Development of Qigong Nursing Therapeutic Program for Women with Menopausal Syndromes

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ชื่อวิทยานิพนธ์ พัฒนาโปรแกรมบำบัดทางการพยาบาลตามแนวคิดชี่กงสำหรับสตรีที่มีอาการรบกวนจากการขาดระดู

ชื่อผู้เขียน นางสาวศรีนวล โอสถเสถียร

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บทคัดย่อ

โปรแกรมพยาบาลตามแนวคิดชี่กง เพื่อลดอาการรบกวนจากการขาดระดูในสตรีวัยทองและผลกระทบ พัฒนาจากสามปรัชญาคือ ปรัชญาพุทธ จีน และการพยาบาลองค์รวม ผู้ร่วมวิจัยคือสตรีวัยทองที่มีอาการรบกวนจากการขาดระดูระดับเล็กน้อย-ปานกลางอย่างน้อย 3 อาการ จำนวน 10 ราย สถานที่ศึกษาคือ มหาวิทยาลัยสงขลานครินทร์ การศึกษาแบ่งเป็น 3 ระยะดังนี้ ระยะแสวงหาความรู้เพื่อสร้างโปรแกรมการพยาบาลชี่กงชั่วคราว ระยะปฏิบัติการหรือวิจัยเชิงปฏิบัติการ 3 รอบ การเก็บข้อมูลหลายแบบ และวิเคราะห์ข้อมูลทั้งเนื้อหาและปริมาณร่วมกัน และระยะสุดท้ายคือการตบแต่งโปรแกรมให้สมบูรณ์

การปฏิบัติแบ่งเป็นสามขั้นคือ การสืบค้น เรียนรู้ เรียนรู้ด้วยตนเองและประเมินผล ตลอดจนปรับเปลี่ยนโปรแกรมและทดสอบ ลักษณะสุดท้ายของโปรแกรมพยาบาลชี่กงสำหรับสตรีวัยทองประกอบด้วย 6 องค์ประกอบได้แก่ 1) การหายใจด้วยกระบังลม 2) การเคลื่อนไหวทุกสัดส่วนของร่างกาย 3) สมาธิแบบจินตนาการตามเส้นปราน 4) คำแนะนำด้านองค์รวม อาหารและสิ่งแวดล้อม 5) การพยาบาลที่ประกอบด้วย 6 การเอื้ออำนวย 3 การประเมินผล และ 6) อาสาสมัครเรียนรู้และประเมินผลอย่างละ 3 กิจกรรม นอกจากนี้การเรียนรู้ยังประกอบด้วยความยืดหยุ่นและปลอดภัยของโปรแกรม ผลการศึกษาพบว่า การพยาบาลแบบชี่กง สามารถบรรเทาอาการขาดระดู ผลกระทบและยัง

ทำให้สุขภาพดีขึ้น สามารถเป็นโปรแกรมทางเลือกหนึ่งของการลดอาการรบกวนจากการขาดระดู ผลกระทบและส่งเสริมสุขภาพแก่สตรีวัยทอง

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ABSTRACT

This study aimed to develop the Qigong Nursing Therapeutic Program for women with menopausal syndromes underpinned by Buddhist, Chinese, and holistic nursing philosophies through participatory action research. Participants were ten women who each had at least three menopausal symptoms disturbances. The research setting was Prince of Songkla University, Thailand. Three phases were carried out for QNTP development: preparatory, action, and final phase. The phases included knowledge exploration and a pilot study to develop a tentative QNTP. QNTP was implemented through three cycles' of participatory action research. Data were collected through multiple techniques, and were done contents analysis was done integrally and validated. Finally, QNTP was articulated and verified.

There were three cycles emerged: 1) situational realization and early learning, 2) self learning, sharing, and adopting into daily life, as well as 3) modification and confirmation. Therefore, the final QNTP was composed of six components: 1) diaphragmatic breathing, 2) multiple muscle and joint movements,3)visualization through meridian lines, 4) health education of holism, nutrition and environments, 5) nine holistic nursing approaches including 6 facilitated and 3 evaluated, as well as 6) six participant activities including 3 learning and 3 evaluating. In addition, practical programming and nurse facilitating activities are helpful for QNTP through out. The outcomes of QNTP practices were decreasing menopausal syndromes, impacts, improved health and well-being. This study indicates that QNTP can be an alternative therapeutic program for reducing menopausal syndromes, and their impacts.

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CHAPTER 1

INTRODUCTION

In this chapter, the researcher described the background significance, purpose specified research questions; outlined the framework of the research study; defined terms used; delineated the scope of study; and project contributions.

Background and Significance of the Study

The menopausal syndromes was not only a personal problem but it was also a national or universal problem. To develop a new alternative nursing therapeutic program for individual personal daily living was essential for women with menopausal syndromes. By the year 2004, the number of Thai women aged 40-59 years (middle aged group) was about 9 millions, and it was estimated that by the years 2010, and 2014, middle aged women will be 9.8 millions, and 10.5 millions respectively (Thailand population project, 1999-2016). These data show that the number of women in this age group in Thailand is increasing rapidly. This group of middle-aged woman is prone to ovarian cell death (Amsterdam, et al., 1999). Twenty studies showed that one woman in four of this group experienced menopausal syndromes (Consunsri, 2003; Ieumsawadikul, 1998). They often confronted with sequelae of ovarian failure. The effects of ovarian failure are both short term and long-term physiological changes. The short-term changes were vasomotor instability, mood disorders, and somatic disturbances. Vasomotor instabilities are expressed in hot flushes, sweat, headache, dizziness, palpitation, temperature deregulated,

forgetfulness, insomnia, poor appetite, abdominal distention, and constipation. Mood disorders show anxiety and depression. The other somatic disturbances includes musculoskeletal degeneration such as joint stiffness, muscle pain, urogenital atrophy such as incontinent, dyspaurea, and pain, and skin changes (dryness, itching). In addition, further long term changes can cause severe health problems of osteoporosis, cardiovascular disease (Moulton, Landau, & Cry, 2002), and colorectal cancers (Studd, 2000).

Both short and long term menopausal changes can be prevented or decreased by hormonal replacement or non-hormonal replacement (Farrell, 2003). However, directed hormonal replacement caused anxiety, fear, and depression in the risk of breast cancer, endometrial cancer, pulmonary embolism, thrombophlebitis, heart disease, and stroke (Rousseau, 2002 cited by Hackley & Rousseau, 2004). Furthermore, it can also cause national economic loss estimated approximately more than fifty million baht/year in Thailand (Jiraporn, Personal communicated, February 30, 2006). After the year 2002, the health care system of Thailand changed to the national health coverage of 30 Baht per visit. In order to reduce health care cost, the trend of menopausal syndromes managements in Thailand today has changed to non-hormonal management. Consequently non-hormonal management strategies have been a major choice for prevention and reducing menopausal syndromes.

Several ways of non-hormonal management have been used to reduce menopausal syndromes. Diet included soy and soy extracts (Kroneberg & Fugh-Berman, 2002), minerals (calcium and magnesium), vitamins (D, E, B6, and B12) (Cutson & Meuleman, 2000), and vegetable or herbal medicine (Kroneberg & Fugh-Berman). In addition, other

non-hormonal managements were acupunctures(Cohen, Rousseau et al. 2003), vippassana meditation (Intephueak, 2003; Thaweerattana, 2003), aerobic exercise (Sunsern, 2002) or the mind-body exercises especially yoga and Qigong (Kalsa, 2004).

Qigong, an energy producing mind-body practice reputed to reduce menopausal disturbances over a long period in Chinese, Korean, and Japanese woman. Qigong in QNTP consisted of at least three essential components. Firstly, body movements that directly and indirectly stimulated Qi which was proven to reduce psychological and physiological disturbances; showed slow down bone loss during menopause (Chan et al., 2004). Secondly, diaphragmatic breathing reduced hot flushes (Freedman & Woodwarty, 1992). Thirdly, vistualization, similar Vipassana meditation had also proven effective in reducing psychological, vasomotor, and musculo-skelatal disturbances of menopause (Intaphueak, 2003; Thaweerattana, 2003). Many studies showed that Qigong improved psychological functions (Gaik, 2003; Lee, Ryu, 1996; Yang et al., 2005), reduced psychological disorders and psychosomatic symptoms (Yeong 1999; Lee, Yang et al., 2005), reduced some physiological disturbances and some physical disorders (Chen, 2004; Scantier, 1998; Scantier & Hole, 2001). Qigong reduced various pains (Wu et al., 1999), reduced nightmares and increased sleep quality (Thinhuatoey, 2003), improved circulation (Wang, Xu, & Qian, 1995 Cited by Sancier & Hole, 2001), cardio respiratory functioning (Chao & Chen, 2002), and muscle strength (Chao et al.2002; Lee et.al., 2000;). All symptoms were similar to menopausal syndromes. However, Qigong hasn't been proven in research as a non hormonal management for reducing menopausal syndromes. The Qigong Nursing Therapeutic Program for women with menopausal syndromes was developed underpinning three philosophies of Buddhism, Chinese, and

holistic nursing. Regarding to menopausal syndromes, it is a multidimensional, complex, and highly unstable phenomenon and the process of enhancing self-cultivating to reduce menopausal syndromes required longer period. Therefore, technical Participatory Action Research was chosen to conduct this study.

Technical Participatory Action Research is the research method allowed the researcher and participants reciprocally to evaluate, reorganize, act on, observe, and reform for a satisfactory outcome. Moreover, technical PAR also conducted step by step through collaboration. Its data collection included both quantitative and qualitative which helped the researcher to gain more information to determine the value of the knowledge before constructing and adjusting a final program.

Research Questions

1. What are the components of Qigong Nursing Therapeutic Program (QNTP) for women with menopausal syndromes?

2. How should nurse support the participant to conduct QNTP and coping with their symptoms?

Purpose of Study

The purpose of this study was to develop a Qigong Nursing Therapeutic Program (QNTP) for women with menopausal syndromes.

Concepts and Philosophical Underpinning this Study

Three philosophical thoughts underpinning this study: Buddhism, Chinese, and holistic nursing which guided QNTP development for women with menopausal syndromes. In addition, menopausal syndromes were used to guide for outcome measuring, and technical participatory action research guided research methodology.

Buddhist philosophy

Buddhism guided woman with menopausal syndromes to overcome menopausal syndromes by understanding three natural characteristics of all things, and the four noble truths (Dhammananda, 2006; Payutto, 1995).

1. Three natural characteristics of all things consist of aniccata, dukkata, and anattata (Chanchamnong, 2003; Payutto, 1995). These help us to understand menopausal syndromes as natural changes of human. It is an impermanent condition which arises, passes, and gradually fades out. There is really nothing clinging to self.

2. Four noble truths include suffering, causes of suffering, extinguishing suffering, and the eight paths that lead to the extinction of suffering especially the proper mindfulness. The mindfulness on breathing is insight meditation of Buddhism to calm drown the mind with focus concentration. The results of mindfulness meditation are that the mind loses its' attachments, becomes free and the body goes back to the nature. Therefore, it could help the women with menopausal syndromes be better able to endure the disturbance of menopausal syndromes. In summary, Buddhism guided to understand menopausal syndromes, and mindfulness meditation in QNTP.

Chinese philosophies

Four main Chinese philosophies in Qigong are five elements, Yin and Yang theory, Taoism, and Energy Flow theory.

1. Five Elements. The five elements are wood, fire, earth, metal, and water. They are essential for human components. The five elements are interconnection among various phenomena of the universe, and human being. The imbalance of each element affects the others and the whole. In menopause, ovarian failure causes kidney function deficiency and liver Qi stagnation, which effect both water and metal elements changing and imbalance. Qigong was designed to balance five elements by increasing oxygen flow from the air to the body through correctly breathing in the proper environment, increasing metal from food, and the earth (Dhammananda, 2006).

2. Yin and Yang are two different forces which are complementary and constantly changing into balance and harmony. The interaction between Yin and Yang relates to three treasures and five elements creating the flow of Qi and Jing. Yin and Yang relates to Qigong by cultivating yang Qi through increasing body movements, and cultivates yin Qi by meditation. Balancing Yin and Yang in women with menopausal syndromes was to cultivate yin Qi through meditation (Dhammananda, 2006).

3. Taoist philosophy views menopausal syndromes as imbalance of three treasurers (Shen, Qi, and Jing). Taoism balanced three treasures closely interrelated with Yin and Yang by Qigong.

