provided them with training and guided them to understand the techniques used by first starting with easy ones before going on to more difficult ones. Thus they began by practicing relaxation techniques; when the mind was relaxed the body would be comfortable. She tried to encourage the participants to practice from the first practice steps. Toto and Porn believed that they could do postures and felt relaxed if their minds and their bodies were together. They might concentrate their minds on the *asanas* (postures) or breathing when they rested. A critical technique was to take their minds away from their thoughts. The participants stressed that this strategy was very useful and made them feel that they could practice real yoga not just follow an exercise.

The nurse's yoga healing skills provided an important strategy in this stage because she trained the participants to practice yoga in a correct way. She understood the principles of yoga, yoga practice, and the way to integrate them in participants' lives. She guided the participants in the right way when learning to practice yoga and they saw the benefit of their yoga practice. The participants had different abilities in practicing yoga, so the nurse could consider each and help them to practice safely and thus get most benefit from their practice.

#### Facilitating factors

In the severe group, the participants had experienced great suffering, so trust was necessary for them. They had to make sure that this way would not make them get worse. If they trusted the nurse to help them get better, or believed that the method could benefit them in dealing with their symptoms, they would practice more effectively.

The findings in this stage indicated that social support from friends and family members facilitated the persons with allergic respiratory symptoms in starting and continuing their yoga practice. Some of them provided the participants with transportation to the yoga lesson and accompanied them.

The participants in this stage hoped that this yoga practice would help them manage their symptoms, so most of them tried to practice and discuss what happened to them. They hoped that yoga practice would decrease their symptoms. Malai said that she joined this study because she hoped that her symptoms would decrease and leave her.



Trust was a factor that helped participants believe in yoga as a way to manage their problems. They trusted in the principles of yoga, the researcher as a nurse, and the institute. The research was established in an institution that was very popular in promoting eastern ways of health practices. Nat and Noi explained that they searched for information about yoga and believed that yoga would be good for them. They associated yoga practice with the researcher who was a nurse in a famous yoga institute; this gave them a feeling of trust.

#### Inhibiting factors

The severity of the symptoms was an inhibiting factor in this stage. Most of the participants with severe symptoms had limitations in practicing some postures. This was in accord with how severe their symptoms were. They thus had to select some postures that were appropriate to their abilities. However, the participants took more time to practice yoga, but some of them had to work and they could not join the program. Ten participants were employees whereas the rest were students. They had work and/or study commitments. However, they committed themselves to practicing yoga at home at least three times a week.

#### Self-healing outcomes

At this stage the participants learned to use yoga for managing their symptoms. They perceived the effects of yoga on their health. Yoga *asana*, *pranayama*, and relaxation brought them to the state of being aware of the mind-body connection. This made them feel relaxed, calm, and fully aware. They noted their

symptoms decreasing in severity and frequency. Yoga practice helped the participants as their negative feelings (fear, and anxiety) decreased. They learned to practice yoga for self-healing.

### Discussion

The participants with allergic respiratory symptoms had perceived their symptoms differently; they also had had different experiences as a result of their yoga practice. The participants with severe symptoms had experienced a life of suffering from their symptoms. They had learned many ways to control their symptoms. They collaborated with the researcher to select the yoga postures that suited their condition. They agreed to practice deep relaxation and breathing through alternate nostrils in this stage.

The participants understood the benefits of deep relaxation. This is supported by Anselmo (2005) who stated that relaxation was the first step towards restoring, renewing, and self-healing. The changes that occurred after relaxation took place automatically in the endocrine, immune, and neuropeptide systems. The alterations brought about by deep relaxation included: increasing the peripheral blood flow (warm extremities); increasing the electrical resistance of the skin (dry palms); the production of slow alpha waves; and the greater activity of natural killer cells (improved immune function). These changes also included: a decrease in oxygen consumption; and decreases in the respiratory rates and volume, heart rates, skeletal muscle tension, epinephrine levels, gastric acidity and motility, sweat gland activity, and blood pressure (Anselmo, 2005).

However, deep relaxation is not easy to practice. Pat (a participant with severe symptoms) tried to do deep relaxation for two weeks and remained uncomfortable. There were many factors that influenced responses to relaxation practices including: a quiet environment; mental devices, passive attitudes; and a comfortable position (Anselmo, 2005). The participants were aware and could learn and apply how to practice in ways suitable to their conditions. The participants felt that they could not do difficult postures. They felt uncomfortable, had muscle pains, they force their bodies and their minds, and could not relax and be at peace. After one to two weeks their symptoms were improved and they were able to do more. They moved from easy to difficult postures. The findings indicate that the difficult postures were not appropriate for persons with allergic respiratory symptoms who suffered severe symptoms.

Knowledge about respiratory allergies and yoga practice were very important to the participants. Such knowledge made them understand their condition and helped them manage their symptoms. They could understand the principles of yoga, yoga practice and their benefits, and learned to apply yoga practices that helped them to manage their symptoms. They agreed to start with warm up sessions, practice postures, and to finish with relaxation. They learned to practice slowly, but needed more time to learn and practice this program. Some needed repeated practice in order to remember how to do the practices by themselves.

The participants noted there were positive effects on their health after four weeks. They could experience the positive effects through their breathing and their bodies were flexible. Most knew that they could improve their respiratory functions and their symptoms decreased. The participants reported that they felt relaxed, calm,

and cool after practicing yoga. Most felt relaxed after relaxation sessions and continued to have this feeling and had greater concentration. They developed mindfulness and self awareness through yoga practice, and used yoga principles to guide their practices and to cope with other problems. They experienced changes inside that made them feel fresh, relaxed, and at peace in their minds and bodies. They felt happy, peaceful in their minds, and less anxious. The participants classified yoga practice as a type of meditation. They had become more conscious and aware when practicing. This benefited them because they applied this consciousness and awareness when they worked and did other things. Twelve participants talked about their inner feeling and having energy after practicing. They felt fresh, powerful and ready to do anything.

The participants felt they had changed inside and this was confirmed by objective evidence. They compared the results from the aura chakra reports and so understood their condition after they used yoga to help them manage their symptoms. After four and eight weeks the aura chakra reports showed their results including aura pictures, aura sizes, aura colors, and yin-yang balance. They confirmed the aura results by reporting that their symptoms decreased because of the effects of yoga practice. The participants' total symptom scores after one and two months decreased; this was supported by the aura results and the reported symptoms. However, some participants could not manage certain factors that brought on their symptoms, such as not enough sleep and changes in the weather. The aura results of these participants showed that they were at the unbalanced stage. They still experienced negative effects after two months yoga practice and this was confirmed by the aura test. The participants learned to use aura tests, total symptom scores, and self reports; these

skills encouraged and stimulated them to manage their symptoms and practice yoga by themselves. The objective evidence helped them to know about their inner selves and to understand their condition.

### Step 3 Integrating yoga into daily life

Conditions of this stage; at this stage the participants were skillful in yoga practice and had learned from the outcomes of their practice from their direct experience. They sometimes had symptoms; sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes. Their symptoms were less frequent and less severe of so they usually did not need medication. They had the capability to manage their symptoms by using yoga.

The participants continued to try to integrate yoga practice for self-healing into their daily lives. Even though all of them still had allergic respiratory symptoms, they reported the severity was decreasing. They could learn self-healing outcomes from their practice. Fifteen participants stated that their physical functioning and emotional states had improved. The data from the reflection undertaken in the previous cycle was analyzed and used to revise the plans for the next cycle. The aim of this step was to encourage the practicing yoga as part of their daily life (see figure 11).

Planning: The researcher and the participants planned to maintain and emphasize the value of yoga practice for self-healing in daily life. They planned to observe and reflect on the effectiveness of postures and strategies, in order to facilitate integrating yoga to help them use it in their daily life.

Action and observation: In order to enhance self-healing in persons with allergic respiratory symptoms they aimed to integrate suitable yoga practice as part of their life style. The researcher encouraged the participants to assess their health holistically and to continue practicing yoga. The activity in this step was focused on ways of integrating yoga practice in their daily lives. Data from field notes, TSS and aura tests were collected and used for them to reflect on their self-healing. They were asked to monitor their symptoms and their practice every month.

Reflection: During this step the participants reflected on their feelings as they perceived the positive outcomes of practicing yoga each day. They learned the outcomes of practicing yoga for self-healing. They noted that they often used some particular postures to improve their respiratory functions. They thought yoga could not only be practiced in their room, but could be practiced anytime and anywhere.

In this stage, the data reflected the outcomes as they learned to integrate yoga into their daily life over 6-8 weeks. They noted the decreased severity and frequency of occurrence of their symptoms. They gained in their positive feelings, such as understanding themselves, understanding others, positive thinking, and spiritual growth. They realized that they could manage the allergic factors.

Five participants still used drugs sometimes, but ten of them stopped using drugs for their allergies. Based on the reflection undertaken in this stage, the researcher and the participants adjusted the handouts for the daily practice for this group (30-60 minutes).

After three months, TSS of all participants declined. The quality of life of them increased. Aura size of eight participants was large, six of them were middle,

and one was small. Yin-Yang of six participants were balanced, eight of them showed unbalanced, and one was very unbalanced

The turning points experienced by the participants that reflected changes enabling them to see themselves in a different way were identified. Learning from self-healing to integrating yoga into daily life was a turning point of them in this step.

There are many themes that emerged in this stage. These included: learning how to incorporate yoga into their daily life; practicing yoga anytime and anywhere; achieving a state of balance and harmony; understanding themselves and understanding others, positive thinking, and promoting spiritual growth. The details of these themes are presented below.

Step 3 Integrating yoga into daily life

Learning from self-healing and integrating yoga into daily life

Conditions

- Sometimes having symptoms (sneezing, rhinorrhea, itchy nose, palate and/or throat, nasal congestion, itchy, watery and/or red eyes)
- Perceived mild symptoms
- Having capability to manage symptoms with yoga

Problem

- Could not integrating yoga practice into daily

Outcomes

- Learning to integrate yoga into daily life 6-8 weeks
- Decrease symptom severity and frequency
- Living with balance and harmony
- Increase positive feelings (understand themselves, understand others, positive thinking, spiritual growth)
- Could manage allergic factors
- Five participants sometimes using drugs and ten of them stopped using drugs
- Adjusted handout for everyday practice for this group (30-60 minutes)

Lesson learned of this stage was:

- Yoga practicing for self-healing in order to prevent attacking from symptoms, select some postures that fit their daily life, and integrating ways of yoga into daily life

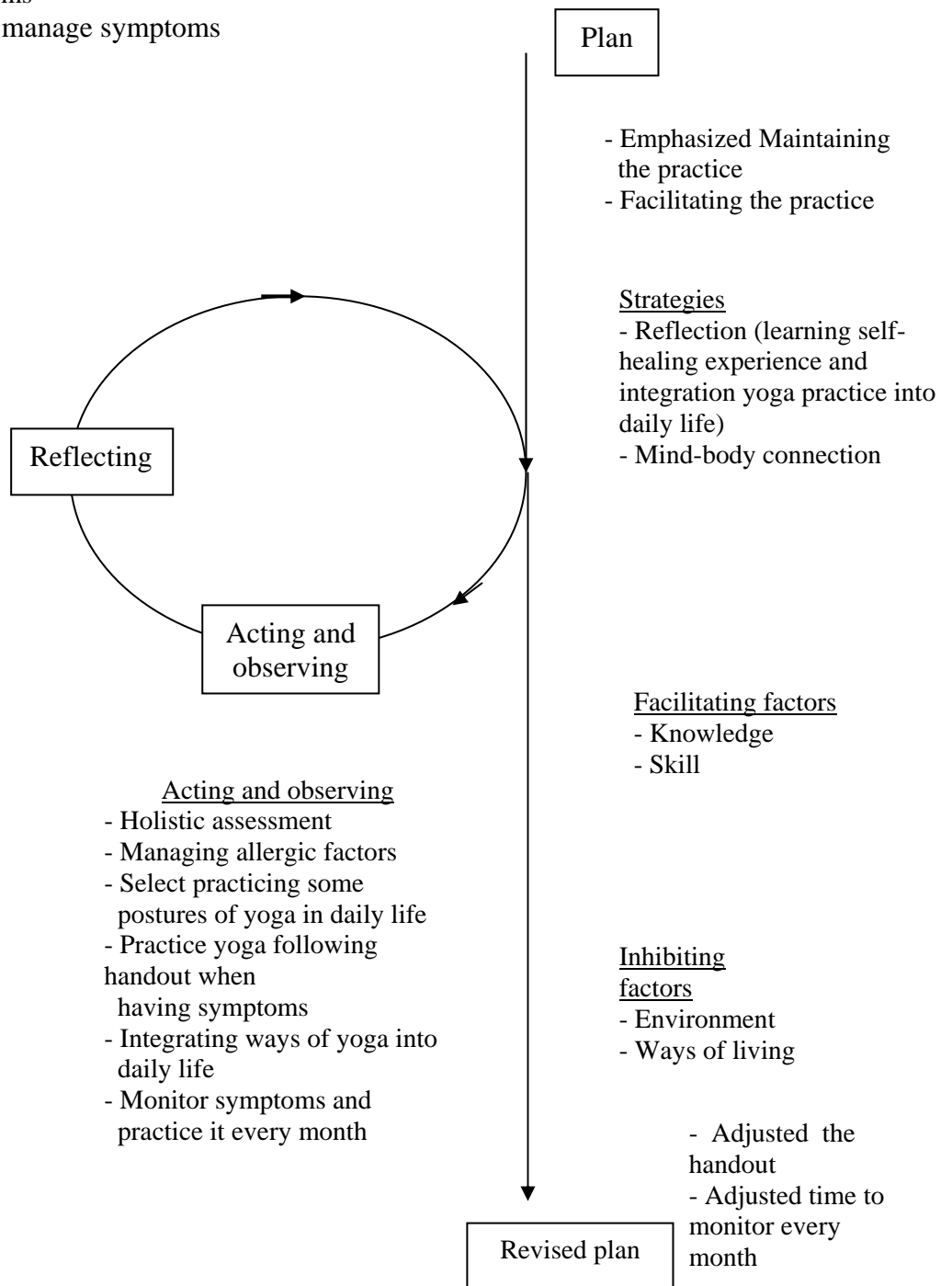


Figure 11. PAR cycles of integrating yoga into daily life



### Learning how to incorporate yoga into daily life

In this stage the participants realized that yoga was not necessarily practiced only in their rooms but could also be practiced at any time and place. They considered the postures that were suitable for them included breathing control and relaxation. Some of them (n=8) practiced yoga at home and joined with the group at the study site every week. The participants reported that they learned to select some postures that found useful. They did not practice all postures but they spent more time on some postures. Moreover, they also learned to take their experience with the group and apply it in their daily life for managing their symptoms. The following are samples of the participants' statements:

*“I could do many postures and I thought they were very useful for me. When I practiced it by myself I tried to select some postures that I could do well and found to be effective to manage the symptoms. If I selected only a few postures sometimes, I spent a longer time on each one” (Am, 12/02/2006).*

*“I could talk and discuss with the nurse and other persons who had the same symptoms as mine and learned about other strategies to manage symptoms. I thought the practice sequence was good” (Ging, 12/02/2006).*

*“I liked to practice yoga with the group because I could talk and discuss with the researcher and other persons who have the same symptoms as mine. We could then learn strategies to manage symptoms from others. I used yoga principles that focused on my mind. These were helpful for me” (Na, 11/21/2006).*

### Practicing yoga anytime and anywhere

When participants had some symptoms they tried to use yoga to manage them instead of using drugs. Some participants stated that before they went to bed they practiced some yoga postures and *pranayama*. Even though, they did not practice the whole set of postures, the regular practice of some key postures was sufficient to help control their symptoms. Some of them shared their ideas that they could do yoga anywhere and anytime, as shown in the following participants' statements:

*"I felt that I had yoga with me all time. I could do it anywhere. I thought practicing yoga in this room was not enough for me. I felt that I should integrate yoga into daily life and yoga could go with me everywhere. When I got some symptoms, I used pranayama instead of taking medicine. I experienced that pranayama was very useful to control respiratory symptoms. I therefore continued practicing some postures and pranayama every morning" (Nat, 09/25/2006).*

*"Sometimes it rained and my symptoms got worse. I knew about these and I tried to prevent myself from the attack of the symptoms but it was so hard for me. After I practiced yoga for two months I observed that my symptoms got better. So any time when I got symptoms I tried to use yoga" (Am, 12/02/2006).*

*“I practiced some postures and pranayama in the morning and it made me feel better. I did not think about medicine. When I got symptoms I practiced breathing control for cleansing and practice alternate nostril to balance my breathing and I tried to do some postures that I could do in that situation so after that I felt better. I would not use medicine immediately” (Porn, 12/20/2006).*

#### Achieving a state of balance and harmony

Many participants achieved a state of balance and harmony in this step. Their experience was that yoga practice helped them understand their inner-self better. Their symptoms and health had been improved and most of them felt they were in harmonious, happy, and had a balanced life. They reported that, when doing thing, their minds were so calm and more mindful. For example, Aree stated that

*“I felt so good that I decided to select yoga to manage my allergic symptoms. I felt peaceful in my mind. I felt really relaxed. I have never had good experiences like this before. Yoga made me happy and balanced in my life”.*

After three months the aura size of most participants was that of an average aura; the rest had wide auras which indicated a strong and powerful radiance. From the findings the aura size of five participants showed increases after two months of the practice. The QOL score of the participants showed that all of them improved their scores from the beginning. Examples of auras, TSS and QOL scores reported by the participants who changed to positive conditions are shown in Table 7.