Three treasures are: 1) Shen (spirit) is the center of the whole human being. It is inherited and controls the entire functioning of the human body, mental and emotional activities, five senses, breathing, and the nervous system function (Kyung, 2001). It also

harmonious flows of essence to build good health. Taoism adapts transmute essence (Jing) and energy (Qi) into pure spirit during prolonged meditation and correct breathing (Reid, 1989). 2) Qi is vital energy which activates the physical body to be active and energetic. Qi keeps flow, rhythms cycles, changes, moves, and balances over all bodies. It is obtained from parents, air, food (Kyung) and universe (Yang, 2005).Moreover, the physical activities (eating, working, and rest), as well as nonphysical of life (motivation, feelings, desires, and a sense of purpose in life) are made possible Qi. In addition, Qi is also obtained from environment such as sky, mountain, sea, tree, sunlight, moonlight, and ancient building (Yang). 3) *Jing* is a living essence, which slows organic change (Kaptchuck, 1986), increasing person's endurance. They are inherited and acquired Jing. The acquired Jing is from food and drink (Liang & Wu, 1989). Taoism increases Jing and Qi in his living by controlling diaphragmatic breathing to increase oxygen flow in blood circulation (Reid). In addition, Taoism also suggests that man live simple with the rhythms following the law of nature, adapting both physically and mentally by applying Ying -Yang close to nature. Moreover, Taoism also suggests taking up oneself as the quality as water. Understanding the functions of three treasures of Taoism, and sources to obtain these three treasures are essential for Qigong practice. Woman with menopausal syndromes is kidney function deficiency due to organs degenerate causing body imbalance. Therefore, to balance three treasures with meditation, correct breathing, slow moving, and proper essence intake balances menopausal syndromes.

4. The Energy Flow theory. Qi connects with twelve meridian lines, eight vessels, through eleven internal organs, six extra ordinary organs, and environmental elements via

the energy cavity (Wyith Institute of Technology, 2005).The flow of Qi balances over the whole body. Therefore, menopausal syndromes due to energy obstruction will release.

The Chinese philosophies guide four principles in virtualization, diaphragmatic breathing, body movement and elements (nutrition and environment) advice as follows:

1. Meditation**.** Meditation of QNTP is mindfulness and visualization. The purpose of meditation is to calm the body and the mind to purify the mind from various conflicts, in order to cultivate Qi. It is also enhancing the ability of the mind and physical capacities for self-healing and for providing the gateway for spiritual growth. The meditation of Taoism focuses on sitting still and doing nothing to empty the mind and let the spirit abide in emptiness, silence, and stillness (Chan, 1966). In addition, Taoism also provides visualizes about taking good view into the body and eliminates the waste out. For the Buddhism brings mindfulness on breath to provide momentary awareness on mental calmness, tranquility and free the mind from various emotional conflicts (menopausal syndromes), promotes insight in reality, good will, confidence, energetic, endurance, and determination (Chanchamnong, 2003). Both would bring the woman with menopausal syndromes understanding various natural changing of life cycle. Then her mind would be free from self, and free from suffering.

2. Breathing**.** Breathing of QNTP focuses on external and internal breathing. The external breathing which guides by Taoism is abdominal breathing or diaphragmatic breathing in rich oxygen air through the airways, drawing the air toward the lower part of the lungs while keeping the diaphragm and the lower abdominal muscles moving forth and then exhale the carbon dioxide out by keeping the lower abdominal muscles moving back (Reid, 1989). In addition, during external breathing, QNTP also followed

Buddhism breathing with mind intention on the rhythm of breathe (Chanchamnong, 2003). The internal breathing is drawing vital oxygen from the lungs through energy channels and blood circulations to the internal organs, cells, and the external body. During breathing out, the waste products are excreted from cells and organs through lymphatic circulation and energy channels driven away by the kidneys and lungs (Yang, 2005b).

3. Body Movements. Body movements and body alignment of Qigong consist of maintaining a stable body structure and resisting the constant pulling of gravity. Moreover, the body movement of QNTP follows Taoism which focuses on simple, slow, repetitive rhythmic contractions and relaxations of internal and external muscles and tendons aimed at strengthening, stretching, and toning the muscles and tendons for full functioning (Reid, 1989; Yang, 2005a) and longevity. In addition, the body movement also emphasizes stimulus energy point moving directly to energy channels to harmonize, smooth, and strengthen flow of Qi and blood through energy network among each organ (Yang).

4. Nutritional and environmental advices**.** Taoism guides to draw Qi and elements from the environment such as sky, earth, and correct breathing, controlling eating and drinking only the essential food. In addition, holistic nursing also guides nutritional and environmental advice in QNTP with health education.

Holistic nursing philosophy

Holistic nursing philosophy recognizes interrelationship of the bio-psycho-social-spiritual dimensions of the person, and understanding the individual as a unitary whole in a mutual process with the environment (Frisch, 2001). Holistic Nursing helped woman

with menopausal syndromes understand how menopause affected their holistic being. In addition, holistic nursing also guided the mutual process and facilitating techniques for self healing in menopausal syndromes.

In conclusion, QNTP was developed based on three philosophies of Buddhism, Chinese and holistic nursing. Buddhism presented the three characteristic of all thing and four noble truths to understand menopausal syndromes. Providing mindfulness on breathe with concentration for reducing menopausal syndromes. Chinese philosophies balanced menopausal syndromes by five elements, Yin and Yang, three treasures, and Energy Flow theory. Therefore, QNTP in the integration form of mindfulness and visualizing meditation, diaphragmatic breathing, body movements, nutritional & environmental advices, and holistic nursing facilitated women with menopausal syndromes to heal themselves.

The development of a set of Qigong Nursing Therapeutic Program for reducing menopausal syndromes was thoughtful project, which needed praxis knowledge to further shape. Therefore, technical Participatory Action Research was chosen as a methodological framework for QNTP implementation.

The root of Participatory Action Research was Critical Social Science Theory (Carr & Kemmis, 1985 cited by Arphorn, 1992). The focus of this theory was to find out the relevant situation by critical reflection. The reflection needed communication within a democratic context to synthesize knowledge (Ray, 1992). The Participatory Action Research chosen for this research study was technical PAR (Grundy, 1982). The goal of Critical Theory is to emancipate people through critique of ideologies (the contradictions, inequities and the potential changes) to promote personal insight and leading to change of

self consciousness in a social condition (Young et al., 2001). The critical theory ontology was historical realism. It was shaped by groups of social, political, cultural, economic, ethnic, and gender factors, over time, and then crystallized into a series of structures. The epistemology was transactional and subjectivist. The nurse and participants are in a reciprocal relationship in process of inquiry. The action of inquiry needed dialogue between the investigator and the subjects of the inquiry. The methodology was dialogic and dialectical. Therefore, particular findings were value mediated and hence value dependent in order to overcome contradiction.

The research process consisted of three phases: the preparatory phase was a tentative QNTP developed; the action phase was a QNTP implementation; and the final phase was final QNTP articulation. QNTP was implemented through participatory action research with four steps. The first step was reconnaissance to understand the situation; the second step was implemented; the third step was a multi-spiral model of action-observation-reflection; and the fourth step was summary of the lessons and changing needs for transforming program (Holloway & Wheeler, 2002).

Menopausal syndromes

The negative perceptions of menopausal transitions attributed short term and long term effects in both physiological and psychological changes. The short term menopausal syndromes were vasomotor instabilities, emotional disorders, and somatic disturbances.

1. Vasomotor instabilities. The vasomotor instabilities are negative complaints due to autonomic nervous systems excitabilities. There are hot flushes, sweating, vertigo, dizziness, fainting, headaches, palpitations, temperature deregulations, insomnia, poor

appetite, shortness of breath, and chest pain in woman with menopausal syndromes (Chaiput, 2003; Fu, Anderson, & Courtney, 2003; Ieumsawadikul, 1998; Mongkoldee, 2000; Obemeyer, Schulein, Haj, & Azelmet, 2002; Sierra, Hidalgo, & Chedraui, 2004).

2. Emotional disorders. The negative expressions are depression, irritability, and anxiety. However, those positive feelings toward menopause may be who see menopausal syndromes in a natural process and feeling satisfied with their living.

3. Somatic disturbances. The somatic disturbances include musculoskeletal system syndromes, skin and tissue syndromes, genitourinary syndromes.

In addition, the long-term effects of menopausal syndromes are cardiovascular problems, osteoporosis, and colon rectum cancer. All of these are severe and have prolonged impacts on woman living that require management and caring.

In brief, the development of a Qigong Nursing Therapeutic Program for reducing menopausal syndromes was conducted underpinning Buddhism, Chinese, and holistic nursing through Technical Participatory Action Research and Critical Theory for inquiry as presented in Figure 1.

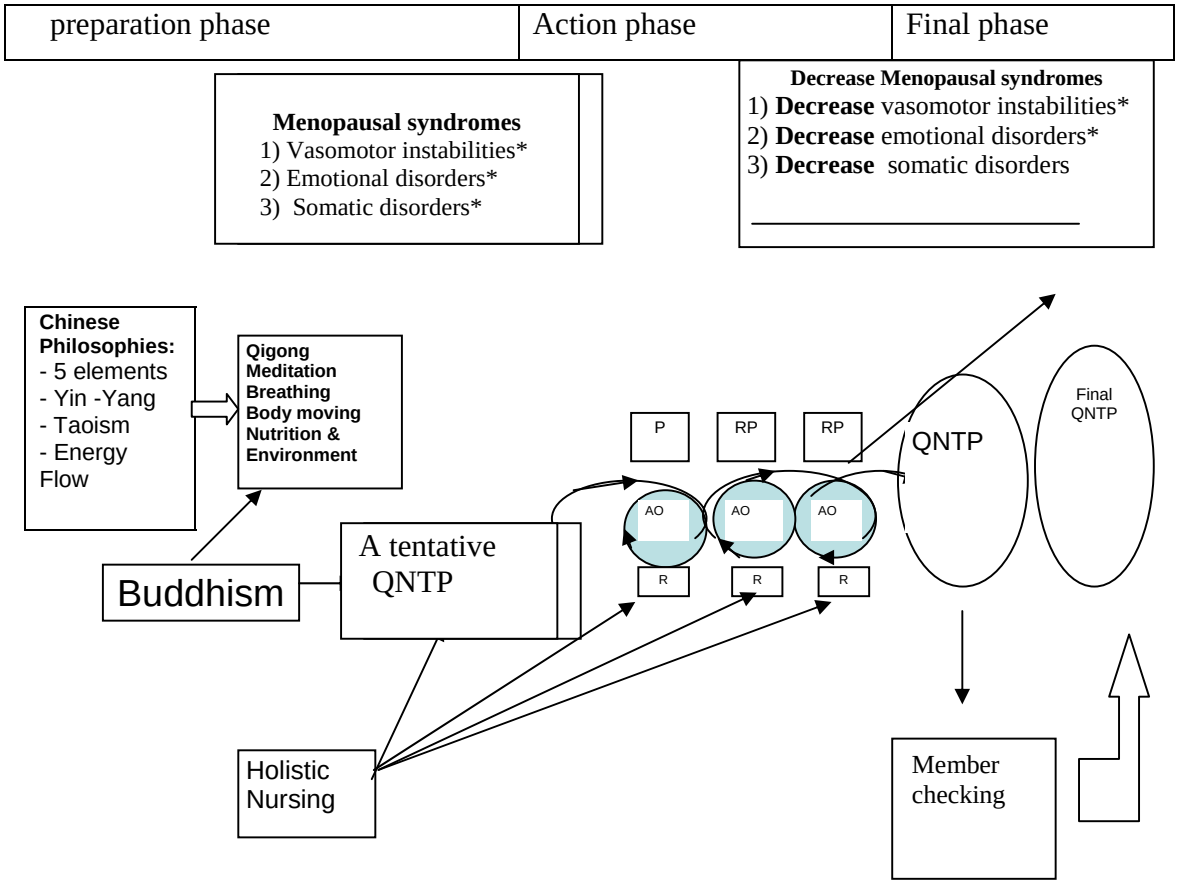


Figure 1. Concepts, philosophies and process of QNTP development

P= Planning RP= Revising- plan R= Reflecting AO = Acting and Observing

***** Vasomotor instability showed as hot flushes, dizziness, fainting, vertigo, headaches, palpitations, temperature deregulation, insomnia, poor appetite, shortness of breath, breath difficulties, and chest pain.

* Emotional disorders showed as depression, hyperirritability, anxiety, panic, crying spells, loss of sexual interest or less sexual feeling and activity, feeling of being unloved, loss of career interest, feeling stress, tense or nervous, poor concentration, loss of self confidence, fear of being alone, unusual tiredness and lack of energy, feeling unhappy, and bored.

* Somatic disturbances included musculoskeletal syndromes, urogenital syndromes, and *skin and tissue syndromes*

Operational Definitions

Qigong Nursing Therapeutic Program (QNTP) refers to a set of nursing intervention which composed of five components of Qigong (meditation, breathing, body moving, health education (nutritional & environmental advices), and holistic nursing for women with menopausal syndromes.

Menopausal syndromes refer to women's physiological changes and perception toward their menopausal syndromes. There are three major categories of vasomotor instabilities, emotional disorders, and somatic disturbances.