Table 7

*The auras, TSS and QOL scores before and one month, two months, and three months after yoga practice*

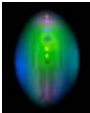
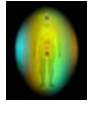
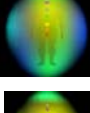

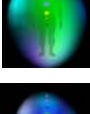
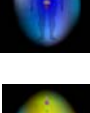
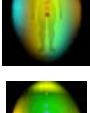
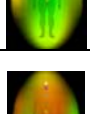
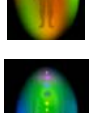
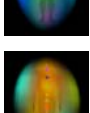
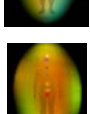

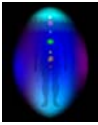
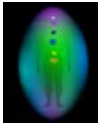
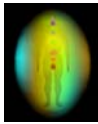
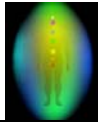
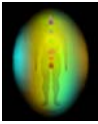
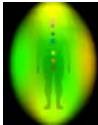
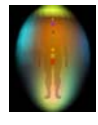

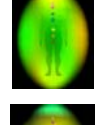
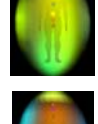
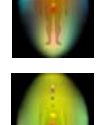

Case	Yoga practice	Aura Picture	Aura Size	Aura color	Yin-Yang	TSS	QOL
Nat	Before		40%	Deep green	balanced	14	5
	After 1 month		60%	Yellow	unbalanced	13	
	After 2 months		90%	Yellow	unbalanced	9	
	After 3 months		90%	Yellow green	balanced	8	7
Nui	Before		60%	Yellow	unbalanced	13	6
	After 1 month		50%	Green	unbalanced	11	
	After 2 months		80%	Yellow orange	balanced	12	
	After 3 months		80%	Yellow	balanced	8	8
Pat	Before		70%	Orange	balanced	14	3
	After 1 month		40%	Deep green	balanced	12	
	After 2 months		40%	Orange	balanced	12	
	After 3 months		80%	Orange	balanced	11	5

Table 7 (continued.)

Case	Yoga practice	Aura Picture	Aura Size	Aura color	Yin-Yang	TSS	QOL
Am	Before		70%	Indigo	very unbalanced	11	4
	After 1 month		40%	Deep green	unbalanced	10	
	After 2 months		60%	Yellow	unbalanced	10	
	After 3 months		90%	Yellow green	balanced	8	7
Ging	Before		60%	Yellow	unbalanced	10	6
	After 1 month		80%	Green yellow	balanced	10	
	After 2 months		70%	Orange yellow	balanced	9	
	After 3 months		60%	Yellow	balanced	8	8
Toto	Before		80%	Green yellow	balanced	13	5
	After 1 month		90%	Yellow	unbalanced	12	
	After 2 months		70%	Orange yellow	balanced	12	
	After 3 months		90%	Yellow orange	balanced	11	6

### Understanding themselves

The participants reported that they were sensitive to allergens which made them suffer allergic symptoms. They explained that these symptoms were chronic symptoms and might stay with them for their whole lives. They tried to balance their lives, and to accept and understand it. They reported that yoga taught them to understand themselves and be more mindful. For instance, Sa stated that:

*“When I got allergic respiratory symptoms I always had anxiety, fear, and stress. Now I felt my mind was relaxed. I was not anxious about my symptoms since I had yoga in my life. I applied many techniques of yoga practice to manage my symptoms. Yoga taught me to be mindful all the time. So I thought my symptoms helped me to learn and understand about myself”*

### Understanding others

Because the participants had suffered from allergic respiratory symptoms for a long time, they often experienced bad relationships with family members, friends, and colleagues. They felt moody when people did not do as they expected. Sometimes they felt angry for no appropriate reasons. After they continued practicing yoga they found that their symptoms decreased. They were more comfortable and relaxed. They expressed the view that when they relaxed, they understand other people and their situations better. They stated that they could develop appropriate feelings and could understand their families, friends, and colleagues. Pom felt that:

*“In the past I often felt moody and acted with inappropriate behavior to other people such as my family and my friends. I thought yoga helped me understand other people. After I had practiced yoga for over two months I perceived changes in my thinking. I felt relaxed and understood other peoples more. I thought that everybody had their own reasons to do anything so I was not angry when they did not do as I expected”*

#### Positive thinking

The participants reported that their symptoms affected their lives. These symptoms made them think negatively. Yoga helped them relax in their mind and promote their harmony. All of them agreed that yoga practice made them feel calm and relaxed, so they changed the way they looked at things and started thinking positively. For example, Toto shared his experience:

*“Yoga practice made me change my way of thinking. I was very calm and thought about good things. My attitudes gradually changed to positive ones. These made me feel happy”*

#### Promoting spiritual growth

From the findings, the participants expressed the feeling that they were very happy to share their experience with others and help others to learn and get benefits from yoga. They stated that they had good experiences of using yoga for their allergic conditions. Their suffering from allergic respiration had been relieved after yoga practice. For example, Muk stated that:

*“I don’t know how to express my feeling. I am very happy and very proud to help others to learn and get benefits from yoga practice like me. It is meriting telling the good thing to others....Yoga helps me so much. After I practice yoga I do not suffer from my symptoms. I can do it any time. So I am willing to share this experience with others anytime. Don’t hesitate to tell me if it could be of any use to others”*

#### Lessons Learned

Yoga practice for self-healing in this stage consisted of yoga practice that was done in order to prevent suffering from symptoms. The yoga postures selected were to prevent suffering from symptoms. Am, Malai, Muk, and Porn preferred to practice alternate nostril breathing when the allergic symptoms started to occur. Noi, Pat, Na practiced cleansing breathing (*Kapalbhati*) and alternate nostril breathing, while Toto choose Sun salutation when their symptoms occurred.

The participants selected the yoga postures that were appropriate to their daily lives. They practiced some postures every day for 30-60 minutes. Noi claimed that she preferred to practice the Sun salutation posture in the morning for six rounds every day before she went to work. Na, Toto, and Porn chose to practice the Sun salutation for three rounds in the morning and a set of sitting and lying *asanas* in the evening before dinner. Ging, Nee, Muk selected some postures and practiced 30 minutes before going to bed.

The participants integrated yoga into their daily lives. They not only practiced yoga *asana* to promote health and prevent suffering from the symptoms but also



brought *yama* and *niyama* to guide their living. They were more self-disciplined in practicing yoga in order to improve their health. For example, being patient to practice yoga regularly, being nonviolent to self and others.

#### Nurse's roles

This step aimed to encourage and facilitate the persons with allergic respiratory symptoms to reach their goals. The participants could experience the outcomes of their practice. The nurse became an important instrument to help them. In this stage the important nurse roles were identified. These stressed that the nurse was an assessing, empowering, and supporting person.

#### Holistic assessing

The nurse took up the role of assessor to assess the participants' experiences of integrating yoga into daily life. This assessment helped the participants to understand what was happening to them and confirmed their reflecting on how to improve using yoga for their self-healing. TSS and aura results were used as the tools to observe the outcomes of self-healing. These tools helped the participants to compare their health condition over the time that the yoga practice took place. Better TSS reflected better health conditions and knowledge of these helped motivation their yoga practice.

#### Empowering

The researcher encouraged the participants to reflect on the process of self-healing. She encouraged them to compare their outcomes before, during and

after their period of yoga practice. The researcher also took on the role of empowering the participants to develop their sustainability in using yoga. She discussed their positive outcomes with the participants and encouraged them to integrate yoga practice in their way of life.

#### Supporting

The researcher took on her role as a consultant to support the participants when they were faced with any problems after the practice period. She continued to provide classes for yoga practice at the study site. The participants could consult her at any time directly or by telephone.

#### Participants' roles

At this stage the participants identified the outcomes of integrating self-healing and yoga in their daily life. Two important participants' roles were identified at this stage: observing and reflecting on their experience; and maintaining the practicing of yoga.

#### Observing and reflecting on experience as a strategy of learning

The participants observed and reflected on process of using yoga for self-healing. In this stage they observed the ways of practicing yoga and applied suitable techniques for themselves. They also reflected on the processes and outcomes of self-healing for allergic respiratory symptoms through the use of many tools, such as TSS, the aura monitor, self-reporting, QOL scores, and in-depth interviewing. For example, Am reported that:

*“I knew about myself and understood the improvements made by using many instruments. TSS made me know the improvement in my symptoms while the aura test showed me about my inner state. When I noted my feelings in my self-report I could understand all the process of my improvement. When my symptoms got worse, I could adjust and apply appropriate yoga techniques for managing my symptoms”*

#### Maintaining the practice

The participants continued practicing what was suitable for them. However, they sometimes stopped practicing when their health condition was good. As a result, the symptoms recurred. They learned that yoga was good for persons with allergic respiratory symptoms and they themselves needed to practice it on their own. Others could not do it for them, so they took up roles to maintain their practice in order to achieve balance and harmony.

#### Self- management

Self-management in this stage consisted of holistic assessment, the managing of allergic respiratory symptoms, selecting suitable yoga postures and integrating yoga practice into daily life.

Holistic assessment was used when they suffered symptoms. The participants assessed themselves in order to prevent suffering from symptoms and tried to manage to do this early and in good time. They also assessed their experience of integrating yoga into their daily life, including assessing the processes and outcomes.

Managing the allergic respiratory factors in this stage meant managing these factors. This emphasized managing to prevent suffering from symptoms. They understood the causes of their symptoms, so they used different methods to prevent and avoid facing these factors.

The yoga practices in this stage were used for many reasons. First, the participants selected some postures to manage their symptoms. For example, *pranayama* was selected when they felt the symptoms coming on. For instance, the participants selected postures that they liked practicing, ones they perceived had positive effects when done every day. Moreover, they could integrate yoga in their daily life by practicing it at any time and place.

#### Supporters' social roles

Friends and family members were required to play their roles during the program to help the participants to continue practicing and integrate it into their daily life. In this cycle the important components were identified to be empowering and providing support.

#### Empowering and providing support

The participants thought that their families and friends should still maintain and provide support and empowerment as these helped them continue practicing to reach their goal. They stated that sometimes they felt unhappy and exhausted, not only from yoga practice, but also from their symptoms. Their families and friends provided support and empowerment to face these problems at these times

and thus they could also use yoga to manage the symptoms. Moreover, they supported the participants in practicing yoga by doing this with them at home.

### Strategies

Reflection was an important strategy at this stage. The participants reflected on their learning about self-healing experiences and enhancing the processes of self-healing through integrating yoga practice into their daily life. The many sources of data about the outcomes of their practice from helped them know and learn about themselves. They could change their ways to promote their self-healing and adjust their practicing that was suitable for them.

Mind-body connection was used as a strategy to help the participants to practice yoga. When they practiced *asana* they could concentrate and focus they mind with their postures or could focus on breathing. This strategy taught them to bring the mind and body together. It was the best way to help the participants to reach a balance and to live harmoniously.

### Facilitating factors

An important finding emerged at this stage. From the findings it could be seen that the skills and knowledge of yoga practice were facilitating factors that helped participants to continue and maintain yoga practicing for self-healing. When the participants had the skills to practice they could manage by finding suitable times for practicing by themselves. Sa knew that she could remember all postures; this was convenient for her as she could practice them at any time or place.

Knowledge of allergy and yoga was a facilitating factor as it helped the participants to gain more confidence in using yoga to help them manage their symptoms. Pat thought that she knew that *pranayama* was very helpful for respiratory functions, so she felt confident when using *pranayama* for preventing attacks from symptoms.

#### Inhibiting factors

The environment was an inhibiting factor at this stage. Participants' reflections suggested that they worked in air conditioned rooms which were not appropriate for practicing yoga because they felt discomfort after their practice. Thus the environment was a limitation for persons who tried to integrate yoga into their life-style.

Their ways of living was a very important factor that inhibited yoga practice for self-healing. Participants had many things to do and forgot to look after their health. The participants usually paid attention to their work or other activities rather than practicing yoga for health purposes.

#### Self-healing outcomes

At this stage the participants learned to integrate yoga into their daily life. They selected some yoga postures to help prevent attacks from symptoms. They selected some postures to practice every day, and could do some postures at any time and in any place. Yoga practice helped them become balanced and to live harmoniously with others. They perceived a decreasing in the frequency of their

symptoms. Their positive feelings increased such as positive thinking and understanding themselves and others. They had the ability to manage their allergic respiratory symptoms as part of their way of life.

### Discussion

By the third stage, the turning point experience by the participants was that they learned from self-healing to integrating yoga into daily life. They were skillful in yoga practice and had learned about the outcomes of their practice from their direct experience of yoga. However, sometimes they had symptoms but these were less frequent and less severe; they did not need medication and could manage their symptoms by using yoga.

Most participants thought that their physical functions and emotional states had improved. They learned to bring yoga into their lifestyles, and tried to use yoga to manage their symptoms instead of using drugs. Some of them felt that they could do yoga anywhere and at any time. The participants applied yoga practice for self-healing, including the use of *asanas*, *pranayama*, relaxation, and the principles of yoga (*yama* and *niyama*) to guide their daily lives.

Firstly, the participants practiced yoga to promote their health. They practiced yoga one to one and for a half hour at least three times a week. Previous studies showed the beneficial effects of *hatha* yoga practice on the health-related aspects of physical fitness, including muscular strength, endurance and flexibility (Tran et al., 2001). *Pranayama*, especially, will directly affect allergic respiratory symptoms through regular and long term practice (Ravindra, Madanmohan, & Pavithran, 2006). Regular yoga practice could influence psychoneuroimmunology functions, and might

improve the individual's self-healing through direct action promoting the homeostatic stabilization of the autonomic nervous system (Walling, 2006).

Secondly, the participants practiced yoga for preventing their symptoms. They considered the postures that were suitable for them, including breathing control and relaxation. Am, Malai, Muk, and Porn reported that they selected practicing *kaballapati* and alternate nostril breathing while Toto practiced sun salutation when they felt that their symptoms attacked coming on. Am felt sometimes that the rain made her symptoms worse. She knew about this and tried to prevent attacks by practicing yoga when she felt symptoms. This is supported by a yogic point of view. *Pranayama* is intended to bring more oxygen to the blood and to the brain, and to control *prana* or the vital life energy.

The science of breath control consists of a series of exercises intended to meet these needs and to keep the body in vibrant health. Yoga breathing can calm the mind and relax the body. Relaxed breathing stimulates the parasympathetic nervous system. These techniques teach people to make maximum use of oxygen for optimum health and vitality (Payne & Usatine, 2002). Moreover, a previous research study reported the positive effect of yoga practice on the vital capacities of the lungs and pulmonary functions (Birkel, & Edgren, 2000; Yadav & Das, 2001).

Thirdly, the participants practiced yoga to manage their symptoms. Nat reported that when she had some symptoms, she used *pranayama* instead of taking medicine. She had experienced that *pranayama* was very useful to control respiratory symptoms so she continued practicing some postures and *pranayama* every morning. Porn reported that she practiced some postures and *pranayama* in the morning and



this made her feel better. She did not think about using medicine. When she had symptoms she practiced breathing control for cleansing and practiced alternate nostril breathing to balance her breathing. She also tried to do the postures she could do in that situation and then she felt better after doing this. She would not use medicine immediately. These findings were supported by a study of the effect of yoga training over 6 months. This found that respiratory pressures and pulmonary functions improved lung functioning (Mandanmohan et al., 2003). Cooper et al. (2003) studied the effect of two breathing exercises on asthma. The results showed that the good breathing techniques can improve symptoms and reduce bronchodilator use.

Fourthly, the participants followed yoga principles (*yama* and *niyama*) to guide their daily lives. These principles were used as promoting the right relationship with the world and universal ethics, and the right relationship with the self, disciplines, and observances. Most participants learned to use and follow these principles in their lives and for living with others. Pom observed that when she was relaxed, she understood more about other people and their situations. She stated that she could develop appropriate feelings and understanding her families, friends, and colleagues. Nui and Pat were satisfied about their lives. They did not need the things that they could not use effectively. This includes non-possessiveness, not being-greedy, satisfying the needs rather than wants, and not being attached to material things, possessions, relationships and habits (Cameron & Parker, 2004; Fritz, 2006; Sadhakas, 1999). For the principles of right relationships with the self, disciplines, and observances, Noi, Am, and Sa followed *tapas* to explain the practice of determination to pursue a goal and the daily practicing of yoga. Most of participants expressed thoughts that included the practice of studying and reflecting on yogic

practice, meditation and a desire to want to know the truth. The participants tried to apply *ishvarapranidhana* which means the practice of willingness to surrender, the letting go of righteousness, and the cultivation of faith, dedication and sincerity (Cameron, & Parker, 2004; Fritz, 2006; Sadhakas, 1999). Some reflected they could not do this completely but they tried using it in their daily lives.

Many participants achieved a state of balance and harmony in this step. They shared their experience that through yoga practice they could understand their inner selves better. They were in harmony, happy, and had a balanced life. They agreed that their minds were more calm and mindful when doing things. Aree stated that she felt peaceful in her mind and really relaxed. She had never had good experiences like these before. She thought that yoga made her happy and more balanced in her life. These statements are supported by many studies which have been undertaken to observe the effects of yoga. Most of them claim that almost all yoga practicing programs have had positive effects, either psychologically, mentally, or both. Furthermore, several randomized controlled trials done with patients with allergies or asthma have shown the benefits gained from yoga postures and breathing. (Singh et al., 2002; Visweswaraiiah & Telles, 2004; Workman, 2002b).

After three months the aura size of most participants was average and the rest had wide auras which indicated strong and powerful radiance. From the findings the aura sizes of five participants showed an increase after two months. According to practitioners of alternative medicine subtle energy consists of: subtle bodies or sheaths; subtle energy centers or *chakras*; bio-energy; and the subtle energy channels (Brennan,1988). According to Traditional Chinese Medicine and Indian philosophy, energy refers to *chi* and *prana*. The personality, health status, emotional and mental

well-being, social factors and surrounding environmental conditions can all have a significant effect on aura (Brennan, 1988).

Negative emotional states assert a deteriorating effect on the body and drain the system of its energy. This explains why one's performance level tends to drop drastically during moments when experiencing emotional states such as fear, hostility and frustration. Similarly, low self-esteem and negative social interactions can weaken the aura and seriously diminish its energy supply (Fisslinger, 2004; Garson, 2005). When the auric field is bright, expanded and strong and the energy centers (*chakra*) are clean and light, the expanded auric field will radiate light and energy (Long, 2005).

The QOL and TSS of participants showed that all of them improved their scores from the beginning and reported changes to more positive conditions. This supports that in their quality of life individuals can make a subjective appraisal of their own lives. The participants identified their satisfaction with their lives as pertaining to the physical, psychological, and social domains of their life (Mandzuk & McMillan, 2005). The findings of some medical studies have suggested that, for people with respiratory allergies, yoga may lessen the symptoms and improve their quality of life (Halvorson, 2002). When they experienced holistic health, the TSS of participants would improve and they moved in a positive direction. This is supported by a study of the effect of yoga training on respiratory pressures and pulmonary functions which indicated that there was improved lung functioning (Mandanmohan et al., 2003).

Regarding the model of enhancing the process of self-healing through integrating yoga practice, the discussion has described the following three steps in the process: understanding situations; learning to cope with allergic respiratory symptoms; and integrating yoga into daily life. Each step included the nurse's roles, the participants' roles, the social supporters' role, the strategies followed, facilitating factors, inhibiting factors, and self-healing outcomes. This study was conducted at the Center for Holistic Health and Eastern Wisdom, Faculty of Nursing, Prince of Songkla University. Most participants were persons with allergic respiratory symptoms who worked at the Prince of Songkla University and others who lived nearby. A body of knowledge on yoga was used that consisted of principles of yoga practice. The yoga postures included sets of *asanas*, *pranayamas*, and relaxation techniques. The participants practiced each session for one hour and a half, at least three times a week for three months.

The nurse was an important person in the process. She provided a nursing focus on self-healing that was intended to bring balance and harmony to the body and mind. She acted as assessor, facilitator, educator, trainer, observer, and reflector. She developed and used several tools to encourage participants, helped participants to understand and translate holistic principles, and planned the teaching to integrate yoga into self management. Moreover, the researcher acted as a coordinator with the participants and their families and collaborated with the participants throughout the study. She acted as an observer and a reflector to facilitate the process of learning and understanding the experiences and changes that took place as they were happening along with the practice.

The participants played their roles as active participations. Participants contributed actively to a process of self-healing that included the role of informant. Thus they shared information about their symptoms and the management that they used, and participated in every process. They came to understand their situation better and made their own decisions to select what was suitable for them to practice. They observed what happened to them and reflected on their feelings and related their thoughts to others.

Social support from friends, daughters, or husbands helped them to continue with their yoga practice even when they found it difficult. The participants felt that the aesthetic environment they practiced in was a very necessary strategy used to promote their practice of yoga and engage them in self-healing. Group activity involved in the process of PAR in this study also helped support the participants to identify their strengths. This helped to develop self-confidence that led to improving their practice, overcoming the barriers to practice, and ultimately to healing themselves.

The implications, processes and outcomes of this study are very important. The implications are that the participants reflected on their many experiences of learning and practicing yoga. These included learning to use yoga, understanding the self and self awareness, and integrating yoga into daily life. The specific postures and movements of yoga were designed to strengthen and stretch the musculature in order to achieve perfect balance. Yoga releases tension, improves flexibility, maximizes the flow of energy, and restores a sense of balance and calmness.

Holistic nursing aims to achieve holistic health. A holistic nurse believes that a person has an innate ability to heal themselves. Hence the individual is the most

important person for self-healing. Nurses in holistic nursing change their roles from that of an expert person on health to a person who understands an individual as a holistic being. Thus they work in partnership with the person to promote their health. Holistic nurses view their roles as facilitators and educators, trainers, assessors, empowerers, observers, and reflectors. This is made possible only by accepting diversity, recognizing patterns, viewing change as positive, and accepting the connectedness of life.

Self-healing is a process that facilitates health and restores harmony and balance between the mind and the body (Glaister, 2001). The whole findings suggest that self-healing is an individualized process that happens over time and comes from within. Through the healing processes demonstrated in this study, participants drew on their inner strengths and had an innate sense of personal self-healing. This supports the concept that self-healing is a dynamic process of recovery, repair, restoration, renewal and transformation. In turn, this increases resilience, coherence and wholeness that involves the whole person physically, mentally, socially, spiritually and environmentally (Jonas et al., 2003).

For the process of integrating yoga in self-healing, this study developed many strategies to support participants to help them change their daily life to improve their health. The participants reported that they were encouraged by the researcher to practice yoga and to reflect on yoga practice. The experience they gathered, in part, was from recording their progress. Their reflections on learning helped in this process. The aura test, total symptom scores, self reports, and quality of life scores were helpful tools in motivating the participants to continue practicing. This enabled them to ultimately reach a more balanced spiritual, emotional, and mental state of being.

They learned to understand the results of these tools to know about their inner-self and inner-energy. In the process of PAR they learned the practice of yoga first. After that they learned to understand their inner-self and self awareness. In the last process they learned to integrate yoga into their lifestyles. All these processes were natural, active and appeared to be central to the phenomenon of enhancing the process of self-healing through integrating it with yoga practice.

The self-healing outcomes on the part of participants in this study involved the whole person and were expressed in many ways. Most of them believed that they had achieved the stages of balance and harmony, improved their respiratory functions, and reduced their allergic respiratory symptoms. Therefore, self-healing was an outcome of this study. Physical improvements were found that consisted of improved respiratory functions and the decrease in symptoms noted in previous studies (Mandanmohan et al., 2003; Manocha et al., 2002; Singh et al., 2002; Visweswaraiiah, & Telles, 2004; Yarcheski, Mohon, & Yarcheski 2004).

The aura results showed that most of them became more balanced and in a harmonious and peaceful state. These findings were supported by the aura results which showed the aura sizes, and yin-yang balance. These outcomes support Ward's (2002) descriptions of the fundamentals of the meaning of healing that includes holistic relationships, caring, and peace.

As a result of the study the participants perceived the flow of energy throughout the body after practicing yoga. These phenomena could be explained through the yoga system. Based on the concept of deep healing, the presence is also conceptualized as bio-energy (Jonas et al., 2003). In *hatha* yoga, the practices of *pranayama* and *asana* are considered to be the highest form of purification and self-

discipline for the mind and the body respectively. The participants were able to learn these processes when engaged in the study. Moreover, yoga is thought to influence the system of *chakras* which are vortices of *pranic* energy (life force) at specific areas of the body (Gharote, 1999; Sivananda, 1999). Further, these *chakras* control the circulation of *prana* in the human structure and each of them is a switch for opening up specific areas of the brain. Yoga practice can stimulate the flow of energy through the *chakras* and help to activate them (Gharote, 1999; Patterson, 1998). *Nadis* are the subtle channels of the *pranic* flow which mainly consists of *ida*, *pingala* and *sushumna nadis* (Saraswati, 2004). In yoga practice, when *ida* and *pingala* nadis are balanced, the mind is controlled, then *sushumna nadi* begins to flow (Saraswati, 2004). The participants learned to understand these results through the aura reports. All of the techniques of yoga provide a total approach to life, health and healing. The tools of yoga are techniques for discovering the truth of life (Page, 2005).

Moreover, the finding from the Total Symptom Scores showed that most of them had reduced their allergic respiratory symptoms. These results might be evidence that the yoga practice followed in this study could influence psychoneuroimmunologic functions. These are identified as numerous mechanisms through which the central nervous system and immune system interact. It includes direct anatomical linkages and soluble neuroendocrine derived products. The effects of this mechanism have been demonstrated by the publication of several nursing interventions such as relaxation training, progressive muscle relaxation, guided imagery and touch therapy (Ader, 2001; Prolo et al., 2002; Zeller et al., 1996).

Regarding the environment, the room used for yoga practice should be clean, quiet, private, and have good ventilation. This might include the playing of light



music before the yoga practice and producing aromas between practices. Pictures of yoga postures should be displayed and some yoga books should be available for study. A comment by one participant was: *“I feel relaxed when I go to practice yoga at the center. I don’t like to practice at home because I cannot concentrate my mind. This place is very suitable and I feel comfortable.”* All participants expressed similar feelings about the center; however, a few found practice at home to be more convenient.

This study was conducted at the Center for Holistic Health and Eastern Wisdom, Faculty of Nursing, Prince of Songkla University where yoga practice is offered on Monday to Friday from 5-6.30 pm. This service is provided by the staff of the University. Friends from yoga groups had motivated the participants to keep trying to practice yoga so they were not alone. A year after the project finished, a few participants from the project were still keeping in touch and supporting each other well. Most of them were happy and still applying what they had learned from the project and had integrated into their lifestyles. Some of them had learned using some new postures to manage their symptoms.

#### *Guidelines for the Implications of the Model of Enhancing the Process of Self-Healing through Integrating Yoga Practice*

The guidelines for using the model of enhancing the process of self-healing through integrating yoga practice consist of two phases, the preparation phase and the implementation phase.

### Preparation phase

The aim of this phase is to prepare the nurses for using the model of enhancing the process of integrating self-healing into Yoga Practice. The nurse has to prepare herself in many ways including: extending knowledge of allergic respiratory symptoms; studying the principles of using yoga for self-healing; exploring the systems and philosophies of yoga as they apply specifically to the participants; and developing the skills of yoga practice by obtaining training on a course given by a yoga teacher. Moreover, the nurse should develop other complementary skills relating to holistic nursing, such as: using suitable assessment techniques; educating and empowering adults; and collaborating in, observing, and reflecting on processes.

### Implementation phase

This phase is divided into three steps or stages: understanding situations; learning to cope with allergic respiratory symptoms; and integrating yoga into daily life. In the first stage, the nurse takes on the roles of an assessor to assess information from the participants. This involves building up informal relationships with participants in order to develop trust when talking and interacting with them. The nurse carries out holistic assessment in order to understand the situation, the contradictory experiences of the participant, and their past management strategies, which covers how they managed and the outcomes of their management.

In the second stage, the method of implementation, the participants are classified into two groups, according to the severity of their symptoms. One group is the severe group, and the other is the moderate group. Each group has different

guidelines for their practice. In these processes the nurse is an educator and trainer and provides information on using yoga for self-healing. *Hatha* yoga, the principles of yoga, yoga practice, the benefits of yoga, and general instructions for yoga practice are all provided for the participants. The nurse empowers and inspires the participants to practice yoga effectively. The participants' friends and family members are allowed to join the yoga practice in order to empower and encourage them. The nurse coordinates with suitably experienced persons to enable them share their experiences with participants in order to provide support for them to practice yoga. The nurse observes and reflects on the changes taking place in order to know what is happening in order to improve the use of yoga for self-healing. Tools for collecting objective and subjective data are used to observe the outcomes of self-healing and help the participants learn about their health condition at the time of the practice. Moreover, the nurse must encourage the participants to reflect on the process of self-healing and their improvement by thinking about these. Their subjective data is then confirmed by objective data. Finally, the nurse empowers the participants to assess the feasibility of keeping up using yoga by discussing the positive outcomes with participants and encouraging them to integrate the practice of yoga into their daily lives.

In conclusion, the findings of this study and its guidelines for implementation are very useful for nurses who want to integrate yoga in self-healing in persons with allergic respiratory symptoms.

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

This chapter presents the conclusions, limitations of the study, implications for nursing, and recommendations for further research.

#### *Conclusions*

Participatory action research was applied to develop a model to enhance the process of self-healing through integrating it in yoga practice in persons with allergic respiratory symptoms. The participants consisted of fifteen persons with allergic respiratory symptoms residing in Hatyai district, Songkhla province. The study was begun in May, 2006 and ended in February, 2007. The process of self-healing was enhanced through the cycles of participatory action research, each cycle included reconnaissance, planning, action, observing, and reflecting phases.

There were three steps for the self-healing process that integrated yoga practice in persons with allergic respiratory symptoms including: understanding situations, learning to cope with allergic respiratory symptoms, and integrating yoga into daily life. Five themes emerged in the step for understanding situations: living with suffering from allergic respiratory symptoms and the side effects of drugs; living with uncertainty; living with fear and anxiety; dependence on drugs; and continuing seeking for ways of self-management.

In the step of learning to cope with allergic symptoms, the participants were divided into two groups, each in accord with the perceived severity of their symptoms. The group with severe symptoms experienced a turning point: through learning to live

with their suffering brought on by the symptoms they moved towards an increasing sense of control. This was supported by themes including: learning how to practice yoga using deep relaxation and alternate nostril breathing; and perceiving the positive effects of yoga.

The turning points for the group with moderate symptom were: learning through an increasing sense of control and moving towards self-healing; learning the ways to practice yoga by understanding yoga principle and yoga techniques, perceiving the positive effects of yoga; and perceiving the results of yoga practice through subjective inner changes and objective evidence. The participants realized that their symptoms or perceived inner changes could be confirmed or disproved by objective evidence (through various results of tests). However, they decided that the way they would attempt manage their symptoms would depend on whether these were severe or moderate. If they had severe symptoms they would use some gentle yoga, such as rest, deep relaxation, and alternate nostril breathing. This would be complemented with inhalant drugs, in addition to holistic assessment, in order to manage the allergic factors. They might go to hospital if they were unsuccessful in managing the symptoms themselves.

In the group with moderate symptoms, the participants had a greater sense of control. They followed a set of *asanas* including: exercises for the joints (a warm up of 10 minutes); standing postures (25 minutes), sitting postures (25 minutes), and lying postures (15 minutes). This was followed by deep relaxation, for which the Corpse Pose (*Savasana*) (15 minutes) was recommended. The participants practiced for one hour and a half, three times a week.

At the third stage, integrating yoga into daily life, the state of health of the participants was more stable. They perceived that they had mild symptoms and might sometimes have allergic symptoms. At this stage the participants experienced a major turning point; they learned to move from self-healing to integrating yoga into their daily life. This was supported by the following themes: learning the way to incorporate yoga in their daily life; practicing yoga at any time and any place; achieving a state of balance and harmony; understanding themselves; understanding others; positive thinking; and promoting spiritual growth.

The descriptions of each of the implementing step included the nurse's roles, the participants' roles, the social supporters' roles, strategies, facilitating factors, inhibiting factors, and self-healing outcomes. The nurse's roles consisted of holistic assessing, educating, training, empowering, and supporting. The participants' roles consisted of giving information, self-management, participating, observing, and reflecting. The social supporters' roles consisted of empowering, facilitating, and supporting. The role of each individual was emphasized differently at each stage. A number of facilitating factors influenced self-healing. These were: belief in yoga practice; the hope that yoga practice would help in managing symptoms; the social support from family members and friends; trust between participants and the researcher; knowledge of yoga; and the skills used in yoga practice. The factors that inhibited self-healing were: the severity of symptoms; the stresses of daily living; unsuitable time schedules; and environmental conditions. The conditions that initiated and were facilitated the success of the practice were quality relationships, trust, reflection, mind-body connection, and the nurse's yoga healing skills. The self-

healing outcomes consisted of: a decrease in the severity and frequency of the symptoms; a reduction of negative feelings, such as fear and anxiety; and feeling relaxed, at peace, calm, cool, balanced and in harmony. In addition, there was an increase in positive feeling such as positive thinking, understanding themselves and others, and confidence in their ability to manage their symptoms in daily life.

#### *Limitations of the Study*

A major limitation of this study was the inadequate number of male participants recruited to the study. The findings of the study may thus only apply to females with allergic respiratory symptoms. In addition, the model developed for integrating yoga practice in the self-healing process was based on a particular context. Its application to a general setting is, perhaps, limited.

#### *Implications for Nursing*

There are implications in the model developed for integrating yoga practice to enhance the self-healing process. Such a model requires nurses who have skills in yoga philosophy and knowledge of the principles of yoga for self-healing. They should be provided with a yoga training course to gain such knowledge and skill about yoga. Moreover, the nurses should have a good understanding of and skills relevant to holistic nursing. They should be able to perform multiple roles in order to encourage, facilitate and empower the participants to advance through the self-healing process and achieve their goals. These nurses' roles are holistic assessor, educator, trainer, empowering agent, and supporter. In addition, social support from families

and friends, and an aesthetic environment are also important in successfully promoting the enhancing of the self-healing process through integrating yoga practice into it.

#### *Recommendations for Further Research*

The model for enhancing the process of self-healing through integrating yoga practice was developed in this study for persons with allergic respiratory symptoms. The model consists of three steps; understanding situations, learning to cope with allergic respiratory symptoms, and integrating yoga into daily life. First, it is recommended that further study is needed to follow up the application of this model and its sustainability. Second, similar study should be undertaken with other chronic illnesses, such as hypertension, diabetes mellitus, and cancer.