Scope of the Study

This study was aimed to develop a QNTP for women with menopausal syndromes. The study divided into three phases: developing a tentative QNTP, conducting QNTP implementation, and articulating the final QNTP. A tentative QNTP was developed underpinning three philosophies of Buddhism, Chinese, and holistic nursing, then conducted pilot study with two menopauses. Follow with QNTP implementation with 10 middle age women who faced with at least three menopausal syndromes. They conducted QNTP practice during March, 2006 - February, 2008 at Prince of Songkla University.

Contributions of this Study

This program contributed an alternative program of Qigong Nursing Therapeutic Program for reducing some menopausal syndromes and improving health. In addition, it is practical and safe to extend for the program prevention and promotion in the general peri-menopause. Moreover this program can facilitate for program training, and further research development. Furthermore, it may be a guideline for developing a new nursing program underpinning thoughtful philosophy and expert's experiences through peer review in the nearly future.

CHAPTER 2

LITERATURE REVIEW

In this chapter the researcher reviewed literature consisting of six topics namely 1) definition of menopause, peri-menopause, and menopausal syndromes, 2) evidence based management strategies for reducing menopausal syndromes, 3) concepts of Qigong, 4) effects of Qigong on reducing symptom disturbances, 5) holistic nursing, and 6) participatory action research.

Menopausal Syndromes

Definition of Menopause, Peri-Menopause, and Menopausal Syndromes

Menopause means "the permanent cessation of menstruation resulting from the loss of follicular activity" (Rees, 2003, p. 415) or "loss of ovarian function" (Rao, 2003, p. 64). Clinically, menopause is diagnosed after the 12 consecutive months of amenorrhea (Moulton, Landau, & Cyr, 2002), which has no other obvious pathological or physiological cause (Rees).

Peri-menopause includes the period beginning with the first clinical biological and endocrine features of menopause and ending months after the last menstrual period (Rees, 2003, p. 416).

Menopausal syndromes arise from negative responses due to ovarian failure. In the early menopausal stage, menopausal syndromes are comprised of three groups of disorders: vasomotor instabilities, emotional disorders, and somatic disturbances. S

Although these three groups of changes are nature of women, nevertheless, they reduced the ability of role function resulting in loss of social ability, reduced self esteem, financial loss, and decreased quality of life. In addition, the long-term effects caused severe health problems such as osteoporosis, cardiovascular problems, and colorectal cancer. Therefore, reducing menopausal syndromes were an important public health needed. Women with menopausal syndromes in this study included pre-menopause and menopause who faced with menopausal syndromes due to loss of ovarian function without other obvious pathological or physiological causes.

Characteristics of Menopausal Syndromes

They are short term and long term effects. The short-term effects are three groups of negative symptoms: vasomotor instabilities, emotional disorders, and somatic disturbances.

1. Vasomotor instabilities. Vasomotor instabilities are autonomic nervous system syndromes. These include many complaints such as hot flushes, heavy sweating, dizziness, palpitations, temperature deregulation, insomnia, poor appetite, abdominal distention, and constipation (Chaiput, 2003; Ieumsawasdikul, 1998; Im et al., 2004; Manopsil, 2004; Mongkondee, 1999; Perz, 1997; Sierra et al., 2004).

2. Emotional disorders. Negative psychological feeling expresses towards menopause.These are depression, hyperirritability, anxiety, panic, loss of sexual interest and activity, loss of career interest, feeling stress, poor concentration, loss of self confidence, and fear of being alone (Chaiput, 2003; Ieumsawasdikul, 1998;Im et al., 2004; Manopsil, 2004; Perz, 1997; Sierra et al., 2004).

3. Somatic disturbances. The somatic syndromes of menopause includes:

3.1 Genito-urinary system disorders. Declining estrogen level leads to atrophy of the urogenital tissue and vaginal thinning and shortening (Custom & Meuleman, 2000). The urogenital atrophy can lead to variety of urinary syndromes including dysuria, urination frequency, urgency and incontinence (Ganz et al., 2000). Approximately 21-30 percent of Thai women aged 45-55 years complain of passing urine more often (Mongkodee, 2000). Vagina thinning and shortening results in vaginal dryness and pain during intercourse (Cutson & Meuleman).

3.2 Musculoskeletal system disorders. Estrogen hormone deficiency caused, bone loss accelerated. Bone is lost at an annual rate of 0.5 percent after age 40 year 1 percent or more for at least 5-10 years after menopause. The muscular and skeletal system disorders are back pain, joint pain, muscle pain, numbness, nipple pain, neck pain, lower skull stiffness and pain (Chaiput, 2003; Ieumsawasdikul, 1998; Im et al., 2004; Manopchil, 2004; Perz, 1997; Rousseau & Gottieb, 2004; Sierra et al, 2004).

3.3 Skin and tissue disturbances. Skin and tissue disturbance are dry skin, itching and scathing, dry hair and loss of hair, dry and tired eyes, acne or skin marks, as well as weight gain (Ieumswasdikul, 1998; Im et al., 2004; Mongkondee, 1999).

Moreover, the long-term effects of sexual hormone deficiency. The menopauses commonly faced of cardiovascular diseases, osteoporosis, and colorectal cancer (Studd, 2000). These severe problems effect both the quality of women' life and cause public health problems.

According to Chinese medicine, menopausal syndromes were resulted in kidney and liver function deficiencies. It involves the endocrine system which causes imbalance

of yin and yang, resulting disturbances of various internal organs and external organs as follows:

1. Autonomic nervous system imbalance causes blood circulation instability, nervous system disorders which exhibited through night sweats, hot flushes, dizziness, headaches, degeneration of vision, ringing in the ears, atherosclerosis, and increasing lipid level in circulation.

2. Mental and spiritual disorders are expressed to anxiety, depression, and inability to focusing, insomnia, mood swings, poor memory, and short temper.

3. A set of symptom relate to the endocrine and metabolism imbalances, which manifest in fluid retention, irregular menstrual periods, loss of bone mass, loss of sex drive, increased collagen crosslink, muscle and joint pain, breast tenderness, and weight gain.

Indicators for Measuring Menopausal Syndromes

A critical review of the instruments for measuring menopausal syndromes found a number of instruments. There were several menopausal scales. Each scale composes of 2 to 5 factors. The items of the questionnaires vary from 10 – 56 items. There are many menopausal scales, but only 4 standard scales are shown in table 1

Table1

Four Menopausal Standard Scales and their Properties

Standard Scale for Menopausal Syndromes	Author	Components	Rating Measure	Reliability
1. Greene Climacteric Scale (21 items)	Sierra, Hidalgo , & Chedraui (2004)	Composed of 4 factors: Vasomotor Somatic Anxiety Depression	Severity 4 point rating	0.83-0.87
2. Women's Health Questionnaire (32 items)	Pert (1997)	Composed of 8 factors: Vasomotor Somatic Anxiety Depression Cognitive Sleep Sexual Menstrual	Present/Absent 2 point rating	0.78-0.96
3. Menopausal Symptom list (25 items)	Schneider,(2003)	Composed of 3 factors: Vaso-somatic General somatic Psychological	Frequency/Severity 6 point rating	0.73-0.83
4. Menopausal Rating Scale (11 items)	Schneider(2003)	Composed of 3 factors: Somato vegetative Urogenital Psychological	Severity	0.6

In Thailand, although there are many menopausal checklists, however, there is no a standard scale for Thai menopause. So for the Participatory Action Research, all factors (vasomotor, somatic, and psychological) reviewed above as indicators for measuring menopausal syndromes in this study.

Factors Related to Menopausal Syndromes

Several studies indicated same factors which affected menopausal syndromes. These included income per month, family atmosphere (Sintuprasit, 2002), menopause status (Cheewaroungroj, 2000; Sintuprasit), attitude toward menopause (Euw, 1996; Jirasatienpong, 1998), life stress events (Cheewaroungroj; Euw), social support,

personality (Euw), education level, body mass increasing (Cheewaroungroj), age, and health status (Jirasatienpong).

Evidence Based of Managements for Reducing Menopausal Syndromes

Two strategies reduced menopausal syndromes. The first was systemic or localizes approaches of estrogen or progesterone hormonal replacements. Several systemic studies showed sexual hormones intake directly reducing menopausal syndromes (Farrell, 2003; McLennan & Fowler, 2001). The second was non-hormonal managements. There were several non-hormonal regimens that have been proven effectiveness in reducing menopausal syndromes. These were nutrition (Kronenberg, & Fugh-Berman, 2002; Morelli & Christopher, 2002), acupuncture (Cohen, Rousseau, & Carey, 2003; Porzio et al., 2002), meditation (Intaphueak, 2003; Thaweerattana, 2003), and aerobic exercise (Booyahotara et al., 1999; Sunsern, 2002). Therefore, this study the researcher presented the specific healing modes which supported QNTP as follows:

1. Nutrition

Nutrition plays a widely accepted and in reducing menopausal syndromes Kronenberg and Fugh-Berman, (2002) criticized 12 randomized, control trial studies of soy and soy extracts which decreased hot flushes in women undergoing menopause. Six reports showed significance while the other six reported no significance. Moreover, it indicated that soy might reduce bone loss, total LDL cholesterol levels and inhibit cancer cell lines growth in vitro and in vivo (http://marilyngleville.com/pms.htm). Furthermore, it was contributed to the prevention of osteoporosis (Morelli & Christopher, 2002), and

colorectal cancer (Studd, 2000). Kronenberg & Fugh-Berman also reviewed the randomized double blind control trials of ten herbal medicines studies such as black cohosh (four studies), red clover (three studies), and one study of dong quai, evening primrose oil, ginseng, and Chinese herb mixture reduced hot flushes and night sweat during menopause. The conclusion showed hot flushes did not decrease significantly. Three types of vitamins were also mentioned for reducing menopausal syndromes. The first was vitamin E: Vitamin E is thought to stabilize estrogen levels (Cutson & Meuleman, 2000), to prevent and to reduce mood swings in menopause (http://www. Marilyngleville.com /pms.htm), and to reduce hot flushes (Sloan et al., 2001). The second was Vitamin B6. Vitamin B6 is a vital substance in synthesizing neurotransmitters that control moods and behavior. Vitamin B6 needs magnesium catalyst to transform pyridoxal-5 phosphate, which is important for menopause (http://www.marilyngleville.com/pms.html). The third was Vitamin D. Vitamin D products or the reaction of the skin to sunlight, function mainly to preserve calcium and phosphorus homoeostasis by increasing internal absorption of calcium and phosphorus. Taking vitamin D daily maintained signal of transform metabolic activities, neuromuscular function and promote skeletal mineralization preventing deficiency, and prevented excessive parathyroid hormone causing muscle weakness (Glerup, Mikkelson, & Poulsen, 2000), and reducing chronic bone pain and recurrent fractures (Hunter & Egbert, 1995). Sunlight is the most important source of vitamin D. The normal adult should be exposed to sunlight at least 30 minutes daily (Cutson & Meuleman). Similarly a study of Rei, Gallagper, and Bosworth (1985) reported that being exposed 15-30 minutes daily to sunlight two or three times a week, the circulating concentration of 25

(OH) D increased sharply. In addition, calcium is the most important nutrient to prevent and to slow down osteoporosis. Calcium phosphate makes up about 65 percent of bone by weight (Nordin et al., 2004). In order to balance the general adult urinary calcium output of 520 milligram daily and 700-900 milligram calcium excreted through the skin daily. Furthermore, an estrogen hormone deficiency during menopause decreased in calcium absorption and an increased in urinary calcium excretion, most researchers suggested for calcium intake of 1.5 grams daily during menopause.

2. Meditation

Meditation decreases severity of menopausal syndromes (Boonyahotra et al., 1999; Intaphueak, 2003; Thaweerattana, 2003). One randomly designed Vipassana meditation of 10 days showed decreasing of the psychological syndromes, vasomotor disabilities, and the musculo-skeletal disorders to be statistically significant (Thaweerattana). Another randomly designed 8 weeks program of Vipassana meditation showed increasing skin temperature, decreasing respiration rate, decreasing pulse rate, decreasing blood pressure level, and increasing physical, psychological, sociological, and holistic health status (Intaphueak). Another 8 months study of the effects of prayer utilizing Participatory Action Research design showed reducing depression and feelings of being unloved (Boonyahotra et al.). These three studies were all the first reports and showed needs for more research replication to confirm and to explore the results in depth. Moreover, other meditative practices such as Qigong, Yoga, and Reki were also mentioned in reducing menopausal syndromes, but this requires further testing.

3. Exercise

Two reports showed aerobic exercise programs conducting on menopause in Thailand (Booyahotara et al., 1999; Sunsern, 2002). One program was conducted for 3 months and showed reducing stress (Sunsern), while another Participatory Action Research project of eight months reduced hot flushes, muscle pain, headaches, depression, anxiety, tiredness, high blood pressure, loss of sexual interest, and urinary incontinence (Boonyahotra et al.). Moreover, another five research programs of aerobic exercises showed 30-75 minutes/time, 2 - 3 times weekly for 3 months – 8 years. The results of aerobic exercise increased endurance (Hagbertg et al., 2000; Kemmler et al., 2004), increased muscle strength (Figueroa et al., 2004), and delayed of bone loss (Kemmler et al; Snow et al., 2000). In addition, aerobic exercise also decreased vasomotor instabilities (Booyahotra et al; Kemmler et al.), decreased heart rate (Hagbertg et al.), decreased risk of death, decreased cardio vascular disease (Kushi et al., 1997), relieved joint and muscle pain, increased in HDL-C, and decreased in triglyceride levels (Booyahotra et al; Kemmler et al.). Furthermore, one study showed that the combination of aerobic exercise with nutritional advice for eight weeks decreased the menopausal syndromes and resulted in better health promotion (Tanalad, 1998). A ten-week exercise and nutritional health promotion program slowed the menopause-associated intimae-media thickness (IMT) progression. Moreover, the randomly designed Tai Chi Chun exercise program of 45 minutes daily 5 days weekly for 12 months showed slowed the rate of bone loss (Chan et al., 2004).

Today menopausal management utilizes both hormonal replacements and non-hormonal replacements. Non-hormonal replacements have been proven effective in

reducing menopausal syndromes. They included nutritional supplements, aerobic exercise, and meditation (prayer and Vippassana). In body-mind practice, only one research reported using Tai Chi Chun to slow down bone loss was conducted (Chan et al., 2004). However, other body-mind practice, only two articles suggested Yoga can reduce menopausal syndromes (Khalsa, 2004). No report existed for Qigong, even though Qigong has reduced menopausal syndromes for a long time in menopausal clinics both in China and abroad. Therefore, researcher interested in developing a Qigong Nursing Therapeutic Program by using Chinese wisdom integrating with holistic nursing. This program would be used as one of the alternative practices for reducing menopausal syndromes.

Concepts of Qigong

Definition of Qigong

"Qigong" consists of two words: "Qi" and "Gong". The word "Qi" means 'breath' or 'vital essence' or 'energy'. The word "Gong" means 'daily effort' or 'self discipline' or 'mastery' or 'power'(Huang, 2003; Zhang, 2004). So the word "Qigong" in this study is defined as the work to controls and distributes the flow of life energy in the whole human body.

Qigong is one of the mind-body practices for producing vital energy (Huang, 2003). It has been proven useful in health promotion and health therapy for various chronic health conditions and psychosocial problems in China for a long time (Lefkowitz, 2005). Nowadays, in the United State, Qigong was accepted as one of five alternative

medicines for promoting health and therapy in some chronic health conditions and emotional disorders (Roger, 2004). Qigong was an alternative form of medicine for reducing non-severe threatening health conditions (Roger). In the future Qigong will be a desirable strategy in reducing enormous health care costs for those undergoing menopause.

Types of Qigong

Two groups of Qigong practice: healing and promoting health.

1. Practice for healing is the Qigong practitioner direct emitted Qi to break Qi blockages and eliminated sick Qi out of the patient's body in order to balance Qi flow free (Chen, 2001). Pain and various symptoms were relieved, and the diseases were eliminated (Yang, 2005).

2. Practice for health promotion: Self mind-body training cultivates Qi for optimal health promotion and disease prevention. There are two modes of practices: static and dynamic Qigong. Static Qigong forbids any trunk and limb movement. It is similar to meditation and concentration. This mode of practice is training for mindfulness followed by breathing only. It could be carried out anywhere, any time and any place for treating cancer and chronic pain (Carnie, 1997). Dynamic Qigong focused on the postures and movements with breathing and mind focusing. There are thousands of dynamic Qigong techniques such as standing, sitting, walking, and so on. Dynamic Qigong calms the mind and relaxes the body by moving slowly with concentrating on breathing and walking meditation. The meditation causes the practitioner to become more awareness and to be more stable for disturbances (Carnie).

Evolution and Philosophical Based of Qigong

Qigong has a long serial evolution estimated to have started about 5000-7000 years ago (Lu, 1998). Throughout its development, it has been integrated with various modes of ancient Chinese thoughts and Buddhist philosophy. The latter of which included Three Nature Characteristics of All Things, Four Noble Truths, and mindfulness on Breathing (Anapanasati). These Buddhist philosophies inter-connect human being. The Chinese philosophies consisted of the theory of the Five Elements, the theory of Yin and Yang, Taoism, and the Energy Flow theory. Likewise, all Chinese theories and Chinese philosophical thoughts are also interconnected (Dhammananda, 2006). The details of Buddhism and Chinese philosophy are as follows:

Buddhist philosophies

The aim of Buddhist philosophy is attainment of Nibbana. Buddhist philosophy which overcomes menopausal syndromes is the three natural characteristics of all things, and mindfulness on breathing of the four noble truths (Dhammananda, 2006).

1. Three natural characteristics of all things. The three natural characteristics of all things compose of aniccata, dukkata, and anattata (Chanchamnong, 2003; Dhammananda, 2006; Payutto, 1995).

1.1 Aniccata is impermanence, instability, and uncertainty condition. It means nothing is repeated for long. It has already arisen, gradually broken down, and faded away.

1.2 Dukkhata is a state of suffering, a condition of pressure, the deficient condition, craving, and causing dukkata.

1.3 Anatta is all condition non self. There is no real essence, soundless, and selflessness. It is emptiness or nothing is substantial.

The three natural characteristics of all things in Buddhist philosophy allow us to understand menopausal syndromes as natural changes of human body. It is an impermanent condition which arises, passes, and gradually fades out. It is really nothing clinging to self.

2. The Four Noble Truths. The Four Noble Truths are (Dhammananda, 2006; Payutto, 1995):

2.1 Suffering or Dukkha is a condition that has innate regression, pressures, conflict, insufficiencies, and incompleteness (Five Aggregates). These constitute a potential problem that may arise at any time and may reoccur or be reborn in any shape or form. It is related to birth, sickness decay and death, encountering distasteful things, being separated from things we love, and not obtaining those things we hope for.

2.2 Samudaya is the cause of suffering. It is interrelated craving (tanha) that is linked with being engrossed (occupied) and infatuated. There are three types of craving: sensual (fleshly), existence (being), and non existence. It is desire to create and determine a substantial self, which causes pressures, anxiety, fear, and a constant adherence to fix notions about self.

2.3 Nirodha is extinguishing suffering. Everyone can meet suffering and become free from suffering. At this stage, one craves elimination, feeling simple, freedom, peace, being unencumbered, clear, and bright.

2.4 Magga is the path that leads to the extinction of suffering. There are

eight-fold paths for reducing suffering: proper understanding, proper thought, proper speech, proper action, proper livelihood, proper effort, proper mindfulness and proper concentration.

The four noble truths in Buddhism help us to identify causes of menopausal syndromes and the paths of proper mindfulness to overcome menopausal syndromes.

Insight meditation (Vipassana). The insight meditation that guides QNTP is mindfulness on breathing. The mindfulness in breathing is the best method for cultivation of mindfulness while breathing in and out. One focuses on one truth or reality of nature and then observes, investigates, and scrutinizes (probe) it within the mind with every inhalation and exhalation. Thus, mindfulness on breathing allows us to contemplate any important natural truth of body (kaya), feeling (vedana), mind (citta), and dhamma while breathing in and breathing out. There are four steps of mindfulness breathing 1) flesh-body and breathing, 2) mastering feeling, 3) subtlety of the mind,and 4) realization of the supreme Dhamma (Buddadasa, 1988).

The mindfulness on breathing of Buddhism is methodology to calm down the mind with mindfulness concentration. The results of mindfulness meditation are that the mind begins to lose its attachments. The mind becomes free from attachments and brings the body back to the nature. Therefore, the women with menopausal syndromes suffering will develop endurance to control menopausal syndromes.

Chinese philosophies

Four main Chinese philosophical thoughts are mentioned in Qigong including.

1. Five Elements. This Chinese philosophical belief is that the world is composed of five elements: wood, fire, earth, metal, and water. The Five Elements describe

interactions among various phenomena of the universe, and human being. The imbalance of each element affects the others or the whole. In menopause, ovarian failure causes kidney deficiency and liver Qi stagnation. They affect water and metal elements changing and imbalance of Yin and Yang. Therefore, Qigong balances the Five Elements for women with menopausal syndromes by increasing oxygen flow into the body by correcting breathe in the proper environment, and increasing mineral from food and the earth (Dhammananda, 2006).

2. Yin and Yang theory. This theory believes that Yin and Yang are two different forces but are complementary in four aspects:

2.1 Yin and Yang are opposite's ends of a cycle. Their relationships are constantly changing and balancing.

2.2 Yin and Yang are interdependent. Nothing is totally Yin or totally Yang. If the state of total Yin is reached, Yang begins to grow. Yin and Yang is constantly transforming into each other.

2.3 Yin and Yang are consumption they are continuously interchanging into balance and harmony. Yin and Yang are imbalances that affect each other. Four imbalances in human are yin excess, yin deficit, yang excess, and yang deficit.

2.4 Yin and Yang are inter-transformation. It is not a random event.

The interaction between Yin and Yang also relates to Five Elements and three treasures. They create the flow of Qi (Reid, 1989). The balance flowing Qi of mind and body means a person is in good health. Qigong helps man cultivating yang Qi by external body movements and yin Qi by meditation. Therefore, yang and yin Qi will regulate the body into balance (Carnie, 1997). The common excessiveness of yang manifests in red

facial, high body temperature, dryness, hyperactivity, constipation and rapid pulse whereas an excess of yin is seen pale, chills, joint edema, lethargy, loose bowels, and slow pulse (Reid). Qigong practice to balance Yin and Yang in menopause is to cultivate yin Qi by meditation, and slow movements (Dhammananda, 2006).

3. Taoism. Tao is universally operating within the law of nature in balance and harmony. Tao means a path or road, method, principle, truth, and reality (Chen, 1963). It is invisible, inaudible, vague (confuse), elusive (subtle), indescribable above shape and form, unity behind all multiplicity, like an uncared (eternal) block, everlasting(the best), unchangeable, all pervasive (abnormal), flows everywhere, operates everywhere, free from danger, use it and you will never wear it out, while vacuous (blank), it is never exhausted. It depends on nothing. It is natural; it comes into existence by itself and has its own principle for being. It is the great form, nameless (wu-ming), unlimited in space and time, unimaginable, unknowable, and above all, It is non-being (wu or empty and devoid of everything). In addition, Tao also points to the supreme that ultimate, nothingness/ formlessness, and empty circle. It manifests in various themes: non action (wu wei), harmonious in nature, detachment, flexibility (strength of softness), peacefulness, and tranquility (Chen). Moreover, Taoism viewed themselves as three bases of the world-the sky (universe), the earth, and human being. Each of these bases consists of three treasurers which will move and change closely interrelated with Yin and Yang, and the Five Elements. Therefore Tao always represents in a circular symbol which contains the universal polarity of Yin (dark area), and Yang (light area) with the continual motion of change. Thus, this presents Tao as closely interactive with Yin and Yang as well as Five Elements.

The main philosophy of Tao is Tao Te Ching consists of eighty one chapters. The aims of philosophical lessons of Tao Te Ching (Chan, 1966) are:

1. Understanding the world of matter, understanding human passion (desire), understanding the law of fate (Dhamma, 2006), daily checking one's personal morals, feeling fulfilled, doing merit, compassion, and careful doing.

2. Emptying the mind by doing nothing to bring eternal and mental enlightenment. In this part, there are two types of Tao meditations: internal meditation with imagination and external meditation were contributed. The internal meditation is visualizing the vital energy flow in vessels and meridian lines. There are a micro cosmic and a large cosmic. The micro cosmic is visualizing the flow of the vital energy in two central vessels, whereas the large cosmic is visualizing the flow of the vital energy in eight vessels and twelve meridians lines. The external meditation is increasing the vital energy by muscle contraction and the slow body movement which agree with breathing.

3. Living simply with the rhythms of nature are loving nature, following the law of nature, not abusing nature, and adapting both physically and mentally by applying yin–yang close to nature.

4. Taking upon oneself as the qualities of water (formless, softness, politeness, flexibility, munificence, and humility).

The lessons of Tao Te Chang teach the person to empty the mind free from various world of matter such as human desire, pressure, menopausal syndromes and so on. It is loyalty calm down the mind to maintain quiet. In addition, it also states that people should live simply within the rhythms of natural law by adapting physically and mentally

applying yin–yang close to nature. These philosophical thoughts of Taoism guides Qigong practice in QNTP.

In addition, one of Tao Te Ching of Toaism mentions that “The one gave birth to two things, then to three things. Tao presents self in three bases -the sky (universe), the earth, and human being. Each of these bases consists of three treasurers: shen, qi, and jing.” For the human being these three treasures relate to human strength and balance which determine health and longevity (Reid, 1989).