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## **APPENDICES**

**APPENDIX A**  
**THE DEMOGRAPHIC AND HEALTH STATUS SHEETS**

## APPENDIX A

## The Demographic and Health Status Sheets

## แบบบันทึกและสัมภาษณ์

1. สำหรับช่วงศึกษาปัญหาของผู้มีอาการภูมิแพ้ระบบทางเดินหายใจ

รหัสผู้ให้ข้อมูล.....

วันที่เก็บข้อมูล.....

อายุ.....ปี ภูมิลำเนา.....

ระดับการศึกษา  ประถมศึกษา  มัธยมศึกษา  วิทยาลัยหรืออาชีวศึกษา  
 มหาวิทยาลัย  อื่น ๆ.....

ศาสนา.....

สถานภาพสมรส  สมรส  โสด  หม้าย  หย่า

จำนวนบุตร/ธิดา.....คน จำนวนสมาชิกในครัวเรือน.....คน

สถานภาพของผู้มีอาการในครอบครัว  บิดา  มารดา  บุตร  อื่น ๆ.....การพักอาศัยของผู้มีอาการภูมิแพ้ระบบทางเดินหายใจ  อยู่กับครอบครัว  อื่น ๆ.....

อาชีพ.....

รายได้ต่อเดือน.....บาท

สถานภาพการเงิน  พอกินพอใช้  ไม่พอใช้  มีเงินเหลือเก็บ

ระยะเวลาตั้งแต่มีอาการภูมิแพ้จนถึงปัจจุบัน.....ปี.....เดือน

สาเหตุที่ทำให้มีอาการ.....

ปัญหาสุขภาพในปัจจุบัน.....

อาการที่เกิดในปัจจุบัน.....

## สำหรับผู้วิจัย

การวินิจฉัยของแพทย์.....

การรักษาที่ได้รับ.....

ลักษณะทั่วไป.....

การตรวจร่างกาย.....

Aura Test.....

.....

.....

Total Symptom Score.....

.....

.....

Quality of life.....

.....

2. สำหรับช่วงพัฒนาYoga Nursing Therapeutic Model for Self-Healing ของผู้มีอาการภูมิแพ้

ระบบทางเดินหายใจ

รหัสผู้ให้ข้อมูล.....

วันที่เก็บข้อมูล.....

ปัญหาสุขภาพในปัจจุบัน.....

.....

อาการที่เกิดในปัจจุบัน.....

.....

.....

การรักษาที่ได้รับ.....

.....

ลักษณะทั่วไป .....

.....

.....

การตรวจร่างกาย.....

.....

.....

Aura Test.....

.....

.....

Total Symptom Score.....

.....

.....

.....

3. สำหรับสิ้นสุดการทดลองใช้ Yoga Nursing Therapeutic Model for Self-Healing ของผู้มีอาการ  
ภูมิแพ้ระบบทางเดินหายใจ

รหัสผู้ให้ข้อมูล.....

วันที่เก็บข้อมูล.....

ปัญหาสุขภาพในปัจจุบัน.....

.....

อาการที่เกิดในปัจจุบัน.....

.....

.....

การรักษาที่ได้รับ.....

.....

ลักษณะทั่วไป .....

.....

.....

การตรวจร่างกาย.....

.....

.....

Aura Test.....

.....

.....

Total Symptom Score.....

.....

.....

Quality of life.....

### Total Symptom Score (TSS)

TSS was defined as the sum of the five individual symptom scores assessed by the patient for: (1) sneezing, (2) rhinorrhea, (3) itchy nose, palate and/or throat, (4) nasal congestion, and (5) itchy, watery and/or red eyes. Each of these symptoms will be evaluated on a five-point scale:

0 - absent;

1 - mild (symptom present but not annoying or troublesome)

2 - moderate (symptom frequently troublesome but not interfering with normal daily activity or sleep)

3 - severe (symptom sufficiently troublesome to interfere with normal daily activity or sleep)

4 - very severe (symptom severe enough to warrant an immediate visit to the physician)

Symptoms	Severity of Symptom				
	0	1	2	3	4
Sneezing					
Rhinorrhea					
Itchy nose, palate and/or throat					
Nasal congestion					
Watery and/or red eyes					
Symptom Score					
Total Symptom Score					

**Self Report (Diary Writing)**

mm/dd/yy	Report
...../...../.....	
...../...../.....	
...../...../.....	
...../...../.....	
...../...../.....	
...../...../.....	
...../...../.....	
...../...../.....	
...../...../.....	
...../...../.....	



### Quality of Life scale



10

9

8

7

6

5

4

3

2

1

0



**APPENDIX B**  
**CASE SCREENING SHEET**

## APPENDIX B

### Case Screening Sheet

รหัสผู้ให้ข้อมูล.....

วันที่เก็บข้อมูล.....

1. ได้รับการวินิจฉัยจากแพทย์อย่างน้อย 1 ปี
2. อายุอยู่ในช่วง 15-60 ปี
3. มีอาการภูมิแพ้ระบบหายใจคือ มีน้ำมูกไหล คันจมูก จาม น้ำตาไหลและคันตา หรือ
4. มีอาการของหอบหืดจากภูมิแพ้ ระดับ Moderate Asthma ถึง Severe Asthma

#### รับรู้ว่าอาการรุนแรง

อาการภูมิแพ้ตลอดเวลา

อาการหอบตอนกลางคืนบ่อยมาก

กิจกรรมต่าง ๆ ของผู้ป่วยถูกจำกัด ด้วยอาการภูมิแพ้หรือหอบ

#### การรักษาที่ผู้ป่วยได้รับ

การใช้ยารับประทานร่วมกับยาพ่น

#### รับรู้ว่าอาการปานกลาง

อาการภูมิแพ้บ่อย

อาการ มีผลต่อการทำกิจกรรมและการดำเนินชีวิต

อาการหอบตอนกลางคืนมากกว่า

#### การรักษาที่ผู้ป่วยได้รับ

การใช้ยารับประทานหรือยาพ่น

5. ยินดีใช้โยคะในการเยียวยาตนเอง

สำหรับนักวิจัย

.....

.....

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.....

.....

**APPENDIX C**  
**GUIDELINE QUESTIONS FOR PERSONS WITH**  
**ALLERGIC RESPIRATORY SYMPTOMS**

## APPENDIX C

### Guideline Questions for Persons with Allergic Respiratory Symptoms

1. What is your allergic respiratory symptom?
2. Are there any allergic respiratory symptoms that remain?
3. What are the causes of these allergic respiratory symptoms?
4. How have you tried to resolve these allergic respiratory symptoms?
5. What are the results of the management?
6. How did you use complementary and alternative therapy? How have you used them and what were the results?
7. How do you know about yoga therapy?
8. Are you interested in using yoga for healing allergic respiratory symptoms? Why?

**APPENDIX D**  
**GUIDELINE QUESTIONS FOR REFLECTION WITH**  
**ALLERGIC RESPIRATORY SYMPTOMS**

## **APPENDIX D**

### **Guideline Questions for Reflection with Allergic Respiratory Symptoms**

- 1) What happened when practicing yoga?
- 2) How did you feel?
- 3) What does it mean?
- 4) How have you reached your goal in practicing yoga?
- 5) How can you perform yoga better?

**APPENDIX E**  
**INTERVIEW GUIDE FOR EVALUATION**



## **APPENDIX E**

### **Interview Guide for Evaluation**

How did you feel after practicing Yoga as follows?

- A set of posture to exercise joint (warm up)
- Sun Salutation posture (Surya Namaskara)
- A set of standing posture
- A set of sitting posture
- A set of breathing (Pranayama)
- A set of lie posture
- Deep Relaxation with Corpse Pose (Savasana)

How did you feel about duration of practice?

How did you feel about sequence?

How did you feel about this yoga practice?

**APPENDIX F**  
**CONSENT FORM**

## **APPENDIX F**

### **Consent Form**

I am Prapaporn Chukumnerd, the student in the Doctor of Philosophy program in the area of nursing at Faculty of Nursing, Prince of Songkla University, who is conducting the research with the topic of Enhancing the Process of Self-Healing through Yoga Practice in Persons with Allergic Respiratory Symptoms in order to gain more an appropriate yoga nursing therapeutic model that enhances self-healing in persons with allergic respiratory symptoms

You are being asked to participate in this project. All information in this study will remain confidential, no name will be mentioned, and the information gather will be reported as a dissertation. You will take part in giving useful information. The first time is the interview about personal information, health status, treatments, problems, and opinion on yoga practice in allergic respiratory symptoms. This interview will be enquired for about 30-60 minutes. Cooperating with researcher to evaluate the problem and situation, find the way to solve problems, decide and plan to practice yoga for self-healing by having the group practice one hour and a half three times a week and meeting for reflecting. For yoga practicing and evaluating the results of developing the model, you will be observed the participating, interviewed about the problem, symptom score, the perception of the effect of practice. In the process of developing the model for self-healing in persons with allergic respiratory symptoms, I would like to get the permission to tape the interview or group meeting and take the photos for some time to contribute the study. The information details will be kept secret and will be used only for this research with your consideration and permission

before use. Furthermore, during the interview or group meeting, you have the right not to say the things that you feel uncomfortable with, and, if you feel unhappy or under pressure, you can get help from the health team.

If you have any questions about this study, I am willing to provide more information. You have the right to say yes or no to the participation in the study. And, even though you have participated in this study, you can cancel anytime you want without any effects on the treatment or service that you may have.

Thank you for your cooperation

Mrs. Prapaporn Chukumnerd

For those who participate in the study

I have acknowledged the explanation as above, understand the objectives of the research and understand that in this research, I have to be interviewed, join the meeting and allow the taping and observing during the interview and meeting and fill in the questionnaire and practice as agreed upon of the group of developing this model. I am willing to join this research project.

Sign.....

(.....)

Date...../month...../year.....

**APPENDIX G**  
**HANDOUT OF YOGA PRACTICE FOR PERSONS**  
**WITH ALLERGIC RESPIRATORY SYMPTOMS**

## APPENDIX G

### Handout of Yoga Practice for Persons with Allergic Respiratory Symptoms

#### คู่มือโยคะสำหรับผู้ที่มีอาการภูมิแพ้ระบบทางเดินหายใจ

##### ภาวะภูมิแพ้ระบบทางเดินหายใจ

อาการภูมิแพ้ระบบทางเดินหายใจ จะมีลักษณะ คัดจมูก มีน้ำมูกใสๆ คัน จาม ถ้าโพรงจมูกบวมมาก อาจจะมีน้ำมูกไหลลงคอ หรือ ไอเรื้อรัง โดยเฉพาะตอนนอน และเมื่ออากาศเย็น อาการหอบหืดก็ถือว่าเป็นภูมิแพ้ลักษณะหนึ่งเช่นกัน ผู้ที่มีอาการภูมิแพ้มักจะไม่มีไข้ ถ้ามีไข้ น่าจะมีการติดเชื้อแบคทีเรียหรือเชื้อไวรัสร่วมด้วย อาการทางตา จะมีอาการในลักษณะการคันในดวงตา น้ำตาไหลบ่อย ตาแดง

##### ภาวะภูมิแพ้ระบบทางเดินหายใจมี 2 รูปแบบ คือ

1. ชนิดที่มีอาการได้ตลอดปี (Perennial type) อาการของผู้ป่วยจะมีอาการคัดจมูก น้ำมูกไหลทั้งปี อาการคันคอ จาม น้ำมูกไหลจะน้อยกว่าชนิดที่มีอาการเป็นฤดู เป็นภูมิแพ้ที่เกิดจากสารภูมิแพ้ที่อยู่ในบ้าน แต่ก็อาจจะเกิดจากสารภูมิแพ้ภายนอกบ้านที่มีอยู่ตลอดปี สารภูมิแพ้ได้แก่ไรฝุ่น สัตว์เลี้ยง แมลงสาบ หนู

2. ชนิดที่มีอาการเป็นฤดู (Seasonal type) ผู้ป่วยมีอาการเฉพาะฤดูกาลหนึ่งฤดูกาลใดเท่านั้น ส่วนใหญ่เกิดจากแพ้อากาศหญ้า วัชพืช ต้นไม้หรือเชื้อราที่มีในอากาศมากกว่าปกติในช่วงเวลานั้น อาการที่สำคัญคือ อาการคันจมูกเป็นอาการสำคัญ นอกจากนั้นอาจจะคันบริเวณ ตา หู คอ ในช่วงที่มีเกสรดอกไม้ และผู้ป่วยอยู่ในช่วงภูมิแพ้ ผู้ป่วยอาจจะมีอาการน้ำมูกไหลมากขึ้นหากสัมผัสสิ่งระคายเคือง เช่นควันบุหรี่ เครื่องปรับอากาศ กลิ่นฉุน คัดจมูก และน้ำตาไหล น้ำมูกใสไหลอยู่ตลอดเวลา อาการคัดจมูกอาจเป็นมากถึงต้องอ้าปากหายใจหรืออาจจะปวดไซนัส หรือปวดหู อาจจะมีอาการไอเนื่องจากน้ำมูกไหลลงคอ ผู้ป่วยโรคหอบหืดจะมีอาการหอบมากขึ้น อาการมักจะ เป็นมากตอนเช้า อาการแต่ละวันจะไม่เท่ากัน

สำหรับผู้ที่มีอาการคัดจมูก น้ำมูกไหล ก็คงขึ้นอยู่กับว่าอาการรุนแรง จนกระทบการดำเนินชีวิตมากน้อยเพียงใด อย่างบางคนเป็นเพียงจามมากๆ ติดต่อกันหลายครั้งในตอนเช้าร่วมกับน้ำมูกไหลเล็กน้อย ก็คงพอทนรำคาญได้ แต่ที่จะทนอยู่ไม่ไหวเห็นจะเป็นอาการคัดจมูกขนาดหายใจไม่

ออกกรากับช่องจมูกถูกปิด วิธีการบำบัดคือ ให้ยาแก้แพ้ซึ่งเป็นยากลุ่มต้านฮิสตามีน (Antihistamine) และให้ยาลดการคั่งของเยื่อจมูก (Decongestamine) คล้ายๆ กับการบรรเทาหวัด

ในกรณีที่อาการรุนแรงมาก แพทย์อาจต้องพิจารณาให้การบำบัดทางภูมิคุ้มกันที่เรียกว่า อิมมูโนบำบัด (Immunotherapy) และบางรายอาจต้องผ่าตัดจมูก เพื่อบรรเทาอาการอุดตันจนหายใจไม่ถนัด

### สาเหตุของอาการภูมิแพ้ระบบทางเดินหายใจ

1. สาเหตุช่วยเสริม ได้แก่ กรรมพันธุ์มากกว่าร้อยละ 50 ของผู้ป่วยจะมีญาติพี่น้องในครอบครัวเดียวกัน เป็นโรคหนึ่งโรคใดในกลุ่มของโรคภูมิแพ้

2. สาเหตุเฉพาะเจาะจง เกิดจากหายใจเอาสารก่อภูมิแพ้เข้าไปโดยตรง

3. สาเหตุไม่เฉพาะเจาะจง คือสาเหตุช่วยส่งเสริมให้เกิดอาการง่ายขึ้นหรือมากขึ้น ได้แก่ การอักเสบในโพรงจมูก สิ่งระคายเคืองต่อเยื่อในจมูก การเปลี่ยนแปลงอุณหภูมิ เช่น ความร้อน ความเย็น ความกดดันของอากาศหรือการถูกแสงแดดจัดๆ โครงสร้างของจมูกผิดปกติ และความผิดปกติทางสภาพจิตใจ ผู้ป่วยจะมีอาการคันจมูก อาจคันที่อื่นด้วย เช่น คันตา เพดานปาก หู คอ แสบตาหรือน้ำตาไหล ต่อมาจะจามติดๆ กัน มีน้ำมูกไหลเป็นน้ำใส คัดจมูก และเสียงพูดขึ้นจมูก อาการคัดจมูกเกิดจากเยื่อในโพรงจมูกบวม ในรายที่บวมมากจะอุดรูเปิดไซนัสทำให้มีอาการปวดศีรษะบริเวณดั้งจมูก หรือหน้าผาก นอกจากนี้ยังมีอาการจมูกไม่ค่อยได้กลิ่น มีเสมหะเหนียวติดคอทำให้รำคาญในคอ บางรายมีเสียงแหบ คันคอ และไอบ่อยๆ หรือมีอาการหอบหืดด้วย เมื่อตรวจจมูกจะพบเยื่อจมูกบวม สีคล้ำหรือซีด มีลักษณะชุ่มน้ำ มีน้ำมูกใส กระดูกเทอร์บินेट (inferior turbinate) บวมโต ปลายกลม สีซีด มองเห็นได้ชัด ในรายที่มีการอักเสบร่วมด้วย น้ำมูกจะข้นเหนียวหรือมีสีเขียวส่งออกยาก ถ้าเอกซเรย์ไซนัสจะพบว่าเยื่อไซนัสหนากว่าปกติเล็กน้อยซึ่งมักจะรายงานว่าเป็น "โรคไซนัส" อยู่เสมอ ซึ่งเป็นการเข้าใจผิดเพราะผู้ป่วยยังไม่ได้เป็นโรคไซนัสอักเสบที่แท้จริงในระยะนี้ อย่างไรก็ตามจมูกแพ้อากาศที่มีการอักเสบร่วมด้วยพบว่าเป็นโรคไซนัสอักเสบได้บ่อย

สารก่อภูมิแพ้กลางแจ้งที่พบบ่อยๆ คือ ต้นไม้ หญ้า เกสรดอกไม้ทั้งหลาย สปอร์ของรา มลภาวะจากโรงงาน