1. Shen. Shen or Shin is spirit or mind (Reid, 1996). Shen is the basic of one’s nature, thinking, judgment, reasoning, and emotion expression (Kyung, 2001). It controls personal consciousness (Cohen, 1996). It is inherited from one’s parents and controls the entire functioning of the human body, mental and emotional activities, five senses, breathing, and the nervous system function (Kyung). It’s harmonious flow of essence which is necessary to build good health (Cohen). Taoism adepts transmute essence (jing) and energy (qi) into pure spirit during prolongs meditation and correct breathing (Reid, 1989).

2. Qi. Qi is a vital active energy, or the unseen force in life (Fontaine, 2000). Qi in human being activates the physical body to be active and energetic. It presents not only in all living matter but throughout the universe. Qi keeps flow, rhythms cycles, changes, moves, and balances over all body. It is obtained from parents and from air, food (Kyung, 2001), and universe (Yang, 2005). Moreover, the physical activities (eating, working, and rest), as well as nonphysical aspects of life (motivation, feelings, desires, and a sense of purpose in life) are all made possible by Qi. Everything in the world - animate and inanimate- is made of energy (Fontain, 2000). Human beings are in universe

of energy (Colling, 1998 cited by Fontaine, 2000). Qi obtained from universe is Qi from sky, mountain, the sea, the tree, sunlight, moonlight, and ancient building (Yang). In addition, Oxygen is also a kind of Qi which obtains man from correct breathing, and nutrient from food, and drink(Kyung).

3. Jing. Jing is a living essence or genetic force. It is related to sexual function and vitality of a person. Jing slows organic change substance (Kaptchuck, 1986) often associates with a person's endurance. In the human, two types of jing: innated jing is inherited and acquired Jing from food and drink (Liang & Wu, 1989). Taoism increases Jing and Qi in living by control diaphragmatic breathing to increase oxygen flow in circulation (Reid, 1989). There are various forms of jing such as blood, hormones, enzymes, lymph, immune factors (Reid), saliva, sweat, tears, urine and essential body components of tissue, skin, hair, muscle, bone and internal organs (Reid).

Understanding the functions of three treasures and knowing the sources to obtain these three treasures were essential for Qigong practice. They guided Qigong practice correctly and purposefully because kidney jing deficiency in woman with menopausal syndromes due to degeneration of body function causes body imbalance. Therefore, corrective Qigong practice would balance three treasures and menopause. Qigong for balancing menopausal syndromes were meditation, correct breathe, slow movement, and element supplies.

4. The Energy Flow theory. The Energy Flow theory focuses on the flow of Qi from environment via the energy cavity through a circle of 12 meridian lines, 8 vessels, through 11 internal organs, and 6 extra ordinary organs (Wyith Institute of Technology, 2005).

Common energy cavity or Qi mark (Yang, 2005a). There are more than 700 cavities on the human body. Each cavity locates fixed and connected with each meridian. Basic energy cavities (Figure 2.) which relate to Qigong were described as follows (Yang):

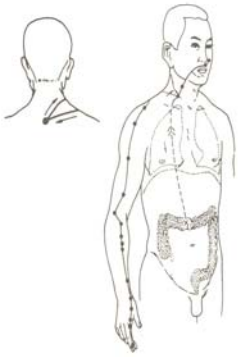
1. Loagong cavity located in the middle of each palm. These cavities receive energy from the universe and excrete waste energy from the body.	
2. Yongquan cavity located at 1/3 from the base of the second toe and the heel in the sole of the foot. These cavities receive energy from the ground and excreting waste energy out of the body.	
3. Paihui cavity located at the anterior fontanel. It is a network of all meridian lines for receiving universal energy.	
4. Huiin cavity located at the middle line of perineum body. It is a guard of the genitourinary organs.	

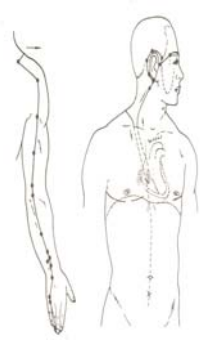
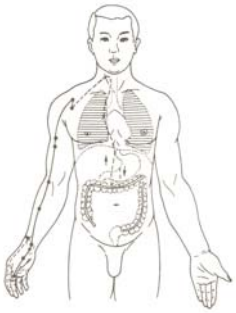
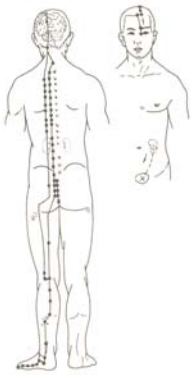
5. Lower Tantien is an important energy reservoir. It locates at the middle line 4 inches under the umbilicus.	

Figure 2. Common energy cavities

Energy reservoirs. Three energy reservoirs in a human: 1) low Qi energy center locates at the navel, 2) middle Qi energy center is at the solar plexus (trunk), and 3) high Qi energy center is at the front of forehead (between the eyes).

Energy channels (the meridian lines). They are 12 meridian lines and 8 vessels in a man. Each meridian line indicates a particular flow of energy or Qi from a different energy point through different internal organs and extra ordinary organs. The energy blockage of each meridian line will be shown in different signs and symptoms (Wyith Institute of Technology, 2005; Yang, 2005a). The energy flow directions guided body movement in QNTP. Nine meridian lines and two central vessels are as follows in Figure 3, & Figure 4 (Wyith Institute of Technology, Yang).

1. Large intestine meridian line. Two large intestinal meridian lines are yang. Each starts from the tip of the index fingers through the external side of the arm, the back of both shoulders, then turns to the front of the shoulders. At the scapular region, each divides into two branches: one branch runs through the lung and terminates at large intestine; the other branch runs through the nose to connect with the gestational meridian line. Energy blockage of this meridian showed abdominal pain, colicky pain, diarrhea, constipation, sore throat, and lower toothache	

2. Sanjew meridian line. Two Sanjew meridian lines are yang. Each starts from the tip of the ring finger, through the back of the hands, arms, and shoulders. Then it turns to the front of the body at the middle of the chest. Each wing of the meridian divides into 2 branches: one runs down to Jongjew and Searjew, whereas the other runs up through the neck and ear to connect with the gall bladder meridian line at the temporal part. Energy blockage of the Sanjew meridian showed migraines, deafness, a buzzing in the ear, red eye, pneumonia, ascitis, urinary obstruction, and diabetes	
3. Lung meridian line. Two lung meridian lines are yin. Each line starts from middle warmer through the large intestine. Then it turns up through the lung, bronchi, neck and divides into 2 branches through the inner side of both arms, and terminates at the external of the thumbs. Energy blockage of this meridian showed coughing, asthmatic attack, hemoptysis, sore throat, common cold, pain and tightness of the chest, clavicle pain, shoulder pain, and numbness of the back	
4. Small intestinal meridian lines. Two small intestinal meridian lines are yang. Each line starts from the tip of the little finger, and runs along the back hand, arm, and shoulder. At the shoulder it turns up to the front and divides into two branches: one branch runs down the small intestine, the other runs up through face to the eye and connects with the gestational meridian line. Energy blockage of this line manifested lower abdominal pain, sore throat, a buzzing in the ear, and deafness	
5. Urinary bladder meridian line. Urinary bladder meridian lines are yang. The origin of each line is located at the head of the eye and the edge of the eye-brow. The path of this line runs up through the anterior fontanel (Paihui), to the back of the head, along the spinal cord, the leg and terminates at the tip of the 5^{th} toe. At the 5^{th} toe, it connects with the kidney meridian line. Energy blockage of this meridian showed dysurea, urine incontinence, headaches, eye pain, upper part back pain, flank pain, sacral pain, and joint pain	

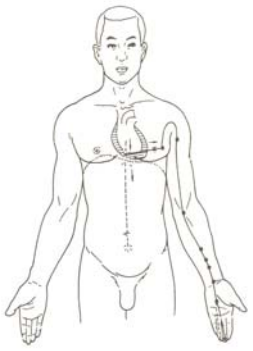
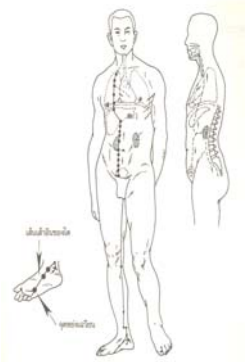
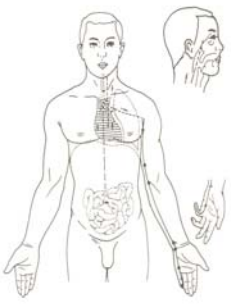
6. Heart meridian line. This meridian line is yin. It starts from the heart through middle line of the body. Then it divides into three branches: one branch runs down to diaphragm, then each of them turns up through the stomach, neck and terminates at the end of the eye. The other two branches run to both armpits along both inner arms to the tip of both little fingers. At the tip of the little fingers they connect with the small intestinal meridian line. Energy blockage of the heart meridian was periodic chest pain, eye pain, upper trunk muscle pain, and warmth in the palms	
7. Kidney meridian lines. Two kidney meridian lines are yin. Each line starts from the sole by the 5th toe and runs along through the cavity of bubbling well (Yongquan), inner side of the leg, urinary bladder, kidney, and chest. At the chest it connects with the pericardium meridian line. Energy blockage of this meridian showed incontinence, masturbation, ascitis, flank pain, dysmenorrhea, abnormal menstruation, abnormal presentation of newborn, a buzzing in the ears, deafness, toothaches, and sore throat	
8. Liver meridian line. Two liver meridian lines are yin. Each line runs from the big toe along the inner-side of the leg, turns a circle at the external genitalia and perineum then turn up to the liver and the lung. At the lung it connects with the pericardial meridian. Energy blockage of this meridian showed irregular menstruation, dysmenorrhea, bleeding of the vagina, incompetent, urinary incomprtent, vomiting, hypertension, fainting, red eye, and pain of the eye.	
9. Pericardium meridian line. Two pericardium meridian lines are yin. Each line starts from pericardium, runs toward the front shoulder and turns down along the inner arm, palm, and the cavity of labor places (Laogong) terminates at the tip of the little finger. This line connects with the Sanjew meridian line. Energy blockage of this line showed chest pain, tightness of the chest, palpitations, irritation, madness, neurosis, and feeling of warmth in the palms.	

Figure 3. Energy channels (the meridian lines)

The energy vessels

There are conception (ren meridian line) and the governing vessel (du meridian line) besides the other six. The functions of these eight vessels are to regulate the circulation of Qi, to store Qi and blood for further use, and to excrete excess Qi (Wyith Institute of Technology, 2005).

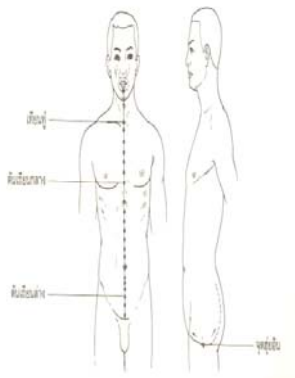
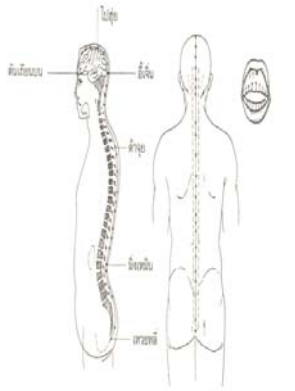
1. Conception vessel. This vessel connects with all yin meridian lines. It descends from the lower abdomen to the perineum and runs up internally along the trunk to the lower lip, into the throat, then turns around the lips, passes through the cheek and emerges in the infra orbital region. The pathological changes of this vessel showed herniation, leukorrhea, lower abdomen mass, irregular menstruation, abortion, and infertility.	
2. Governing vessel. Governing vessel governs all yang meridian lines. This vessel starts from the lower abdomen runs downward to the perineum, and then flows upward along the spinal column, enters the brain, through the forehead, and descends to the nose bridge, the lips and the labial frenulum of the upper lip. The pathological changes of this vessel showed stiffness of the spine, opisthotonos, back pain, mental disorders, and infantile convulsion.	

Figure 4. Energy vessels

All energy lines regulate the flow of Qi. The flow of Qi of each line should be strong, full and smooth. The network of energy lines are reservoir for transferring, transforming, moving and storing Qi. Qi flows along the channels like electrical circuits moving through wires. Each line connects with each particular internal organ and external organ.

Principle Components of Qigong

There are various principles of Qigong practice: Nutritional supply, environmental energy supply, acupressure, acupuncture, body moving, meditation, breathing, and voicing. In QNTP for reducing menopausal syndromes, the researcher chose five components of Qigong: body moving, breathing, meditation, nutrition, and environment for women with menopausal syndromes. The detail of each component was as follows:

1. Meditation**.** Meditation is mindfulness and visualization. It was the most essential part of QNTP. The purpose of visualized meditation was to calm the body and the mind, to purify the mind from various conflicts, in order to cultivate Qi, and to enhance the ability of the mind and physical capacities for self healing and for providing the gateway for spiritual growth. The meditation of Taoism was sitting still and doing nothing to empty the mind entirely of conceptual thought, and let the spirit abide in emptiness, silence and stillness. This practice increased internal energy by: 1) conservation of essence, 2) restoration of essence, 3) transmutation of essence, 4) nourishing of essence, 5) transmutation of energy, 6) nourishing spirit,7) transmutation of spirit, and 8) transmutation of pure cosmic spirit (Reid, 1989). Similarly, Buddhism guides mindfulness focus on breathing and visualization taking good view into the body, and eliminated the waste out (Thein, 1999). The mindfulness of Buddhism provided momentary awareness while contemplation (concentration) provided mental calmness, tranquility and frees the mind from various emotional conflicts (menopausal syndromes), promoted insight reality, good will, confidence, energetic, endurance, and determination (Chanchamnong, 2003). The visualized meditation of QNTP was related to concentration and awareness as follows:

Concentration and awareness. During QNTP practice, the participant's mind concentrated on visualizing by bringing well in and eliminating waste products out of the body follow the meridian vessels. These provided understanding of the nature of mind and body resulting in spirit growth.

2. Breathing**.** Both external breathing and internal breathing of QNTP focus on mental and physiological effects. The external breathing guides by Buddhism and Taoism was abdominal breathing or diaphragmatic breathing. This type of breathing emphasizes breathing in rich oxygen from the fresh air through the airways drawing the air toward the lower part of the lungs while keeping the diaphragm and the lower abdominal muscles moving forth, and exhaling the carbon dioxide by keeping the lower abdominal muscles moving back (Reid, 1989). In addition, it was also following by Buddhism during external breath with mind intention on the rhythm of breathe in and breathe out (Chanchamnong, 2003). Moreover, Taoism also presents skin breathing and internal breathing in the process of drawing vital oxygen from the lungs through energy channels and blood circulations to the internal organs, cells, and the external body. During breathing out, the waste products were excreted from the cells and organs through lymphatic circulation and energy channels driven away by the kidneys, skin, and lungs (Yang, 2005b).

3. Body alignment and body-movement. Body alignments which maintain a stable body structure and resisting the constant pull of gravity is guided by Toaism. (Yang, 2003). Moreover, the body movements which focus on simple, slow, repetitive and rhythmic contractions and relaxations of muscles and tendons follow Taoism. Both internal and external moving aimed of strengthening, stretching and toning the muscles and tendons for full functioning (Yang, 2005a; Reid, 1989). The movements of QNTP focuses on stimulus energy point to harmonize, smooth, and strong flow

of Qi and blood through energy network (Yang, 2005a).

4. & 5. Nutrition and environment advices. Taoism suggested cultivating qi from the environment by diaphragmatic breathing, and food intake adjustment to follow Yin & Yang.

Mechanism of Qigong

There were three main physiological mechanisms (Crampton, 1995; Sancier 1999; Sancier & Hole, 2001) and one psychological adaptation (Zhang, 2004) of Qigong on the human being.

1. Shifting sympathetic and parasympathetic function. Qigong shifted the autonomic nervous system towards parasympathetic-sympathetic balance which support and enhance the immune system.

2. Increasing efficiency of the waste disposal system. Qigong helps the lymphatic circulation to eliminate toxins, metabolites, and pathogenic factors from cells and tissues whereas the diaphragmatic breathing also helps abdominal muscles, urinary muscles and perineum muscle to be strengthen. All of these support to excrete waste products out of the body.

3. Increasing self-psychological regulation. Qigong not only directs body restoring physiological function equilibrium but also leads to balance of psychological disorders (Zhang, 2004). During Qigong body is in a trance state, one subjectively feels free, calm, and open mind. Positive emotional state fully recharged a person from psychological stress, objectively changing neuroendocrine functions (Zhang).

Effects of Qigong on Organs Function

The effect of Qigong on organ function is a complex mechanism because Qigong is a holistic mind–body. It produces vital energy for various organs of human body (Chen & Turner, 2004; Crampton, 1995; Sancier & Hole, 2001) as follows:

1. Effects on neurological systems. Qigong balances parasympathetic-sympathetic action. It accelerates oxygen and enriches nutrition supply to neurons and nervous systems. In addition, Qigong decreases the waste on neurons and nervous tissue by increasing waste excretions. These support the efficiency of neurological systems function and activate the immune system resulting in a significant stability in mood and mental state (Crampton, 1995; Sancier, 1999; Sancier & Hole, 2001).

2. Effects on endocrine systems. Qigong increases circulation and decreases blockage in various energy channels. So Qigong increases efficiency of the endocrine function to regulate various hormones balance especially sex hormones in menstruation which slows down the normal process of aging (Crampton, 1995;Sancier & Hole, 2001).

3. Effect on immunological systems. Qigong increases vital energy to distribute nourishing nutrients and oxygen (essence) supply to cells, tissues, and accelerate the extraction of waste from the body. Moreover, Qigong calms and relaxes the mind, increasing directly both cellular and hormonal immunity (Crampton, 1995; Sancier, 1999; Sancier & Hole, 2001).

4. Effects on the respiratory system. Breathing in Qigong is diaphragmatic breathing or full abdominal breathing with mind intention. It slows down the frequency of breathes from 20 times per minute to 4-5 times or even fewer. (www.tctaichi.com/articles/ abdella Qigong.htm, 2005). This efficient breathing increases oxygen into the airway and tissue. The breathing is soft, quiet (Carnie, 1999), and regular (Yang, 2005a). This increases concentration and relaxation of the body (Roger, 2004), and increase alveolar ventilation by activating gas exchange.

5. Effects on the digestive system. The movement of abdominal muscles and diaphragmatic muscles during Qigong breathing increases gastrointestinal peristalsis

activities. It increases gastrointestinal juices, gastrointestinal absorption and waste excretion (Health centre, http://www.health phone. com/consume English/a_ healing center/Qigong_ main.htm). In addition, increasing absorption activities may reflect decreasing amount of food intake.

6. Effects on cardiovascular systems. During energetic stage, full, strong and smooth Qi drives through circulatory channels (meridian lines, blood vessels, lymphatic vessels). Qi cleans the channel surfaces and decreasing spaces occupied with fat and other substances. Moreover, Qi enriches nutritional supply and accelerates excretion of waste. This increases red blood cells, improves and reinforces micro circulation, improves the elasticity of blood vessels, decreases risk of stroke, decreases risk of arterial sclerosis and coronary disease, cures hypertension, increases zinc level, and a decreases dopamine and beta-hydroxyl levels (Crampton, 1995).

7. Effects on the muscles, tendons, and skeletal systems. Body movements and abdominal breathing increase internal organ movements and external muscles, and tendon strengthening and toning. In addition, increasing circulatory function reduces collagen formation of bones and lactic acid in muscles (Sancier & Hole, 2001).

8. Effect on skin. Skillful Qigong practitioners expressed body energy by increasing skin temperature, and regulating skin resistance. The regulating skin was observed from electric potential, amplitude of the wave, modulation and periodic cycle (Crampton, 1995; Sancier 1999; Sancier & Hole, 2001).

Qigong is not only beneficial in recovering organ structures and functions but also regulates emotion and spirit of practitioner. Therefore, Qigong daily will increase life essences.

Effects of Qigong on Reducing Symptom Disturbances

No report of Qigong studied on menopausal syndromes. However, many Qigong studies relevance in reduced various symptom disturbances in humans. Like other symptoms, menopausal syndromes which has the same mental and physical symptom disturbances. In addition, one review examined the effect of Qigong balances estrogen hormone (Kaung, 1998 cited by Sancier & Hole, 2001; Ye, 1999). Therefore, following reports were Qigong on reducing various symptom disturbances in human. Fifty-six research of Qigong were reviewed from EBSCO, Blackwell Synergy, and Science Direct. The results of analysis showed five categories as follow:

Reduced psychological suffering

Qigong reduced anxiety (Chen et al.,2004; Lee & Jang, 2005), reduced negative moods (Chen & Lui, 2004; Lee, Kang, Lim, & Lee, 2004), and reduced depression (Gaik, 2003; Lee & Jang, 2004). These three psychological disturbances also appeared in menopause. Therefore, Qigong may reduce these three psychological disturbances in menopause.

Reduced somatic syndromes

Qigong reduced pain (Chen & Lui, 2004) reduced fatigue (Lee & Jang, 2005), reduced insomnia (Lee, Yang et al., 2005) and increased sleep activity (Thinhuatoey, 2003), reduced discomfort, reduced vomiting, and anorexia (Lee & Jang).This group of psychosomatic syndromes also happens in menopause thus Qigong might reduce the psychosomatic syndromes in menopause too.

Improved psychosocial behaviors

Qigong increased psychological benefits (Tsang, Mok, Yeung, & Chan 2003), increased calmness (Lee, Yang et al., 2005), livelier appearances (Pirason, 1998), increased self efficacy and cognitive functioning of understanding, and analysis (Lee,

Yang et al., 2003; Lee, Lim, & Lee, 2004). In addition, each report increased cognitive functioning, and increased concentration (Pirason), as well as increased positive social behavior (Witt et al., 2003). The indicators showed above were also importance goals for menopause women to cope with menopausal syndromes. Thus, Qigong may be the appropriate wisdom for women in menopausal syndromes to cope with their menopausal syndromes.

Reduced physical disturbance

Qigong reduced blood pressure (Chao et al., 2002; Chen & Turner, 2004; Lee & Jang, 2005; Lee, Kang, Lim et al., 2004), reduced water retention (Jang et al., 2004), reduced leg edema (Chen & Turner, 2004), and reduced blood sugar (Leiankure, 2003; Lee, Kang, Ryu, & Moon, 2004; Lee, Woo et al., 2004; Lee & Jang, 2005). In addition, Qigong also decreased musculoskeletal disabilities. Some indicators of physical disturbance also occurred in menopause, so Qigong may reduce physical disturbances in menopause.

Improved physical health

Qigong improved respiratory functioning such as increased ventilation increment (Chao et al., 2002; Lee, Lee, Choi, & Chung, 2003) showed oxygen velocity and oxygen pulse both peak exercise and ventilators threshold of the Qigong group was higher than the control group at $p < .05$ (Lan, Chou, Chen, Lai, & Wong, 2004), reduced respiratory syndromes (Sancier, 1999), increased cellular immunity (Thinhuatoey, 2003), gene expression of normal neutrophils prolonged life span while the inflammation of neutrophiles accelerated death significantly which compared with healthy controls,(Lee, Lim, & Lee, 2004; Li, Li, Garcia, Johnson, & Feng, 2005), besides hormonal immunity such as increasing plasma level of growth hormone, balanced insulin-like growth factor (Lee, Kang, & Ryu et al., 2004), increased beta

endorphin (Ryu, 1996), normalized testosterone and estrogen levels (Ye, 1990 and Kaung,1998 cited by Sancier & Hole, 2001), decreased plasma concentration of ACTH, cortisol (Ryu, 1998), and aldosterone (Lee, Kang, Lim et al., 2004), and decreased urinary catecholamine levels (epinephrine, nonepinephrine and metanephrine) significantly (Lee, Lee, & Kim, 2003), increased cardiac function as energy expenditure. The cardio respiratory response (respiratory rate, heart rate, systolic blood pressure, diastolic blood pressure and rating of perceived exertion) after TCOG practice were significantly higher than before (Chao et al., 2002),alpha waves were found at the frontal area of the brain (Kawano, Yamamoto, & Kokubo, 2002; Litscher, Wenzel, Niederwieser, & Schwarz, 2001), increased mean blood flow velocity (vm.) in the posterior cerebral artery and decreased the velocity in the middle cerebral artery (Litscher et al., 2001), In menopausal women the indicators of physical health degenerated in many reports indicating a need to improve. Hence Qigong may help these menopausal women to improve their physical health.

Only three reports in Thailand studied the effects of Qigong on human health. All of them are quasi-experimental designs with purposive samplings. The outcomes of these studies showed reducing blood pressure in the hypertensive patient (Pirason, 1998), decreased blood sugar in diabetes type II (Leiankure, 2003), and promoted of physical and mental wellness in nursing students (Suthana, 2001).

In brief, Qigong is a kind of mind–body practice for producing vital energy to promote health and a therapy used for a long time in China. Qigong composed of two main thoughts: Buddhist and Chinese philosophy. Qigong can be cultivated by various techniques. Practicing Qigong regularly for a significant period results in Qi flowing strongly, fully and smoothly through meridian lines in the human body. This indicates the body in a balance state. Many research reports indicated that Qi reduced

psychological disorders, somatic disturbances, improved physiologic imbalance, and reduced some physical abnormalities. In addition, Qi balanced hormonal disturbance to prevent and slow down the aging process. This means applying Qigong daily may help women with menopausal syndromes balance their menopausal syndromes.

To development a Qigong Nursing Therapeutic Program is to expand nursing professional role. Therefore, understanding holistic nursing approaches not only important but necessary.

Holistic Nursing

Holism comes from a Greek word “holo” means all, entire, total. It is all the properties of a system (biological, chemical, social, economic, mental, linguistics, etc) which cannot be explained by the sum of component alone. Holism believes that all living organisms are interacting unified wholes that are more than the mere sum of their parts (Patterson, 1998).