สารก่อภูมิแพ้ภายในบ้านที่พบบ่อยๆ คือ ฝุ่นละออง ไร ขนสัตว์ต่างๆ เครื่องสำอาง มูลหรือรังแคสัตว์เลี้ยง ควันบุหรี่ เครื่องใช้ที่ใช้ฟันทาใหม่ๆ

### กลไกการเกิดโรค

กลไกที่ก่อให้เกิดอาการดังกล่าวเริ่มจากสารก่อภูมิแพ้ที่รวมเรียกว่า "อัลเลอเจน" (Allergen) เช่น ไรฝุ่น, ฝุ่นละออง, เกสรดอกไม้ ลอยมาสัมผัสผิวเยื่อในจมูก แล้วก่อให้เกิดปฏิกิริยาบวม, มี

สารคัดหลั่งปรากฏออกมามากมายภายในไม่กี่นาที ทั้งนี้เป็นผลจากการที่ร่างกายใช้มาตรการต่างๆ ต่อสู้สิ่งแปลกปลอม แต่ในการทำสงครามต่อผู้เข้าศึกนั้นจะมีความเสียหายเกิดขึ้น เช่น มีการอักเสบของเยื่อภายในจมูก ทำให้เกิดอาการคัดจมูก น้ำมูกไหล น้ำตาไหล คันตา คันจมูก มากน้อยต่างกันไปในแต่ละคน

เมื่อระบบภูมิคุ้มกันในร่างกายสัมผัสกับสารก่อภูมิแพ้จะทำให้ร่างกายสร้างภูมิคุ้มกัน (Antibodies) ซึ่งจะไปเกาะอยู่ในเซลล์บางชนิดของร่างกาย เช่น ที่ทางเดินหายใจ ทางเดินอาหาร ผิวหนังหรือในกระแสเลือด เวลาเกิดปฏิกิริยาภูมิแพ้ขึ้น เซลล์เหล่านี้ก็จะปล่อยสารเคมีอันตรายพลัง เช่น ฮิสตามีน (Histamine) ทำให้เกิดอาการของภูมิแพ้ตามมา เช่น น้ำมูกไหล น้ำตาไหล คันตา คันจมูก ผู้ที่เป็นภูมิแพ้ระบบหายใจจะมีลักษณะดังนี้

- ผู้ที่เป็นภูมิแพ้จะมีขอบตาดำเนื่องจากการขยายของเส้นเลือดรอบดวงตา
- เนื่องจากจะคันจมูกบ่อยผู้ป่วยจะขยี้จมูกทำให้เกิดรอยขวางส่วนปลายจมูก
- เมื่อต้องดูจมูกจะพบว่าเยื่อจมูกบวมสีแดงบางคนอาจจะซีดหรือสีม่วงคล้ำ ลักษณะน้ำมูกที่ช่วยบอกโรคได้เช่น หากน้ำมูกใสก็น่าจะเป็นภูมิแพ้ หากมีน้ำมูกขุ่นเขียวสีเหมือนหนองก็น่าจะเป็นไซนัสอักเสบ

- อาจจะมีการอักเสบของหู แก้วหูอาจจะทะลุทำให้ผู้ป่วยได้ยินไม่ชัด
- เยื่อบุตาอาจจะแดง และบวมเนื่องจากภูมิแพ้

#### การรักษาภาวะภูมิแพ้ระบบทางเดินหายใจ

นักวิจัยค้นพบกลไกการอักเสบอันสลับซับซ้อนที่เกิดขึ้นเวลาร่างกายเผชิญผู้เข้าศึกที่มาก ความเปรียบเทียบกับสมรภูมิมหาศึกที่มีการบัญชาการรบอย่างมีหลักการมีการแบ่งหน้าที่ชัดเจน อย่างเมื่อดเลือดขาวก็มีการแยกประเภทเพื่อไปทำหน้าที่ต่างๆอย่างเป็นที่น่าอัศจรรย์ใจและจากความรู้ดังกล่าวก็นำไปสู่การค้นหายาที่จะบรรเทาอาการ หรือบำบัดโรคได้ ซึ่งขณะนี้มียาที่ใช้บำบัดโรคภูมิแพ้ของจมูกหลายกลุ่ม ซึ่งบางคนต้องใช้อย่างระมัดระวังแล้วจึงจะได้ผล

1. ยาด้านฮิสตามีน (Antihistamine) ซึ่งมีอยู่มากมายหลายขนานแต่ละจะมีรุ่นใหม่ๆ ที่ทำให้เกิดอาการง่วงน้อยกว่า เช่น ยา Loratadine เป็นต้น
2. ยาด้านลิวโคไตรน (Antileukotriene) ซึ่งจะช่วยลดการอักเสบของเยื่อทางเดินหายใจ
3. สเตียรอยด์ชนิดพ่น ซึ่งออกฤทธิ์ช่วยลดการอักเสบเช่นกัน
4. ภูมิคุ้มกันบำบัด ซึ่งอยู่ในระหว่างการพัฒนาและวิจัย
5. หลีกเลี่ยงสิ่งที่ทำให้เกิดภูมิแพ้ทั้งสารที่สงสัย และสิ่งแวดล้อมรวมทั้งสารที่ระคายเคืองต่อทางเดินหายใจ



## ยาแก้แพ้

ยาแก้แพ้เป็นยาหลักสำหรับการรักษาโรคภูมิแพ้ ยาแก้แพ้ในระยะเริ่มแรกจะมีผลข้างเคียงที่ไม่พึงปรารถนา เช่นอาการปากแห้ง ทำให้เกิดการง่วงซึมซึ่งเป็นผลเสียต่อการทำงาน คุณสมบัติของยาแก้แพ้มันนี้คือ ลดอาการที่เกิดจากการหลั่งฮิสตามีน เช่น อาการจาม คันจมูก น้ำมูกไหล แต่ไม่ลดอาการของคัดจมูก สามารถลดอาการคันตา และคันหู และยาแก้แพ้ส่วนใหญ่ออกฤทธิ์เร็ว

### ผลข้างเคียงของยา

- อาจจะทำให้ง่วง ซึม และน้ำหนักตัวเพิ่ม แต่อาการน้อยกว่ายาแก้แพ้รุ่นแรกๆ
- พืชต่อหัวใจ จะมีผลต่อการเต้นของหัวใจ แต่ยาตัวอื่นไม่มีผลต่อการเต้นของหัวใจ

## ยาแก้คัดจมูก

อาการคัดจมูกเป็นอาการที่สำคัญสำหรับผู้ป่วยที่เป็นหวัด หรือเป็นโรคภูมิแพ้ การรักษาอาการคัดจมูกจะให้ยาแก้แพ้ แต่บางครั้งอาจจะไม่สามารถคุมอาการจำเป็นต้องใช้ยาแก้คัดจมูก ยาแก้คัดจมูกจะออกฤทธิ์ต่อระบบประสาทอัตโนมัติ ทำให้เลือดไปที่เยื่อบุจมูกลดลง อาการคัดจมูกจึงดีขึ้น เนื่องจากยานี้ออกฤทธิ์ต่อระบบประสาทอัตโนมัติจึงอาจเกิดผลเสียต่อร่างกายดังนี้คือ ทำให้ความดันโลหิตสูง ดังนั้นผู้ที่เป็โรคความดันโลหิตสูง โรคหัวใจ โรคหลอดเลือดสมอง ก่อนจะใช้ยาควรจะปรึกษาแพทย์ กระสับกระส่าย มือสั่น นอนไม่หลับ ปวดศีรษะ ปากแห้ง มีอาการคั่งของปัสสาวะ ใจสั่นมือสั่น หัวใจเต้นผิดปกติ ยาแก้คัดจมูกอาจจะเป็ยาชนิดเดียว เช่น pseudoephedine หรืออาจจะเป็ยาที่ผสมกันระหว่างยาแก้แพ้และยาแก้คัดจมูก เช่น Actifed, Carinase, ยาบางชนิดมีขายลดใช้ร่วมด้วยเช่น tiffy, decolgen ดังนั้นการเลือกยาจะต้องเลือกใช้ให้ถูกต้อง เช่นหากเป็หวัดมีไข้และเกิดอาการน้ำมูกไหลอาจจะใช้พวก tiffy, decolgen หากเป็ภูมิแพ้ก็เลือกใช้ยาแก้แพ้อย่างเดียวหรือยาแก้แพ้ผสมยาลดน้ำมูกยาแก้คัดจมูกอาจจะผลิตเป็ยาหยอดจมูก ซึ่งจะให้ผลเร็ว และมีผลข้างเคียงต่ำ แต่อาจจะทำให้เกิดการติดยาทำให้ต้องใช้ยาเพิ่มขึ้น

## Steroid

เป็ที่มีประสิทธิภาพในการรักษาโรคภูมิแพ้โดยยาจะออกฤทธิ์ดังนี้ ลดการอักเสบของเยื่อบุจมูก ทำให้เยื่อบุจมูกไม่บวม ลดการหลั่งของน้ำมูก ลดความไวต่อการถูกกระตุ้น ลดการตอบสนองต่อสิ่งกระตุ้น ยา steroid ที่ใช้รักษาภูมิแพ้มีสองรูปแบบคือ ชนิดรับประทานและชนิดหยอดจมูก

### ยา Steroid รับประทาน

เนื่องจากยานี้มีฤทธิ์ลดการอักเสบ และยังมีผลเสียของการกดภูมิคุ้มกันอย่างมาก หากใช้นานๆอาจจะเกิดผลเสียต่อร่างกาย การใช้ยาในกลุ่มนี้มีข้อแนะนำดังนี้

- รับประทานยาในช่วงสั้นไม่เกิน 3-7 วันเมื่อคุมอาการได้จึงหยุดยา

- ควรจะใช้ยานี้ในรายที่มีอาการมาก ไม่สามารถควบคุมด้วยยาธรรมดา
- ไม่ควรจะใช้ยาคัด

### ยา Steroid ชนิดพ่น

เป็นที่รักษาอาการคัดจมูกเนื่องจากภูมิแพ้ การให้ยาพ่นจมูกจะช่วยลดอาการ คัดจมูก น้ำมูกไหล จาม คันคอ และอาการไอ แต่ไม่สามารถลดอาการทางตา เมื่อเริ่มให้ยาอาการจะดีขึ้นใน 1-4 ชั่วโมงและออกฤทธิ์เต็มที่ใน 2 สัปดาห์

- ยานี้อาจจะใช้ร่วมกับยาแก้แพ้ชนิดกิน
- การใช้ยานี้อย่างต่อเนื่องเพื่อป้องกันการเกิดโรคภูมิแพ้
- หากใช้ต่อเนื่องอาจจะเกิดผลข้างเคียง เช่น อาการเคืองจมูก รูกูมกแห้ง คัดจมูก เลือดกำเดาไหล
- การใช้ยานี้ในเด็กอาจจะทำให้เด็กโตช้า หากต้องใช้เป็นเวลานานต้องปรึกษาแพทย์
- ยาที่สำคัญได้แก่ Triamcinolone, Beclomethasone, Budesonide, Fluticasone

### ผลข้างเคียงของยา

จมูกแห้ง แสบจมูก ระคายคอ กลิ่นและรสไม่ดี ปวดศีรษะ เลือดกำเดาไหล การรักษาภูมิแพ้ที่ดีที่สุดคือ หลีกเลี่ยงสิ่งที่แพ้ แต่ถ้าทำไม่ได้ ต้องใช้การรักษาโดยรับประทานยาแก้แพ้ อาจร่วมกับการใช้ยาพ่นจมูก หรือรักษาโดยวิธีการฉีดสารก่อภูมิแพ้ โดยฉีดสารที่คนไข้แพ้ในปริมาณความเข้มข้นน้อยๆ จากนั้นจะเพิ่มปริมาณและความเข้มข้นขึ้น เพื่อให้ร่างกายสามารถปรับตัวและสร้างภูมิคุ้มกันต่อสิ่งนั้นๆ ได้

### โรคหืด (Asthma)

ความสัมพันธ์ของภูมิแพ้และโรคหืดคือคนที่ เป็นโรคภูมิแพ้ อาจเป็นโรคหืดได้ เช่นเดียวกับคนเป็นโรคหืดก็อาจเป็นโรคภูมิแพ้ได้ ดังนั้น การรักษาร่วมกันก็จะควบคุมอาการได้ดี

กลุ่มโรคภูมิแพ้มีการถ่ายทอดทางพันธุกรรมให้สารพิเศษเพื่อต่อสู้สิ่งระคายเคืองร่างกาย โดยเฉพาะอย่างยิ่งโปรตีนที่มีชื่อว่า "อิมมูโนโกลบูลิน อี" (Immunoglobulin E หรือย่อๆ ว่า IgE) เพื่อออกมาต่อสู้กับสารก่อภูมิแพ้ทั้งหลาย แต่ถ้าสารก่อภูมิแพ้รุนแรงมาก เปรียบเหมือนข้าศึกที่มีพลังทำลายมหาศาลได้เปรียบกว่ามากก็ย่อมเอาชนะเราได้

อาการหอบหืดเกิดจากพยาธิวิทยาพื้นฐาน 3 ประการของโรคหืดคือ

1. มีการตีบตัวของหลอดลม เนื่องจากกล้ามเนื้อเรียบที่รายล้อมหลอดลมเกิดการหดตัว
2. มีการอักเสบของทางเดินหายใจทำให้เยื่อบุวม และมีการตอบสนองอย่างเกินเหตุของหลอดลม
3. มีเยื่อเมือกผลิตน้ำเมือกเข้มข้นออกมาอุดทางเดินหายใจ

เมื่อเข้าใจพยาธิสภาพแล้วก็จัดการรักษาไปตามส่วน เช่นถ้าคนไข้มีอาการหายใจหืดหิวหรือหายใจหอบก็ควรให้ยาขยายหลอดลมซึ่งขนานที่มีและออกฤทธิ์เรงน่าพอใจในปัจจุบันคือยากลุ่ม Beta-2-Agnist เช่น ยา Salbutamal และ Terbutaline จัดเป็นการรักษาแบบบรรเทาอาการ

อาการบวมก็ควรให้ยาต้านการอักเสบซึ่งขนานที่ดีที่สุดขณะนี้คือ สเตียรอยด์ชนิดสูดดม จัดเป็นการรักษาแบบควบคุมอาการ

โรคภูมิแพ้เป็นตัวอย่างของการทำลายสภาพแวดล้อมจนเกิดมลภาวะของสิ่งแวดล้อม ที่กระตุ้นให้เกิดโรคนี้น่าจะขึ้นตามลำดับ ปัจจัยในการเกิดอาการแพ้ต่อสารก่อภูมิแพ้ชนิดใด ชนิดหนึ่ง นั้น จะขึ้นอยู่กับสัมผัส ความถี่ของการสัมผัส ปริมาณของสารของแต่ละบุคคล ดังนั้น ลักษณะทางพันธุกรรมสารก่อภูมิแพ้ในที่อยู่อาศัยคงขึ้นอยู่กับ เวลาที่อาศัยอยู่ในที่อยู่นั้นๆ และปริมาณของสารก่อภูมิแพ้ในที่อยู่อาศัย

กล่าวโดยสรุป สารก่อภูมิแพ้ในที่อยู่อาศัยเป็นปัจจัยสำคัญ ที่ทำให้ความชุกของโรคภูมิแพ้มากขึ้นรวมทั้งการปรับปรุงที่อยู่อาศัยให้ทันสมัย สะดวกสบาย เช่น การติดตั้งเครื่องปรับอากาศ การปูพรม การติดผ้าม่าน การเลี้ยงสัตว์ในบ้าน ล้วนเป็นปัจจัยสนับสนุนให้สารก่อภูมิแพ้ในบ้าน

### ขั้นตอนในการรักษาภาวะภูมิแพ้ระบบทางเดินหายใจ

ความหนักของอาการ	ชนิดของการรักษา
อาการไม่หนักหรือนานๆจะเป็นสักครั้ง	<ul style="list-style-type: none"> <li>• ยังไม่ต้องใช้ยา</li> <li>• แนะนำให้หลีกเลี่ยงจากสารที่ทำให้เกิดภูมิแพ้</li> </ul>
อาการเป็นหนักปานกลางและเป็นบ่อย	<ul style="list-style-type: none"> <li>• ให้ยาแก้แพ้ชนิดรับประทาน หรือ</li> <li>• ให้ยาสเตียรอยด์ (steroid) ชนิดพ่น</li> </ul>
ในรายที่มีอาการรุนแรง	<ul style="list-style-type: none"> <li>• เริ่มด้วยยา สเตียรอยด์ชนิดพ่น</li> <li>• หรือยาแก้แพ้ชนิดรับประทาน</li> <li>• หากอาการเป็นมากอาจจะให้เพรดนิโซโลน (prednisolone) รับประทาน</li> </ul>

## การจัดการกับอาการ

### 1. การดูแลตนเอง

- นอนหลับพักผ่อนให้เพียงพอ
- ออกกำลังกายสม่ำเสมอทุกวัน
- รับประทานอาหารให้ถูกหลักโภชนาการ
- หลีกเลี่ยงความเครียด
- ใช้จ่ายตามที่แพทย์สั่ง ไม่ควรใช้จ่ายเอง

### 2. การดูแลสิ่งแวดล้อม

กำจัดฝุ่นละอองและตัวไรในห้องนอน

- ทำความสะอาดห้องนอนทุกวัน
- จัดห้องนอนให้โล่ง มีเครื่องตกแต่งน้อยชิ้นที่สุด
- หลีกเลี่ยงวัสดุที่ทำจากขนสัตว์ นุ่น
- หลีกเลี่ยงการใช้พรม
- ที่นอน หมอน ควรนำออกตากแดดทุกสัปดาห์
- ผ้าคลุมที่นอน ปลอกหมอน ผ้าห่ม มุ้ง ผ้าคลุมเตียง ควรทำความสะอาดอย่างน้อย

เดือนละ 2 ครั้ง

- เก็บหนังสือและเสื้อผ้า ในตู้ที่ปิดมิดชิด
- ใช้วัสดุที่เป็นใยสังเคราะห์ หรือฟองน้ำ

กำจัดแหล่งที่อยู่ของแมลงสาบ และแมลงอื่น ๆ ในบ้าน

ลดปริมาณละอองเกสรดอกไม้ หญ้า

- หลีกเลี่ยงการนำดอกไม้สด หรือต้นไม้วัดในบ้าน
- ตัดหญ้าและวัชพืชออก

ไม่ควรคลุกคลีไกล่ซิดหรือนำสัตว์เลี้ยงมาไว้ในบ้าน

กำจัดเชื้อรา

- อย่าให้เกิดความชื้นหรืออับทึบ กำจัดแหล่งเชื้อรา เช่น ห้องน้ำ กระจ่างต้นไม้

ห้องครัว

### วิธีป้องกันสารก่อภูมิแพ้ในบ้าน

- เปิดหน้าต่างให้เกิดการถ่ายเทของอากาศ โดยเฉพาะห้องครัว ห้องน้ำโดยเปิดหน้าต่างอย่างน้อยครั้งละ 1 ชั่วโมงเปิดวันละสองครั้งหากแพ้เกสรควรปิดหน้าต่างโดยเฉพาะช่วงที่มีเกสรดอกไม้มาก
- ไม่ควรตากผ้าในห้องนอนและห้องนั่งเล่น
- ถ้าห้องมีความชื้นมากให้เปิดให้อากาศถ่ายเทให้มาก

### การปฏิบัติตัวเมื่อเป็นโรคภูมิแพ้

- ไม่เลี้ยงสัตว์ที่มีขนไว้ในบ้าน โดยเฉพาะในห้องนอน
- ไม่ควรตกแต่งห้องนอนด้วยพรม หรือมีตุ๊กตา มั่นเช็ดฝุ่นบ่อยๆ
- ห้องนอนไม่ควรจะมีชั้น หรือหนังสือ
- เครื่องนอนควรซักและต้มสัปดาห์ละครั้ง
- งดบุหรี่ หรือทาสีในบ้าน
- หมั่นทำความสะอาด และดูดฝุ่นบ้านและม่านกันแดด
- กำจัดเศษอาหารให้มีขีดเพื่อป้องกันแมลงสาบ

### โยคะสำหรับผู้ที่มีอาการภูมิแพ้ระบบทางเดินหายใจ

โยคะคือศาสตร์ที่ว่าด้วยการฝึกฝนตนเอง อันมีรากฐานมาจากอินเดียโบราณเป้าหมายของโยคะคือ พัฒนาตัวมนุษย์ ในทุกๆมิติ เช่น กาย จิต อารมณ์ บุคลิกภาพ ฯลฯ อย่างเป็นองค์รวม การเข้าสู่แก่นของโยคะนั้น ประกอบด้วยเทคนิคอันหลากหลายโดยลักษณะร่วมของเทคนิคโยคะทั้งหมดล้วนเป็นเรื่อง กาย-จิตสัมพันธ์ ซึ่งจะช่วยกระตุ้นและประสานการทำงานของระบบประสาทอัตโนมัติ และโยคะยังชี้ให้เห็นถึงความสัมพันธ์ระหว่างรูปแบบการหายใจ กับสภาวะทางร่างกาย และสภาวะทางจิตใจ จากกลไกดังกล่าวยังส่งผลให้ผู้ฝึกปฏิบัติมีความสมดุลของภูมิคุ้มกันเพิ่มขึ้น และช่วยในการจัดการกับความเครียด เกิดการผ่อนคลาย ควบคุมจิตใจและอารมณ์ ช่วยควบคุมปฏิกิริยาที่ตอบสนองต่อภูมิแพ้ระบบทางเดินหายใจ ถึงแม้ว่าแต่ละเทคนิคจะมีกระบวนการช่องทางต่างกัน แต่ทุกเทคนิคก็ล้วนสนับสนุนกันและกัน

### อัญญาณ์โยคะ หรือ มรรค 8 ของโยคะ

ผู้สนใจโยคะเบื้องต้น มักเข้าใจว่า การฝึกทำอาสนะ คือ ทั้งหมดของการฝึกทำโยคะ! ในความเป็นจริง โยคะประกอบด้วยขั้นตอน 8 ประการ ที่เอื้อซึ่งกันและกัน ผู้ที่จะได้รับประโยชน์จากโยคะ จำเป็นอย่างยิ่งที่จะต้อง เรียนรู้ ทำความเข้าใจ และฝึกองค์ประกอบทั้ง 8 ประการนี้ ควบคู่กัน

ไป เราสามารถเปรียบอัฐฐานค์โยคะกับกงล้อ 8 ซึ่งของวงล้อ ล้อที่ประกอบด้วยกงที่สมบูรณ์เท่านั้นที่จะเคลื่อนไปข้างหน้าได้ ที่จะนำพาเราไปสู่เป้าหมายได้

1. ยมะ คือหลักการอยู่ร่วมกับผู้อื่น (หมายรวมถึงสิ่งมีชีวิตทั้งหลาย) ได้อย่างสันติ มีอยู่ 5 ประการ

อหิงสา	การไม่ทำร้ายชีวิต การไม่เบียดเบียน การแก้ปัญหาโดยไม่ใช้ความรุนแรง
สตัย	การรักษาสตัย ไม่โกหก
อัสเตยะ	ไม่ลักทรัพย์ ไม่ละโมภ ไม่ตกเป็นเหยื่อของความโลภ
พรหมจรรย์	การประพฤติตนไปบนหนทางแห่งพรหม (พรหม จรรยา)
อปริครหะ	คือการไม่ถือครองวัตถุเกินความจำเป็น

2. นิยามะ คือวินัยต่อตนเอง มีอยู่ 5 ประการ เช่นกัน

เสาะจะ	หมั่นรักษาความสะอาดบริสุทธิ์ ทั้งกาย – ใจ
สันโดษ	ฝึกพอใจในสิ่งที่ตนเองมีอยู่
ตบะ	มีความอดทน อดกลั้น
สวารยาเย	หมั่นศึกษา เรียนรู้ ทั้งเรียนรู้เกี่ยวกับโยคะ และ เรียนรู้เกี่ยวกับตนเอง
อศวรปณิธาน	ฝึกเป็นผู้อ่อนน้อมถ่อมตน มีความศรัทธาในโยคะ ที่เรากำลังฝึกปฏิบัติ

3. อาสนะหรือการดูแลร่างกาย เมื่อมีศีล มีวินัย ต่อมาก็ดูแลร่างกายตนเอง อาสนะไม่ใช่การออกกำลังกายอย่างที่หลายคนเข้าใจ แต่เป็นการจัดปรับสมดุลให้กับระบบต่างๆ ขั้นตอนในการฝึกอาสนะ ได้แก่ การเตรียมความพร้อม ฝึกทำอาสนะ ปิดท้ายด้วยการผ่อนคลาย

4. ปราณายมะหรือการฝึกลมหายใจ เมื่อร่างกายสมดุล เป็นปกติ ก็พร้อมต่อการ ฝึกควบคุมลมหายใจ ลำดับขั้นของการฝึกลมหายใจ คือ เข้าใจระบบหายใจของตนเอง มีสติรู้ลม หายใจของตนเองตลอดเวลา ควบคุมลมหายใจ หายใจช้าลงและลมหายใจสงบ

5. ปรัชยาหาระหรือสำรวมอินทรีย์ เมื่อร่างกายนิ่ง ลมหายใจสงบ จากนั้นก็ฝึก ควบคุมอารมณ์ ซึ่งมักแปรปรวนไปตามการกระทบกระทั่งจากภายนอก ปรัชยาหาระคือ การควบคุมประสาทสัมผัสทั้ง 5 ได้แก่ การสำรวม รูป รส กลิ่น เสียงและสัมผัส

6. ชารณะหรือการเพ่งจ้อง (Concentration) เมื่อกายสงบ อารมณ์ก็มั่นคงจึงเริ่มอบรมจิต ซึ่งมีธรรมชาติของการไม่อยู่นิ่ง ชารณะคือ การฝึกบรมจิตให้หนึ่ง จิตหนึ่งเป็นจิตที่มีประสิทธิภาพเป็นจิตที่สามารถทำงานได้สำเร็จลุล่วง

7. ฌาน (Meditation) การอบรมจิตสมาธิเสมอ ทำให้จิตมีคุณภาพสูงขึ้นๆ จนถึงขั้นฌาน ฌานคือ จิตที่สามารถจดจ่ออยู่กับเรื่องใดเพียงเรื่องเดียว เป็นจิตที่ฝังตัวอยู่ในสิ่งที่กำลังทำ เป็นจิตที่รู้เห็นตามความเป็นจริง

8. สมาธิ (Transconsciousness) สมาธิของโยคะ ไม่เหมือนกับสมาธิของพุทธเสียทีเดียว ในที่นี้ สมาธิ คือ ผลสูงสุดที่ได้จากการฝึกโยคะ จิตสมาธิของโยคะคือ จิตที่มีความเป็นหนึ่งเดียว จิตที่เป็นหนึ่งเดียว คือ จิตที่พ้นจากความเป็นสอง พ้นจากความเป็นธรรมดา เป็นจิตที่หลุดพ้น

เราจะเห็นได้ว่า การปฏิบัติโยคะครบทั้ง 8 ประการ ก็คือ การมี วิถีชีวิต ไปตามครรลองของโยคะซึ่งเป็นการนำพาของของผู้ฝึก ให้มีความแข็งแรง ยกระดับจิตของผู้ฝึกให้สูงขึ้น จนไปสู่เป้าหมายสุดท้าย อัน ได้แก่ ความหลุดพ้น (โมกษะ) คือความเป็นอิสระจากสิ่งผูกมัดทั้งหลายทั้งปวง

**หลักการของโยคะ มี 5 ประการ คือ**

1. อาหารดี (proper diet)
2. ออกกำลังกายดี (proper exercise) คือ อาสนะนั่นเอง ซึ่งอาสนะ หมายถึง ท่าบริหารอย่างโยคะ ต้องทำให้เหมาะสมกับวัยและตามจริตนิสัย
3. อากาศดี (proper breathing) คือ ปรานายาม หมายถึง การพัฒนาร่างกายเพื่อเอาประโยชน์จากอากาศให้ดีที่สุด คือการฝึกกระบวนการหายใจนั่นเอง
4. อารมณ์ดี (positive thinking and meditation) ซึ่งเป็นเรื่องทางจิตใจ เพราะโยคะเป็นปรัชญาทางศาสนาอย่างหนึ่ง
5. รู้วิธีผ่อนคลาย (proper relaxation) เป็นส่วนหนึ่งของอาสนะ แต่เป็นการเน้นท่าที่ผ่อนคลายเป็นพิเศษ เช่น ท่าศพ เป็นท่าที่สำคัญเพราะปัจจุบันผู้คนมีความเครียดกันมาก ซึ่งส่งผลกระทบต่อกระบวนการสร้างภูมิคุ้มกันต้านทานในร่างกายด้วย แต่ถ้ารู้วิธีผ่อนคลายก็จะช่วยฟื้นฟูระบบเหล่านี้ขึ้นมาได้

### **การฝึกโยคะสำหรับผู้ที่มีอาการภูมิแพ้ระบบทางเดินหายใจ**

ศาสตร์แห่งโยคะที่นำมาประยุกต์ใช้ สำหรับผู้ที่มีอาการภูมิแพ้ประกอบด้วย อาสนะ ปรานายามะ การผ่อนคลายและ สมาธิ ในการฝึกโยคะจะประกอบด้วย 1) การบริหารข้อต่อต่าง ๆ และ สุนทรียศาสตร์ซึ่งถือได้ว่าเป็นการอบอุ่นร่างกาย 2) การฝึกอาสนะในท่าต่าง ๆ 3) การฝึกการหายใจ และ 4) การผ่อนคลายอย่างลึก ซึ่งจะใช้เวลาในการฝึกทั้งหมดประมาณ 1 ชั่วโมง 30 นาที สัปดาห์ละ 3 ครั้ง เวลาที่เหมาะสมในการฝึกโยคะ คือ ยามเช้า ฝึกทำโยคะจนเป็นนิสัย เช่นเดียวกับกิจวัตรประจำวัน อื่นๆ ในชีวิตประจำวัน การทำอาสนะควรฝึกตอนท้องว่าง ห่างจากอาหารหนัก 4 ชั่วโมง หรือห่างจากอาหารเบาอย่างน้อย 2 ชั่วโมง และมีหลักในการทำอาสนะคือ ทำอาสนะด้วยความรู้สึกสบายตัว ไม่เกร็ง อยู่ในอาสนะอย่างมั่นคง นิ่ง สงบ ใช้แรงแต่น้อย ใช้ความพยายามแต่น้อย ไม่จำกัดแค่ทางกาย แต่รวมถึงการใช้ความพยายามทางใจให้น้อยที่สุดด้วย และมีสติ คือการมีสติกำหนดรู้ รู้ตัวอยู่ทุกขณะ ลำดับของการฝึกประกอบด้วย

## โยคะสำหรับผู้ที่มีอาการภูมิแพ้ระบบทางเดินหายใจที่รับรู้การรุนแรง

### ท่านั่งพัก



ขากางออกฝ่ามือทั้งสองวางไว้ด้านหลัง ใช้น้ำหนักตัวที่เอนไปด้านหลัง ทำตัวให้เป็นมุมป้าน นิ่ง ผ่อนคลาย จิตตามรับรู้และตั้งเจตนาหายใจ

### การหายใจสลับจมูก

คือการหายใจเข้าออกทางรูจมูกทีละข้างสลับกันไป เป็นการชำระล้างช่องทางเดินของปราณภายในร่างกาย



### วิธีปฏิบัติ

ในรายที่มีอาการมากนั่งในท่าสุขาสนะหรือท่าดอกบัว มือซ้ายยกนิ้วโป้งและนิ้วชี้ให้แตะกัน ส่วนนิ้วอื่น ๆ เหยียดออก มือขวาพับนิ้วชี้และนิ้วกลางลง ใช้นิ้วโป้งปิดรูจมูกขวา นิ้วนางหรือก้อยปิดรูจมูกซ้าย หายใจเข้า-ออกตามปกติสัก 3-4 รอบการหายใจ จะปฏิบัติในอัตราส่วน 1: 1: 2 โดยปิดรูจมูกขวาด้วยนิ้วหัวแม่มือ หายใจเข้าทางรูจมูกซ้าย 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4 เปิดรูจมูกขวาหายใจออกทางรูจมูกขวา 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกขวา 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4 เปิดรูจมูกซ้ายหายใจออกทางรูจมูกซ้าย 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกซ้าย 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4 เปิดรูจมูกขวาหายใจออกทางรูจมูกขวา 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกขวา 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4 เปิดรูจมูกซ้ายหายใจออกทางรูจมูกซ้าย 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกซ้าย 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4 เปิดรูจมูกขวาหายใจออกทางรูจมูก



ขวา 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกขวา 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลืนลมหายใจ 1-2-3-4  
เปิดรูจมูกซ้ายหายใจออกทางรูจมูกซ้าย 1-2-3-4-5-6-7-8 เปิดรูจมูกทั้งสองข้างปรับลมหายใจ จิต  
ตามรู้อยู่กับลมหายใจ

### ประโยชน์

เป็นการใช้ลมหายใจทำความสะอาดภายในบริเวณบริเวณโพรงจมูก เป็นการปรับสมดุล  
ของระบบประสาทอัตโนมัติ ซึ่งแบ่งได้เป็น 2 ส่วน คือส่วนที่รับผิดชอบด้านการผ่อนคลาย  
(Parasympathetic Nervous System) และ ส่วนที่รับผิดชอบด้านการตื่นตัว (Sympathetic Nervous  
System) การฝึกหายใจสลับรูจมูกทำให้มวลอากาศที่ผ่านเข้าออกตามทางเดินหายใจหนาแน่นขึ้น  
เอื้อต่อการมีสติตามรู้ลมหายใจได้ง่ายขึ้น

### **ท่าศพ (ชะสนะ)**



### ขั้นตอนการฝึก

นอนหงาย กางขาประมาณ 1 ฟุต กางแขนประมาณ 1 ฟุต หายใจฝ่ามือ

### ประโยชน์

ผ่อนคลาย ทั้งร่างกาย และ จิตใจ ลดความเครียด ช่วยให้เราเฝ้าสังเกต ความรู้สึกภายใน  
ตัวเอง ได้ดีขึ้น