Holistic nursing is the dynamic process to assist person in finding the wholeness inherent within self. The concepts of holistic nursing are broad eclectic academic background, a sensitive balance between art and science, analytical and intuitive skills, and the opportunity to choose from a wide variety of modalities to promote the harmonious balance of human energy systems (Bright, 2002).

The root of holistic nursing emerged from the vision of Florence Nightingale, and then followed with three holistic nursing of Martha Rogers, Margaret Newman, and Jean Watson (Bright, 2002).

Nightingale (1859) viewed person as multidimensional being inseparable from the environment. Nursing was putting the person into the best condition for nature to act upon them, emphasizing touch and kindness along with the physical environment.

Rogers (1970) viewed human beings are irreducible, unified energy fields and evolve irreversibly and unilaterally across space and time. The environmental energy field is in constant and meaningful interaction with the human energy field. Nursing is an evolving the study of pandimentional energy fields.

Newman (1974) developed a mutual interaction between nurse and person uniqueness and wholeness to move through life process with consciousness.

Watson (1979) proposed assumptions about science of caring, and presented the primary factors of caring.

Therefore, holistic nursing philosophy recognizes two views as identifying the interrelationship of the bio-psycho-social-spiritual dimensions of the person, and understanding the individual as a unitary whole in a mutual process with the environment (Frisch, 2001). Consequently holistic nurse recognizes and integrates body-mind-spirit principles and modalities in daily life and clinical practice. In addition, the holistic nurse believes that the goals of holistic nursing can be achieved within either framework. Nurse is an instrument of healing and a facilitator in the healing process (Frisch).

The holistic nursing approaches individuals, families, and communities by drawing up nursing knowledge from theories, research, expertise, intuition, and creativity. In addition, holistic nursing practice encourages peer review of professional practice in various clinical settings and integrates knowledge of current professional standards, laws, and regulations governing nursing practice. Moreover, practicing holistic nursing requires self-care, self-responsibility, spirituality, and

reflection in caring. This may lead the holistic nurse greater awareness of the interconnectedness with self and others, and understanding individual human and global community.

The goal of holistic nursing is to define the ways to enhance the healing of the whole person. Therefore, holistic nursing reduces crisis and illness by providing care and enhancing self-healing of the whole person.

In conclusion, QNTP was developed combing three philosophical thoughts of Chinese, Buddhism, and holistic nursing. In addition, it was also developed under supervision of a Qigong healer, and validated by menopausal experts and Qigong expert. It required praxis knowledge for further development. Therefore, this therapy was implemented with Participatory Action Research.

Participatory Action Research

Participatory Action Research is called by various terms such as cooperative inquiry, action inquiry, action research, community-based Participatory Action Research, collaborative research, and participative inquiry (Reason, 2001; Tetley & Hanson, 2001 cited by Speziale & Carpenter, 2003). It can be defined as "a research methodology consisting of the reciprocal collaboration between researcher and participants through participation."(Greenwood and Levin, 1998 cited in Speziale & Carpenter, 2003, p. 256), "encourage self reflection." (Kemmis & McTarggart, 1988 p. 5), using empowerment to bridge the gap between theories, research and practice (Holter & Schwartz-Baarcott, 1993), as well as to gain in actual knowledge and improve social circumstance.

This research method includes action and research with flexible and adjustable for changing during the research process. It is suitable for solving complicated or holistic phenomena. Both menopausal syndromes and Qigong are holistic and complicated phenomena. Therefore, Participatory Action Research is a suitable research method for inquiry. In addition, PAR also focuses on the contradictions of inquiry process. In addition, PAR provided more content to transform a tentative program. It will help the researcher solve conflicting factors, which may occur during three months of the research project. Furthermore, the participants have their own individual, social, and cultural beliefs which are impossible to totally eliminate threats (something bad that may happen) during the study. Therefore, Participatory Action Research was identified for QNTP implementation. For the technical PAR was used as the methodology for QNTP implementation because of each step of QNTP development was done base on scientific principles, and validated by health care professions,.

Evolution and Philosophical Based

Participatory Action Research was started by the early report of Action Research and Minority Problem of Kurt Lewin(1946). His work was concerned with social problems and focused on participative group processes for addressing conflict, crises and changes within organizations. The results of this study affected various forms of social action and his research leading to changed social action. The process of the research utilized multi-spiral steps. Each phase of the spiral composed of planning, action, and fact-finding about the result of the action (Rory, 1998). Thereafter, Eric Trist (1963) applied this Participatory Action Research to the war and tended to focus more on large-scale and multi-organized problems (Rory). Consequently, Carr and Kemmis (1986) used the ideas of Critical Theory, which was

developed over generations by, Jurgen Habermase, a member of the institute for Social Research in Frankfurt School of Germany.

The Critical Theory perspective was that knowledge did not stand alone and was not produced in a vacuum by a pure intellectual process (Burns & Groove, 2001). Moreover, the goal of critical theory was to emancipate people through the critique of ideologies (the contradictions, inequities and the potential changes) in order to promote personal insight and lead to transformation of self consciousness in the social condition (Young, Susan, Taylor, & Mclaughin-Renpenning, 2001). The critical theory ontology is historical realism. It is shaped by groups of social, political, cultural, economic, ethnic, and gender factors, over time, and then crystallized into a series of structures (real or a virtual or historical reality). The epistemology is transactional, and subjectivist. The investigator and her subjects are in a reciprocal relationship inquiry. Therefore, particular findings are value mediated and hence value dependent in order to overcome contradiction.

The inquiry needs dialogue between the investigator and the subjects. The form of dialogue was dialectical in nature to transform ignorance and misapprehensions into more informed consciousness or transformative intellectuals' knowledge (knowledge coming from the integration of inner and outer factors). Events are understood within social and economic contexts with emphasis on ideological critique and praxis. The inquiry aims at critique and structural change, factors controlling and achieving human potential. The method may engage in confrontation, even conflict, reducing ignorance, misapprehensions and stimulants to actions. The criterion for progress is that over time, restitution, and then emancipation occur and persist (Denzin & Lincoln, 1994). The investigator is an advocated and an activist. So the inquirer's roles are as an initiator and facilitator. The judgments of

transformations serve the inquiry. The participants affect to transform. The value of inquiry in critical theory has pride of place, and its outcomes. Place of inquiry of critical theory is more nearly intrinsic to ethic. As the intent to reduce ignorance, misapprehensions take full account of values and historical situation in the inquiry process. This is the moral tilt of the inquirer. The voice of the inquirer is mirrored in the inquirer's activities of change agent. The voice is transformative intellectuals to confront ignorance and misapprehensions. Changing is facilitated as individual develop greater insight into the existing state of affairs and act on the information (Denzin & Lincoln).

Knowledge grows and changes continuously through the dialectical process of structure revision, which enlarges with more informed insights. Generalizations can occur when in mixe situations and value is similar across settings. The implications of novices are first be resocialized from their early and usually intense exposure to the view of science, and the second learning to master both quantitative and qualitative methods; dialogic and dialectic or hermeneutical dialectical methodologies (Denzin & Lincoln, 1994). The basic assumptions of critical social science studies are (Berman, Ford-Gilboe, & Campbell, 1998): 1) knowledge ought not be generated for it's own benefit, but used as a form of social or cultural criticism, 2) the oppression can be changed by exposing hidden power imbalances and by assisting individuals, groups or communities to empower themselves to take action, 3) the critical agenda should be focused on creating knowledge that has potential to produce change through personal or group empowerment alterations in social systems, 4) the values of people have an important stake in how issues are resolved, 5) a critical researcher ought not to control and predict, but needs to understand, to describe, and 6) the event seeks to change must be capable of meeting or discussion.

Characteristics of Participatory Action Research

There are several characteristics, which can distinguish Participatory Action Research from the other research approaches. These include collaboration between researcher and participants, problem solving in the flexible circumstances for changing in practice, theory development and publicizing the results of the inquiry (Holter & Schwartz-Barcott, 1993; Zuber-Skerritt, 1992).

1. Collaboration. Participatory Action Research focuses on the collaboration between the researcher and participants. This collaboration vary from periodic to continuous throughout the study (Hart & Bond, 1995; Holter & Schwartz-Barcott, 1993). The process of research is reciprocal relationship. The researcher is viewed as a ‘co-worker' with the participants. Participants directly involve the practices concern (Kemmis & McTaggert, 1988; Zuber-Skerritt, 1992).

2. Problem solving. Participatory Action Research is a tool for solving practical problems experiences by professional, communal or private living. A variety of data collection methods (observations, interviews, questionnaires and so on) are used to identify the significant problems (Holter & Schwartz-Barcott, 1993), solving the problem and to gain reciprocal success.

3. Flexible circumstances. Participatory Action Research method allows researcher and participants to adjust their study within a particular holistically real situation or unclear phenomena through the flexibility involvement (Rory, 1998). Therefore, this QNTP implemented in real social circumstances.

4. Change in practice. The goal of Participatory Action Research is to bring about changing and improvement. Results and insights to gain from the Participatory Action Research should not only be of theoretical importance but also lead to practical improvements in the identified problem (Rory, 1998; Zuber-Skerritt, 1992).

The changes in practice depended upon the nature of the problem identified and the focus of the participants (Holter & Schwartz-Barcott, 1993).

5. Theory development. Lesson learnt from Participatory Action Research will help the researcher to develop a new theories or an expand existing scientific theories (Halter & Schwartz-Barcott, 1993). The participants are able to develop a reasonable justification for their work, the evidence gather and the critical reflection will help researcher to create a tested and critically-examined rationale' for their area of practice (Kemmis & McTaggart, 1988).

6. Public results. The theories and solutions which are produced from the Participatory Action Research should be made public to the wider community who may have an interest in that work setting or situation (Zuber-Skerritt, 1992).

Principles of Participatory Action Research

Six key principles of Participatory Action Research (Winter, 1989) follow:

1. Reflexive critique. The researcher makes judgment from reflective critique on issues, the processes, and makes explicit interpretations, biases assumptions and concerns of the participants. These practical accounts can give rise to theoretical considerations.

2. Dialectical critique. The particular social reality is consensually validated. It was shared through language. Phenomena are conceptualized in dialogue. Therefore, a dialectical critique is required to understand the set of relationships both between the phenomenon, its context, and between the elements producing the phenomenon. The key elements are unstable, or in opposition to one another. These are most likely to create change. The dialogue leads to raise collective consciousness and identification of ways to take action against oppressive forces. Furthermore, dialogues are also used to collect, analyze and interpret qualitative data in an action process. The

techniques of dialogue are different in conversation usages for relationship of equality and active reciprocity whereas reflection and insight for data collecting, analyzing, and interoperating the data (Burns & Groove, 2001).

3. Collaborative resource. Participants in Participatory Action Research are co-researchers. The principle of collaboration pre-assumes that each person's ideas are equally significant as potential resources for creating interpretive categories of analysis and for discussion among participants. The process tries to avoid bias and makes possible insights gleaned from the idea of the contradictions both between many viewpoints and within a single viewpoint.

4. Risk. Using Participatory Action Research changes a process, potentially threatens all that was previously established which created psychic fear during discussion among the participants.

5. Plural structure. The nature of Participatory Action Research includes a multiplicity of views, commentaries and critiques leading to a multiple of possible actions and interpretations. Therefore, the plural structure needs many accounts made explicit with notes of contradictions and a range of options for action presented. The series reports support ongoing discussion among collaborators rather than a final conclusion of the facts to make it more rigorous.

6. Theory, practice, and transformation. Participatory Action Research has the dynamic process both of theory informing practice and practice refining theory in a continuous transformation.

Modes of the Participatory Action Research

There are three modes of Participatory Action Research on knowledge synthesis- technical, practical, and emancipatory Participatory Action Research (Grundy, 1982).

1. Technical Action Research. This approach of knowledge synthesizes uses empirical and analytical scientific methodology in the form of inquiry and requires procedures to improve a particular intervention. The information is based on a pre-specific theoretical framework. The aim of this research is to enhance more effective or efficient practice. The kind of knowledge from this approach is predictive and the major thrust is on validation and refinement of an existing theory and hence is essentially deductive.

2. Practical Action Research. This approach focuses on understanding the phenomenon and reflective interpretation of the condition by communication and inter-subjectivity by using the phenomenological-hermeneutic method. Its process focuses on improving practice through the application of participant wisdom. In this approach, the researcher regards himself as a member of the organization, and desires to motivate the participants to a power state by self reflection. The communication flow in this type of Participatory Action Research must be unimpaired between each member of the group and the facilitator.

3. Emancipatory Participatory Action Research. The Emancipatory Participatory Action Research is based on critical social science. This type of research approach focuses upon particular practice, but also the theoretical and organizational structures and social relations which support it. The participants and researcher in emancipatory Participatory Action Research are equal with no hierarchy existing in order to decrease the distance between the actual problems and theory used to explain and resolve the problems.