### **การผ่อนคลายการผ่อนคลายอย่างลึก**

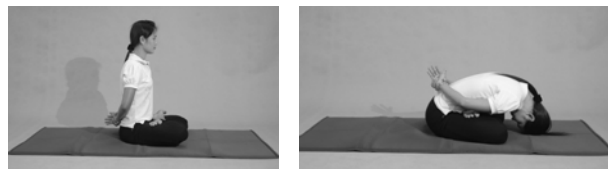


นอนในท่าศพ เป็นการใช้สติไปกำหนดรู้ที่ลมหายใจ พร้อมกับกำหนดให้ผ่อนคลาย เมื่อรู้สึกรู้ว่าเริ่มมีการผ่อนคลาย ให้กำหนดจิตที่ร่างกายทีละส่วน ตั้งแต่ปลายเท้าจนถึงศีรษะ รับรู้กับร่างกายตนเอง และมีสมาธิ เป็นการประสานสัมพันธ์กายและจิตทำให้เกิดความรู้สึกสงบและนิ่ง ช่วยสลัดความกังวล ความกลัว ครุ่นคิดออกจากจิตใจทำให้เกิดการปล่อยวางและผ่อนคลาย หากสามารถผ่อนคลายได้ลึกซึ้งและสงบมากเท่าใด ลมหายใจจะแผ่วเบาและปลอดโปร่งสบายมากเท่านั้น เมื่อเกิดการผ่อนคลายทำให้จิตเกิดความตระหนักรู้กับความเป็นจริงที่เป็นอยู่ มีสมาธิ และเกิดปัญญา หาแนวทางในการดูแลสุขภาพตนเองได้อย่างมีประสิทธิภาพ

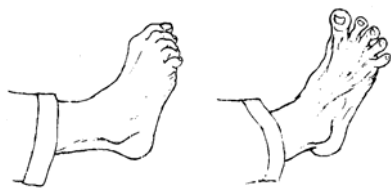
### โยคะสำหรับผู้ที่มีอาการภูมิแพ้ระบบทางเดินหายใจที่รับรู้การปานกลาง

#### ท่าไหว้ครู

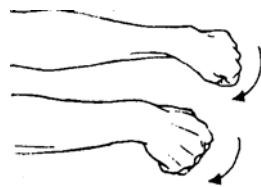
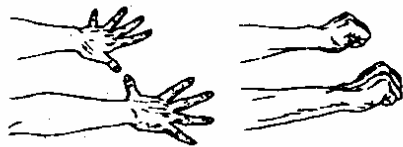
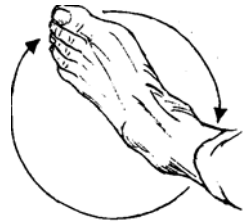
นั่งในท่าที่มั่นคงและสุขสบายในท่าสุขาสนะ ดอกบัวชั้นเดียวหรือดอกบัวสองชั้น มือวางบนเข่า คำว่าหรือหงาย หลังตา ผ่อนคลาย พนมมือตั้งความปรารถนาด้วยกันที่จะเรียนรู้และถ่ายทอดศาสตร์แห่งภูมิปัญญาจากครูบาอาจารย์ ปล่อยมือไปไว้หลัง มือซ้ายจับข้อมือขวา ยึดลำตัวขึ้น ก้มลำตัวและศีรษะลงจรดพื้นหรือลอยอยู่ในท่าสัญลักษณ์โยคะ คารวะครูบาอาจารย์ นิ่ง ตั้งจิตลมหายใจ เหยศีรษะยกลำตัวขึ้น ปล่อยแขน ทำความรู้สึกที่บริเวณเปลือกตา แล้วลืมตาขึ้น



#### การบริหารข้อ



งุ่ม – กาง ข้อนิ้วเท้า ส่วนอื่นของร่างกาย นิ่ง สบาย ค่อยๆงุ่มนิ้วเท้าเข้าจนสุด จากนั้นเหยียด กางนิ้วเท้าจนถึง ทำ 10 รอบ จะทำพร้อมกันทั้ง 2 ข้าง หรือ ทีละข้างก็ได้



เหยียดข้อเท้า เหยียดปลายเท้าทั้งสองไปข้างหน้า  
จนหลังเท้าตั้ง ดึงเท้าทั้งสองกลับจนน่องตั้ง  
กำหนดรู้อยู่ที่ข้อเท้า ซึ่งเป็นจุดหมุนของการ  
เคลื่อนไหว ทำ 10 รอบ

หมุนข้อเท้า ให้ข้อเท้าเป็นจุดศูนย์กลาง ค่อยๆ  
หมุนเท้าเป็นวงกลมตามเข็มนาฬิกา 10 รอบ แล้ว  
หมุนทวนเข็มนาฬิกาอีก 10 รอบ ขณะทำ ตั้งใจ  
วาดปลายเท้าให้เป็นวงกลมวงใหญ่

บริหารขาหนีบในท่าผีเสื้อ งอขาทั้งสองข้าง ฝ่า  
เท้าประกบกัน เลื่อนเข้ามาชิดฝีเย็บ มือสองข้าง  
จับฝ่าเท้าไว้ ยึดหลังตรงแล้วขยับเข้าขึ้นลงทั้ง  
สองข้าง 50 ครั้ง ยึดลำตัวขึ้น ก้มลำตัวและศีรษะ  
ลงจรดพื้นหรือลอยอยู่ นิ่ง สังเกตลมหายใจ เสง  
ศีรษะยกลำตัวขึ้น

ข้อนิ้วมือ กางนิ้วมือเต็มที่ แล้วกำหมัดแน่น ทำ  
10 รอบ ระหว่างกำ ให้นิ้วโป้งอยู่ในหมัด

เหยียดข้อมือ ตั้งฝ่ามือขึ้นจาก แล้วพับฝ่ามือลง  
ปลายนิ้วชี้พื้น ข้อมือเหมือนบานพับ ทำ 10 รอบ

หมุนข้อมือ กำหมัดหลวมๆ แล้วหมุนหมัดเป็น  
วงกลม โดยให้ข้อมือเป็นจุดศูนย์กลาง ทำตาม  
เข็มนาฬิกา และทวนเข็มนาฬิกาอย่างละ 10 รอบ

หมุนไหล่ พับศอก นำมือแตะไหล่ ปิดศอกเข้า  
ชิดกัน วาดศอกเป็นวงกลม โดยให้ไหล่เป็นจุด  
ศูนย์กลาง วาดศอกขึ้นด้านบนแล้วอ้อมไป

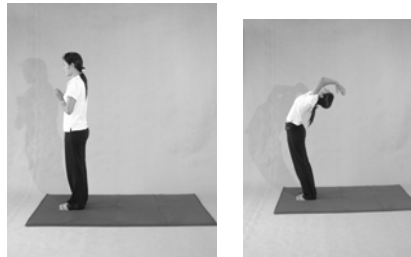


ด้านหลัง 3 รอบ แล้ววาดศอกย้อนทิศทางลง  
ด้านล่าง แล้วจึงอ้อมมาด้านหน้า อีก 3 รอบ  
บริหารคอ ทิศทางแรก หันหน้าซ้าย – ขวา  
ทิศทางที่สอง เอียงศีรษะซ้าย – ขวา ทิศทางที่สาม  
เงยและก้มคอ ทำอย่างละ 1 – 2 รอบ

### ทำไหว้พระอาทิตย์

#### ขั้นตอนการฝึก

ยืนลำตัวตรง พนมมือ หายใจเข้าพร้อมกับไหว้ไปข้างหน้า ไหว้ขึ้นข้างบน ไหว้ไปข้างหลัง



หายใจออก ก้มพับลำตัวลง มือและเท้าอยู่ในแนวเส้นตรงเดียวกัน ในท่าสี่ส่วนสัมผัสพื้น



หายใจเข้า เขยิบขาขวาไปข้างหลัง แหงนมองพระอาทิตย์ มือวางอยู่บนพื้น



หายใจออก เขยิบขาซ้ายตามมา ลำตัวอยู่ในแนวเส้นตรง



หายใจเข้าลึกๆ หายใจออกหอบอบลง ปรับลมหายใจในท่ากระด้างหอบอบ จิตตามรับรู้ลมหายใจ



หายใจเข้าลึก หายใจออกยาว กลั้นลมหายใจ เลื่อนหน้าอกมาแตะพื้น คาง มือสองข้าง เข้าสองข้าง และหลังเท้าทั้งสองข้างแตะพื้นในท่า แปรส่วนสัมผัสพื้น



หายใจเข้ายกกล้าตัวขึ้นในท่าสูงใหญ่



หายใจออก ยกสะโพกขึ้นลดศีรษะลงใกล้พื้นในท่าสามเหลี่ยมสะพานโค้ง



หายใจเข้าลึกเข้า หายใจออกหมอบลง ปรับลมหายใจในท่ากระต่ายหมอบ จิตตามรับรู้ลมหายใจ



หายใจเข้าดึงเท้าขวามาอยู่ระหว่างมือทั้งสองข้าง แหงนมองพระอาทิตย์



หายใจออกดึงเท้าขวามาคู่กันในท่าสี่ส่วนสัมผัสพื้น



หายใจเข้า ยกตัวขึ้นพร้อมกับไหว้ไปข้างหน้า ไหว้ชี้ข้างบน ไหว้ไปข้างหลัง



หายใจออกกลับมาอยู่ในท่าไหว้ ปรับลมหายใจ คิดเป็นครึ่งรอบของการไหว้พระอาทิตย์



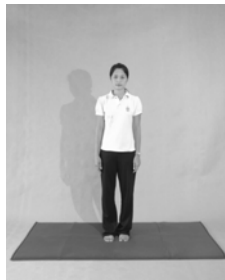
ปฏิบัติอีกครึ่งรอบ โดยเปลี่ยนจากขาขวาเป็นขาซ้าย ปฏิบัติ 3 รอบ

ประโยชน์

ได้บริหารกล้ามเนื้อทุกส่วน ฝึกลมหายใจ ช่วยบำรุงอวัยวะภายใน เช่น ระบบหายใจ ระบบไหลเวียนเลือด กล้ามเนื้อ กระดูก และระบบประสาท รวมถึงการทำงานของระบบต่อมไร้ท่อ

ประสาทในช่องท้องให้ทำงานได้ดีขึ้น การเคลื่อนไหวต่อเนื่อง สอดคล้องกับการกำหนดลมหายใจเข้าออก ทำให้เกิดสมาธิจิตแน่วแน่ จิตใจแจ่มใส

### ท่าภูเขา



ยืนตรงขาสองข้างชิดกัน นำหนักตกลงด้านล่าง ศีรษะตรง คอตรง หลังตรง รู้สึกมั่นคงเหมือนภูเขา สัมผัสลมหายใจ

### ท่ากวาง (จักระชั้นอาสนะ)



### ขั้นตอนการฝึก

1. ยืนหลังตรง ไม่เกร็ง สันเท้าชิด มีสติรับรู้อยู่ที่บริเวณฝ่าเท้า
2. หายใจเข้ายกแขนซ้ายขึ้นทางด้านข้างลำตัว จนแขนขนานพื้น
3. พลิกฝ่ามือหงาย
4. ยกแขนต่อ จนให้ต้นแขนแนบชิดหู
5. หายใจออกค่อยๆ โน้มตัวไปทางขวา เขยียดกล้ามเนื้อข้อข้างลำตัวทุกส่วน เขยียดข้อข้างลำตัว

### ทั้งหมด

6. หายใจเข้ากลับมาตรง หายใจออกวางแขนลง จากนั้น ทำสลับข้าง

### ประโยชน์

บริหารแนวกระดูกสันหลังไปทางด้านข้าง เขยียดกล้ามเนื้อข้อข้างลำตัวลดอวัยวะภายในช่องท้องเพิ่มการไหลเวียนของเลือดบริเวณแขน

## ท่าต้นไม้



### ขั้นตอนการฝึก

จากท่าภูเขา ยืดลำตัวตรง ปลายเท้า สันเท้าชิดกัน กระจุกสันหลังยืดตรง ไหล่ตรง คอตรง แขนทั้งสองข้างอยู่ข้างลำตัว งอเข่าขวา วางขาขวาบน โคนขาซ้าย วางแขนทั้งสองข้างบนสะโพก พยายามทรงตัวให้นิ่ง โดยเพ่งสายตาไปที่จุดใดจุดหนึ่งบนพื้น หายใจเข้าค่อยๆ ยืดแขนขึ้นข้างบน นำฝ่ามือมาประกบกันเหนือศีรษะ เขยียดแขนตึง หายใจออกค่อยๆ ลดแขน ขา กลับคืนสู่ท่าภูเขา สลับทำอีกข้างหนึ่ง โดยการงอเข่าซ้าย วางขาซ้ายบน โคนขาขวา แล้วยืดแขน นำฝ่ามือประกบกันเหนือศีรษะ

### ประโยชน์

กล้ามเนื้อด้านข้างยืดหยุ่นและแข็งแรง ไหล่และขาแข็งแรงขึ้น ช่วยในเรื่องความมั่นคง และการจัดจ่อ

## ท่าตรีโกณ



### ขั้นตอนการฝึก

ยืนเท้าชิดกัน มือแนบลำตัว หรือยืนท่าภูเขา แยกเท้าให้กว้างประมาณ 1 ช่วงไหล่ หายใจเข้า ยกแขนสองข้างกางออกขนานกับพื้นในระดับไหล่ หงายฝ่ามือคว่ำ หายใจออกช้าๆ พร้อมกับเอียงตัวลงไปเท้าขวา ฝ่ามือขวาวางที่พื้นใกล้กับตาตุ่มด้านนอก แขนซ้ายเขยียดตรงและชี้ขึ้น ไหล่และแขนทั้งสองข้างอยู่ในแนวตรงกัน หันหน้าขึ้น ตามองไปทางมือซ้าย หายใจเข้าและคลายท่าโดยการยืดลำตัวขึ้น ทำซ้ำ 2-3 ครั้งในแต่ละข้าง



## ประโยชน์

ยึดกล้ามเนื้อต้นขา น่อง เข่า ข้อเท้า ไหล่ หลัง กระตุ้นอวัยวะในช่องท้อง ลดอาการเครียด และช่วยระบบย่อยอาหาร

## **การหายใจด้วยกล้ามเนื้อหน้าท้อง**

เพื่อเพิ่มประสิทธิภาพในการหายใจ และเพื่อเป็นการผ่อนคลายทั้งร่างกายและจิตใจของผู้ฝึก



นั่งในท่าสุขาสนะ มือทั้ง 2 วางบนเข่าคว่ำหรือหงาย หายใจตามปกติ มีสติกำหนดรู้กับลมหายใจ จากนั้นเพิ่มการมีสติกำหนดรู้กับการเคลื่อนไหวของหน้าท้อง สังเกตลมหายใจของเราที่ผ่อนช้าลง สงบลง ลมหายใจจากหยาบมาเป็นลมหายใจที่ละเอียด

สูดลมหายใจเข้า ให้หน้าท้องพองขึ้น ผ่อนลมหายใจออก ให้หน้าท้องแฟบลง มีสติกำหนดรู้อยู่กับลมหายใจ ที่สัมพันธ์กับการเคลื่อนขึ้น-ลงของหน้าท้อง พยายามดึงช่วงเวลาของลมหายใจออก ให้นานกว่าช่วงเวลาของลมหายใจเข้า

มีสติกำหนดรู้ขณะที่ผ่อนลมหายใจออกจนสุด เผื่อสังเกตห้วงขณะที่เราหยุดหายใจ ซึ่งเป็นช่วงที่เราหายใจออกหมดแล้ว แต่การหายใจเข้ายังไม่เกิดขึ้น โดยไม่ได้ตั้งใจกลับลมหายใจ กำหนดรู้อยู่กับห้วงขณะที่ร่างกายไม่หายใจที่เวลานี้ อันเป็นห้วงขณะที่กายนิ่ง ลมหายใจหยุด และ จิตสงบ คอยมีสติระลึกถึงห้วงเวลาที่จิตสงบ ตลอดทั้งวัน

## **กะปละบาคิ**



นั่งให้มั่นคง หลังตรง และผ่อนคลาย มือทั้งสองวางไว้บนเข่า ยกทรงอกขึ้นเล็กน้อย หายใจเข้าและตั้งใจหายใจออกด้วยกล้ามเนื้อหน้าท้องโดยเร็ว และแรง หายใจออกทางจมูก เน้นที่

ลมหายใจออก เป็นการเขม่วช่องท้องเข้าโดยเร็ว ส่วนตอนหายใจเข้า คลายบริเวณช่องท้อง ปล่อยให้การหายใจเข้าเกิดขึ้นเองตามธรรมชาติ ทำต่อเนื่องเป็นจำนวนครั้งตามที่กำหนด

**ขั้นตอนการฝึก**

1. ฝึกทำรอบละ 10 ครั้ง วันละ 3 รอบ เป็นการเริ่มต้นฝึกเทคนิคให้ถูกวิธี หายใจด้วยหน้าท้องเท่านั้น ทำด้วยความผ่อนคลาย เน้นลมหายใจออก โดยไม่ต้องพ่วงกับการหายใจเข้า

2. ฝึกทำรอบละ 30 ครั้งในเวลา 30 วินาที วันละ 3 รอบ เป็นการฝึกทำให้เป็นจังหวะที่สม่ำเสมอ คือ วินาทีละ 1 ครั้ง

**ประโยชน์**

เป็นการหายใจเอาอากาศที่มีออกซิเจนจำนวนมากกว่าปกติในระยะเวลาสั้น ทันทีหลังฝึกจะรู้สึกไม่ต้องการหายใจเป็นเวลานานกว่าปกติ

**การหายใจสลับจมูก**

คือการหายใจเข้าออกทางรูจมูกทีละข้างสลับกันไป เป็นการชำระล้างช่องทางเดินของปราณภายในร่างกาย



**วิธีปฏิบัติ**

นั่งในท่าสุขาสนะหรือท่าดอกบัว มือซ้ายยกนิ้วโป้ง นิ้วชี้ให้แตะกันส่วนนิ้วอื่น ๆ เขยิบออก มือขวาพับนิ้วชี้และนิ้วกลางลง ใช้นิ้วโป้งปิดรูจมูกขวา นิ้วนางหรือก้อยปิดรูจมูกซ้าย หายใจเข้า-ออกตามปกติสัก 3-4 รอบการหายใจ จะฝึกอย่างน้อย 3 รอบ ปิดรูจมูกขวาด้วยนิ้วหัวแม่มือ หายใจเข้าทางรูจมูกซ้าย 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 เปิดรูจมูกขวาหายใจออกทางรูจมูกขวา 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกขวา 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 เปิดรูจมูกซ้าย หายใจออกทางรูจมูกซ้าย 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกซ้าย 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 เปิดรูจมูกขวาหายใจออกทางรูจมูกขวา 1-2-3-4-5-6-7-8 หายใจเข้าทางรูจมูกขวา 1-2-3-4 ปิดรูจมูกทั้งสองข้างกลั้นลมหายใจ 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 เปิดรูจมูกซ้าย หายใจออกทางรูจมูกซ้าย 1-2-3-4-5-6-7-8 หายใจเข้าทางรู

จุมุกซ้าย 1-2-3-4 ปิดรูจุมุกทั้งสองข้างกลั้ยมหายใจ 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16เปิด  
 รุจุมุกขวาหายใจออกทางรุจุมุกขวา 1-2-3-4-5-6-7-8 หายใจเข้าทางรุจุมุกขวา 1-2-3-4 ปิดรูจุมุกทั้ง  
 สองข้างกลั้ยมหายใจ 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16เปิดรูจุมุกซ้ายหายใจออกทางรุ  
 จุมุกซ้าย 1-2-3-4-5-6-7-8 เปิดรูจุมุกทั้งสองข้างปรับลมหายใจ จิตตามรู้อยู่กับลมหายใจ  
ประโยชน์

เป็นการใช้ลมหายใจทำความสะอาดภายในบริเวณบริเวณโพรงจุมุก เป็นการปรับสมดุล  
 ของระบบประสาทอัตโนมัติ ซึ่งแบ่งได้เป็น 2 ส่วน คือส่วนที่รับผิดชอบด้านการผ่อนคลาย  
 (Parasympathetic Nervous System) และ ส่วนที่รับผิดชอบด้านการตื่นตัว (Sympathetic Nervous  
 System) การฝึกหายใจสลับรุจุมุกทำให้มวลอากาศที่ผ่านเข้าออกตามทางเดินหายใจหนาแน่นขึ้น  
 เอื้อต่อการมีสติตามรู้ลมหายใจได้ง่ายขึ้น

### ทำนั้งพัก



ขาางออกฝ่ามือทั้งสองวางไว้ด้านหลัง รับน้าหนักตัวที่เอนไปด้านหลัง ทำตัวให้เป็นมุมป้าน นั้ง  
 ผ่อนคลาย สังเกตลมหายใจ

### ท่าเหยียดหลัง (ชาณู ศรีษะอาสนะ)

#### ขั้นตอนการฝึก



จากทำนั้งพักรวบรวมขาชิด ตั้งหลังตรง พับเข่า  
 ข้างหนึ่ง นำฝ่าเท้าไปวางชิดต้นขา ดึงสันเท้า  
 ชิดสุดลำตัวหายใจเข้ายกมือทั้ง 2 ขึ้น



หายใจออกค่อยๆเหยียดหลัง ลดตัวลง เอามือ  
รวบจับที่ขา จากนั้นลดทรวงอก แล้วค่อยลด  
ศรีษะลง หน้าผากจรดขา

### ประโยชน์

เป็นการเหยียดเส้นเอ็น กล้ามเนื้อ ตลอดส่วนหลังของร่างกาย ทั้งบริเวณขา หลัง และคอ  
เป็นการกदनวดอวัยวะในช่องท้อง

### **ท่าคิม (ปัจฉิมโถมนะอาสนะ)**

#### ขั้นตอนการฝึก



จากทำนั่งพัก รวบขาชิด นั่งหลังตรง  
หายใจเข้าค่อยๆเหยียดหลัง



หายใจออกลดแผ่นหลังลงจนสุด  
มือจับไว้ที่ขา บริเวณที่เราจับถึงหากมือแตะ  
ถึงเท้าได้ ทำนิ้วชี้เป็นตะขอ เพื่อเกี่ยวนิ้วหัว  
แม่มือไปงลดทรวงอกลง แล้วจึงลดศรีษะลง  
เป็นลำดับสุดท้าย

### ประโยชน์

เป็นการเหยียดอวัยวะบริเวณส่วนหลังทั้งหมด อย่างเต็มที่  
กदनวดอวัยวะภายในช่องท้อง  
เป็นทำรักษาสุขภาพทั่วทั้งร่างกายอย่างเป็นองค์รวม  
เป็นทำที่ทำให้ผู้ฝึกเกิดความสงบ มีสติรู้ภายในได้ชัดเจน

## ท่าบิดสันหลัง (วักระอาสนะ)

### ขั้นตอนการฝึก



เข้าสู่ท่านั่งหลังตรง ชันเข่าซ้าย สันเท้าซ้าย  
เสมอเข่าขวา มือซ้ายยันหลัง ตั้งหลังตรง



ข้อศอกขวาคร่อมเข่าซ้าย ออกแรงศอกขวา  
ดันต้นขาซ้ายเข้าแนบเอว เขม่วท้อง แล้วบิด  
ตัวไปทางซ้ายตามลำดับ จากเอว ไหล่ และ  
ศีรษะ  
ทำสลับข้าง

### ประโยชน์

เป็นการสร้างความยืดหยุ่นให้กระดูกสันหลัง  
กระตุ้นระบบประสาทตลอดแนวกระดูกสันหลัง บริหารอวัยวะภายในช่องท้อง บริหารคอ บริหาร  
สายตา

## ท่าศพ (ชวาสนะ)



### ขั้นตอนการฝึก

นอนหงาย กางขาประมาณ 1 ฟุต กางแขนประมาณ 1 ฟุต หายฝ่ามือ

### ประโยชน์

ผ่อนคลาย ทั้งร่างกาย และ จิตใจ ลดความเครียด ช่วยให้เราเฝ้าสังเกต ความรู้สึกภายใน  
ตัวเอง ได้ดีขึ้น สร้างความคุ้นชินกับการอยู่ในท่าศพ ปล่อยวางจาก ความกลัวตาย

## ท่าคันทิด ครึ่งตัว (อารคะ หาละอาสนะ)

### ขั้นตอนการฝึก



จากท่าศพ เข้าสู่ท่าเตรียม โดยรวบขาชิดกัน แขนชิดลำตัว คู้ฝ่ามือ หายใจเข้ายกขาทีละข้าง ถึง 30 องศา รอสักครู่ ยกถึง 60 องศา รอสักครู่ ยกขาขึ้นสุด ยกเท่าที่ได้ โดยไม่เกินมุมฉาก รอสักครู่ หายใจออก ค่อยๆวางขาลงช้าๆ แล้วสลับทำอีกข้าง จากนั้น หายใจเข้ายกขา 2 ข้างพร้อมกัน ถึง 30 องศา รอสักครู่ ยกถึง 60 องศา รอสักครู่ ยก 2 ขาขึ้นสุด ยกเท่าที่ได้ อย่ายกเกินมุมฉาก รอสักครู่ หายใจออก ค่อยๆวางขาลงช้าๆ

### ประโยชน์

สร้างความแข็งแรงให้กล้ามเนื้อหน้าท้อง กล้ามเนื้อสะโพก  
บริหารอวัยวะในช่องท้อง เสริมการทำงานของระบบย่อยอาหาร และ ระบบขับถ่าย  
ทำให้การไหลเวียนของเลือดบริเวณขาดีขึ้น

### ท่าปลา

### ขั้นตอนการฝึก

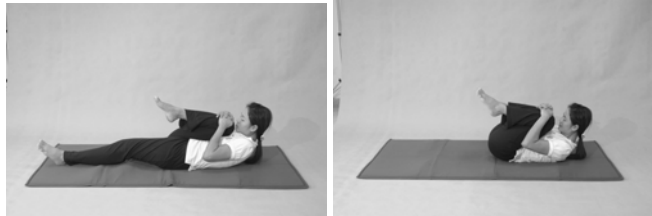


นอนหงาย ขาสองข้างชิดกันมีอ่าวใต้  
สะโพก ยกหน้าอกขึ้น วางศีรษะลงบนพื้น  
หายใจเข้าช้าลึก หายใจออกยาว

### ประโยชน์

ช่วยให้มีการคลายตัวของกล้ามเนื้อบริเวณไหล่ ช่วยให้ปวดขยายตัวได้เต็มที่

### ทำขับลม



### ขั้นตอนการฝึก

เริ่มจากท่าศพ เข้าสู่ท่าเตรียมพร้อม ขาสองข้างชิดกัน แขนวางข้างลำตัว งอเข่าขวา แล้วใช้นิ้วมือประสานกัน รัศเข่าขวาไว้ หายใจเข้ากดเข่าขวาให้ชิดอก นิ่ง หายใจออกพร้อมกับปล่อย ขา แขน และวางศีรษะลงบนพื้น พร้อมกัน สลับทำข้างซ้ายวิธีเดียวกัน จากนั้นงอเข่าทั้งสองข้าง ใช้นิ้วมือประสานกันรัศเข่าไว้ หายใจเข้ากดเข่าทั้งสองให้ชิดอก นิ่ง หายใจออกหายใจออกพร้อมกับปล่อย ขา แขน และวางศีรษะลงบนพื้น พร้อมกัน นับเป็น 1 ครั้ง ควรทำ 3-5 ครั้ง

ประโยชน์ คุ้ดูแลการย่อยอาหาร ช่วยขับลมออกจากกระเพาะอาหาร บรรเทาอาการท้องผูก ช่วยนวดลำไส้ และนวดหลังส่วนเอว

### ท่าจรเข้ (มัคระอาสนะ)



### ขั้นตอนการฝึก

นอนคว่ำ ขาทั้งสองกางออกราว 2 ฟุต ปลายเท้าชี้ออกรวบแขน มือโอบไหล่ หรือจับต้นแขนพักศีรษะบนปลายแขน

### ประโยชน์

เป็นท่าผ่อนคลายสำหรับกลุ่มอาสนะในท่านอนคว่ำ เป็นการนวดผนังหน้าท้องให้แข็งแรง ช่วยให้ระบบย่อยอาหารทำงานได้ดีขึ้น

## ท่าตะกั่ว (ชาลระอาสนะ)

### ขั้นตอนการฝึก



จากท่าจรเข้ เข้าสู่ท่าเตรียมหายใจเข้ายกขา  
ขึ้น ค้างไว้สักครู่ หายใจออก ค่อยๆวางขา  
ทำทีละข้างทีละข้าง สลับกัน



ยกทั้ง 2 ขาขึ้นพร้อมกัน

### ประโยชน์

บริหารกล้ามเนื้อหลังส่วนล่าง กคผนวชองทออง กระจุดันการทางานของระบบจับถ่าย

## ท่างู (ภุขงคะอาสนะ)

### ขั้นตอนการฝึก



เริ่มจากท่าจรเข้ แล้วเข้าสู่ท่าเตรียม ด้วยการ  
รวบขาชิดกัน แขนชิดลำตัว หายใจเข้า ค้าง  
จรดพื้นยกมือวางเสมอและชิดทรวงอก  
หน้าผากจรดพื้น ตั้งศอกขึ้น ปิดศอกชิด  
หายใจเข้าค่อยๆยกขึ้นตามลำดับจาก  
หน้าผาก ศีรษะ ไหล่ และ ทรวงอก ค้างไว้  
หายใจออก ค่อยวางลำตัวลง



### ประโยชน์

บริหารกล้ามเนื้อหลัง ส่วนบน เพิ่มความยืดหยุ่นของกระดูกสันหลัง กดขนาดช่องท้อง ลดกรดในกระเพาะอาหาร ช่วยการขับถ่าย

### **ท่าแมว (มาจาริอาสนะ)**

#### ขั้นตอนการฝึก



คุกเข่า โน้มตัวไปข้างหน้า วางมือบนพื้น แขนตั้งฉาก หลังเท้าแนบพื้น หายใจเข้า แอ่นอกและหลัง เงยหน้า คงอยู่ในท่าชั่วขณะ หายใจออก โกงตัว ก้มศีรษะคงอยู่ในท่าแล้วกลับมาในท่า หลังตรง

### ประโยชน์

1. เพิ่มความยืดหยุ่นของกระดูกสันหลังและอุ้งเชิงกราน
2. ประสานลมหายใจและการเคลื่อนไหว

### **การผ่อนคลายการผ่อนคลายอย่างลึก**



นอนในท่าศพ เป็นการใช้สติไปกำหนดรู้ที่อวัยวะส่วนต่างๆของร่างกาย พร้อมๆไปกับการกำหนดความรู้สึกผ่อนคลายที่อวัยวะนั้นๆ ไล่ไปที่ละส่วน จนครบตลอดทั่วทั้งร่างกาย เริ่มตั้งแต่ปลายนิ้วเท้า ฝ่าเท้า สันเท้า ข้อเท้า น่อง เข่า ต้นขา สะโพก ก้น และเอว ทรวงอก กระดูกสันหลัง กล้ามเนื้อหลังส่วนล่าง ส่วนกลาง ส่วนบน ไหล่ ต้นแขน ข้อศอก ปลายแขน ข้อมือ ฝ่ามือ ตลอด

จนถึงปลายนิ้วมือ คาง ริมฝีปาก ระหว่างริมฝีปาก ฟัน เหงือก ลิ้น หลอดลมเพดานปาก จมูก แก้ม ตาคิ้ว หว่างคิ้ว หน้าผาก ขมับ หู หนังกีริษะ กระหม่อม ทำความรู้สึกผ่อนคลายตลอดทั่วทั้งร่างกาย จากกีริษะ จรด ปลายเท้า จากปลายเท้า จนถึง กีริษะ รับรู้ความรู้สึกที่เกิดขึ้นตลอดทั่วทั้งร่างกาย (ความรู้ตัวทั่วพร้อม) ตลอดจนความรู้สึกแฉะใส สดชื่น กระปรี้กระเปร่า ที่เกิดขึ้นหลังฝึกโยคะ

การผ่อนคลายร่างกายที่ละส่วนด้วยความตระหนักรู้ในตนเองอย่างลึก ตั้งแต่ปลายเท้าจนถึง กีริษะ สมองและความคิดมุ่งความสนใจเข้าสู่ภายในตัวเองและรับรู้กับร่างกายตนเอง จดจ่อด้วยความตั้งใจ และมีสมาธิ เป็นการประสานสัมพันธ์กายและจิตทำให้เกิดความรู้สึกสงบและนิ่ง ช่วยสลัดความกังวล ความกลัว ครุ่นคิดออกจากจิตใจทำให้เกิดการปล่อยวางและผ่อนคลาย หากสามารถผ่อนคลายได้ลึกซึ้งและสงบมากเท่าใด ลมหายใจจะแผ่วเบาและปลอดโปร่งสบายมากเท่านั้น เมื่อเกิดการผ่อนคลายทำให้จิตเกิดความตระหนักรู้กับความเป็นจริงที่เป็นอยู่ มีสมาธิ และเกิดปัญญา สามารถนำความรู้ และหาแนวทางในการดูแลสุขภาพตนเองได้อย่างมีประสิทธิภาพ

## สรุป

โดยสรุป โยคะเป็นศาสตร์การแพทย์ทางเลือกแขนงหนึ่ง จัดเป็นศาสตร์การดูแลสุขภาพแบบองค์รวม ซึ่งรวมกายกับใจของผู้ฝึกเข้าด้วยกัน โดยให้ความสำคัญกับเทคนิคต่าง ๆ ที่ช่วยให้มนุษย์รู้จักสมดุลเหตุทุกชนิดที่ขาดสมดุล อันก่อให้เกิดการเจ็บป่วย และจัดปรับให้คืนสู่ความเป็นปกติ ดังนั้นโยคะจึงเป็นศาสตร์ที่ว่าด้วยการพัฒนาทางด้านจิตและกายของมนุษย์ และด้านการบำบัดรักษาไปพร้อม ๆ กัน ซึ่งขั้นตอนการฝึกโยคะชุดนี้จะส่งผลต่อการดูแลสุขภาพแบบองค์รวมของกลุ่มผู้ที่มีอาการภูมิแพ้ระบบทางเดินหายใจ

## VITAE

**Name** Mrs. Prapaporn Chukumnerd

**Student ID** 4758008

### **Educational Attainment**

Degree	Name of Institution	Year of Graduation
Bachelor's Degree of Science (Nursing and Midwifery)	Mahidol University	1985
Master's Degree of Nursing Science (Adult Nursing)	Mahidol University	1999

### **Scholarship Awards during Enrolment**

The Commission of Higher Education, Ministry of Thai Education.

### **Work-Position and Address**

Instructor, Faculty of Nursing, Prince of Songkla University, Hat-Yai, Songkhla, Thailand, 90112 E-mail: prapaporn.c@psu.ac.th

### **List of Publication and Proceedings**

Chukumnerd, P., Hatthakit, U., Chuaprapaisilp, A. & Wardell, D. W. (2007).

Self-Healing through Yoga in Persons with Allergic Respiratory Symptoms.

Abstract paper presented at 29th Annual International Association for Human Caring Conference. May, 17-18, 2007. St. Louis, Missouri, USA.