For this study technical participatory action research was chosen to acquire the empiric knowledge to shape both QNTP contents and procedures. Technical PAR is

the most appropriate approach to develop this program with the four reasons as follows:

1. Technical PAR can answer both what and how to develop QNTP questions clearer than other research methods because technical PAR gained empiric, personal, ethical and artistic knowledge from both research and action. So during ongoing research process, the researcher may gain more knowledge to adjust the tentative QNTP.

2. Technical PAR has the same philosophical as menopausal syndromes, and Qigong (Traditional Chinese Medicine, Taoist and Buddhist philosophy) and holistic nursing. In addition, technical PAR is also a method designed to study the holistic phenomena, which usually appear in a real social situation. Therefore technical PAR may help in clarifying QNTP better than other methods.

3. The techniques of inquiry of technical PAR are highly flexible for adjustment and changing during the research process. It is a dynamic focus of seeking a concurrent outcome. Therefore, technical PAR may help the researcher to resolve any uncertain concepts.

4. There are many confounding factors of prolong QNTP practices in the non-bound areas or protracted program. Therefore, technical PAR will solve these problems by giving attention to all contexts rather than ignoring or eliminating them.

Process of Participatory Action Research

The Participatory Action Research process is comprised of four steps: 1) reconnaissance, 2) planning, 3) acting, observing, and reflecting, as well as 4) revising-plan. Each research step exists interdependently and follows each other in a spiraling cycle (Chuaprapaisilp, 1992; Kemmis & MaTaggart, 1988). The details of each step were:

1. Reconnaissance. This step of Participatory Action Research is that the researcher enters the situation to clarify the context and phenomenon of the study. In this step the researcher used various quantitative and qualitative descriptive research methods to obtain in depth understanding of the situation.

2. Planning. The researcher and participants present their critical ideas or innovative ways of problem solving during group discussions to carry out the agreed-upon tasks, reflect on decision making (Holloway & Wheeler, 2002), set priorities and strategies for implementation and evaluation of change (Chuaprapaisilp, 1992). The character of the plan must be flexible to adapt to unforeseen effects or constraints (Hatten, Knapp, & Salonga, 2000).

3. Acting, Observing, and Reflecting

3.1 Acting. The researcher and participants carry out the agreed-upon planning (Chuaprapaisilp, 1992). During this step, the phenomenon may change or have extraneous factors that cause planning changes (Chuaprapaisilp).

3.2 Observing. This action goes together with acting. The researcher observes to collect evidence which allows thorough evaluation. The guidelines of observation are both contents and context of situation. The observing run individually (Hatten, Knapp, & Salonga, 2000). During the research process the researcher act as an observer, facilitator, consultant, manager, change agent, and so on. Moreover, the researcher has the ability to hold the project in various situations (Chuaprapaisilp, 1992).

3.3 Reflecting. This step, the researcher and participants collaborate to explore their thoughts, concerns and feelings. The actions, processes, issues, contradictions, resources, knowledge and lessons obtained from action are discussed.

Moreover, the researcher and participants present the ideas for revising-plan (Chuaprapaisilp, 1992).

4. Revising-program. In this step, the researcher draws all observations and reflections to be a conclusion, comes up with a diagnostic thematic statement and formulates a new program for implementation on the next cycle.

In conclusion, participatory action research is a research method, which includes both research and action. It is a method for solving complicated or holistic phenomena, which usually appear in a real social situation. The root of participatory action research is Critical Theory. The focus of this theory is to find out the relevant situation by reflection, and communication, within a democratic context. There are three modes of carrying out this approach-from the simple to the more complicate using either technical, practical, and emancipatory participatory action research. For this study QNTP has a pre specific theoretical framework. Therefore, technical participatory action research was chosen for program shaping. The techniques of this type of research are highly flexible and the research process dynamic by intention to seek the concurrent outcome, and the process of inquiring, empowering, and the details of the contradiction solving. The process of this technical participatory action research in QNTP implementation including 1) reconnaissance, 2) planning, 3) action with QNTP practicing action, observe, reflection, and 4) evaluation pre-enter and during QNTP implementation for QNTP articulation with reasons and context of they learned.

Trustworthiness

According Guba and Lincoln (1985) identified four criteria included credibility, transferability, dependability, and conformability for establishing the trustworthiness of the qualitative work.

1. Credibility. Credibility or internal consistency: The credibility refers to the researcher's ability to take into account all of the complexities that presents themselves in a study and to deal with patterns that does not easily explain to achieve this, the researcher conducts as following.

1.1 Triangulation means two or more confirmations (Holloway & Wheeler, 2002; Streubert Speale & Carpenter, 2003). It means researchers use multiple and different sources methods, investigators, and theories to provide corroborating evidence (Lincoln & Cuba, 1985).

1.2 Persistent observation. Persistent observation means focusing observation in depth and detail (Holloway & Wheeler, 2002; Lincoln & Guba, 1985; Streubert Speale & Carpenter, 2003). In this process the researcher establishing trust with participants, learning their life style, and validated the data and analyses, interpreting and conclusion the study (Creswell, 2007).

1.3 Peer review or peer debriefing or external checking. It is the same as interrator reliability in quantitative research. The person keeps the researcher honest, asks hard questions about the methods, meanings, interpretation and writing conclusion. In addition, peer provides sympathetically listening to the researcher's feeling (Creswell, 2007).

1.4 Negative case. A negative case means disconfirming evidence. A case of negative case protects the holistic bias. Thereafter data analysis and eliminating all outliers and exceptions, the researcher revise research questions until all cases fitted, (Creswell, 2007).

1.5 Clarify researcher bias. It is necessary to understand the researcher's position and any biases or assumptions that impact the inquiry. Because of the clarification of the researcher past experience, biases, prejudices, and orientations that

have likely shaped the interpretation and approach to the study (Creswell, 2007).

1.6 Member checking. Member checking means the procedure of the researcher to confirm participants' view of the credibility in all the processes and the outcomes of the study. It is the most critical technique for establishing credibility of research study by sending the finding, interpretations, and conclusions back to participants for checking the accuracy and hearing some reflections on the accuracy of the account (Creswell, 2007).

1.7 Thick description. Researcher describe in detail of the participant or setting under study, because the detailed description enables reader to transfer information to other settings and to determine whether the findings can be translated (Erlandson et. al., 1993 p. 32 cited by Creswell, 2007).

1.8 External audits. External audit means allowing an external consultant to examine both the process and the product of the account, assessing their accuracy of findings, interpretations, and conclusions. This procedure also provides a sense of interrater reliability to the study (Creswell, 2007).

1.9 Referential adequacy. Concepts and ideas within the study clearly draw from the reflection experiences and perspectives of participants rather than be interpreted according to schema emerging from a theoretical or professional knowledge. The reports and communication are grounded in language which can be clearly understood (Stringer, 2007).

2. Transferability. Transferability or generalisability referred to knowledge of the research study which can apply in another similar context (Holloway & Wheeler, 2002; Lincoln & Guba, 1985; Streubert Speale & Carpenter, 2003).

Participatory Action Research outcomes apply only to the particular people and places that were part of the study. It does not aim to generalize the findings to

other contexts. However, the carefully explores the possibility outcomes which may be relevant elsewhere other similar situations to adapt both the process and findings for their applied (Stringer, 2007).

3. Dependability. Dependability had the same meaning as reliability or consistency, stability, and accurate predictability (Holloway & Wheeler, 2002; Lincoln & Guba, 1985; Streubert Speale & Carpenter, 2003). It means people trusts base on a systemic research process. An inquiry audit provides a detailed description of the procedures that have been followed and provides the basis for judging the context to which they are dependable.

4. Confirmability. Conformability had the same meaning as objectivity in measuring (Holloway & Wheeler, 2002). An audit trail enables an observer to view the data collected, instruments, field note, tape record from individual reflection, and self-report of the study. This Participatory Action Research audited data by various data collection techniques such as field note, tape record from individual reflection, self-report, and validated by member checking and group verifying the veracity of the study.

In conclusion, there are various and multiple menopausal syndromes which are uncertainty and irregularity in individually. Three principle components are: vasomotor instabilities, emotional disorders and somatic disturbances. In-depth study of menopausal managements showed two major strategies releasing menopausal syndromes: hormonal replacement and non hormonal replacement. Up to date, the non hormonal replacement is trend of menopausal managements. There are nutritional managements, Vipassana meditation, and physical exercise.

The mind –body connection methods such as Yoga, Tai Chi, and Qigong are strategies of body- mind practice to induce vital energy in a person (menopause). Consequently her vital energy will heal her from various conflicts. The mind- body connection is still need to proof in research study. Therefore, to development a new alternative program by Qigong for reducing menopausal syndromes in women with menopause is a valuable project for mankind.

The principle aim of this program is to increase vital energy in human body. Then the vital energy will correct and flow smooth in the meridian lines and vessels effecting release various symptoms disturbances including menopausal syndromes.

QNTP is developed underpinning of three philosophical thoughts of Buddhism, Chinese philosophies, and holistic nursing. The principle components from these three philosophies and holistic nursing are mind and body connection. By internal and internal meditation, diaphragmatic breathing, and increasing body essence by proper nutrient and increasing contract to natural fresh environment increase the vital energy in the body.

In addition, to develop QNTP to be efficiency program, researcher invited participants to be key informants who directly expose menopausal syndromes to shave and to adjust this program to be efficiently and practically. Therefore, the technical participatory action research is the research method chosen for this study.

The technical participatory action research is a method to test a pre-specific framework of particular intervention in practically setting. Therefore, QNTP which have pre-specific theoretical framework of three philosophical thoughts of Buddhism, Chinese philosophies, and holistic nursing also need to test by technical participatory action research.

CHAPTER 3

METHODOLOGY

In this chapter, the researcher described the research design, participants of this study, research setting, the protection of human rights, and the research process including preparatory phase, action phase (instruments, data collection, data analysis), and final phase as well as the establishment of trustworthiness.

Research Design

This study aimed to develop a Qigong Nursing Therapeutic Program (QNTP) for women with menopausal syndromes. The research process consisted of three phases: preparatory, action, and final phase. In the preparatory phase, a tentative QNTP was developed. In the action phase, QNTP was implemented through technical participatory action research step by step to shape the contents and to develop nursing and participant activities. In the final phase, overall data were analyzed and a final QNTP articulated.

Participants of this Study

The participants of this study consisted of women with menopausal syndromes. The inclusion criteria for the participants were: 1) diagnosed of menopausal syndromes

by physician, 2) experienced at least three menopausal symptoms at mild to moderate level by participants perception, 3) had no physical restriction to do meditation, 4) were able to read and to write in Thai, and 5) volunteered to participate QNTP at least three-four executive months.

Research Setting

This study was conducted at participants' work-place and residence in Prince of Songkla University, Thailand.

Protection of Human Rights

This research protected the participants' human rights as follows:

1. This research project has been approved by the IRB Committee, Faculty of Nursing, Prince of Songkla University where this research was conducted.

2. This program was created under supervision of Qigong healer and Buddhist healer and key menopausal experts. This tentative QNTP was approved for safety by gynecologists, a natural healer and a gynecological nurse.

3. Prior to participants joining this research study, the researcher explained the objectives of the study, the details of the research process, the expected research outcomes, participant benefits, the collaboration period and participants' tasks, the potential risk and the plan for safety, and the participants own rights to participate or

withdraw from the study if they felt harm at anytime. Moreover, the researcher provided time to answer question that related to the study. Furthermore, the participants were asked permission by verbal consent.

4. While conducting this research program, the researcher gave orientations and trained the participants step by step in QNTP practice. In addition, during QNTP practice, the participants could ask for repeated training and lesson content as needed.

5. While participants conducted QNTP, they were free to express their feelings and contradictions in doing. Issues of potential concern or harm both physically and emotionally were also considered. Sound recordings, field note recording and overall records were kept confidential.

Research Process

The aim of this research study was to develop a QNTP. Three phases were conducted as following: the preparatory phase, the action phase and the final phase.

Preparatory Phase

The preparatory phase consisted of three steps as follows:

1. Understanding the situation. The researcher conducted this step as follows:

1.1 Visited and discussed with women with menopausal syndromes and health care providers at the menopausal clinic of Hat Yai hospital. This step enabled researcher to gain in-depth understanding of menopausal conditions and actual menopausal

managements. Then researcher followed on by determining further menopausal management needs by interview the menopause.

1.2 Reviewed the existing literature related to menopausal management to determine gaps in studies and to gain ideas to address in the research study.

1.3 Participated in the Qigong program to understand concepts of Qigong and techniques that were applicable for menopausal syndromes healing.

2. Developed a tentative QNTP for women with menopausal syndromes. This process included: 1) reviewing literature of menopausal syndromes management; 2) reviewing literature of the applicable philosophical precepts of Buddhism, Chinese philosophies, and holistic nursing; 3) reviewing literature of the Qigong healing processes and outcomes; 4) interviewing women with menopausal syndromes and health care providers' experiences of specific healing programs which they have used and the outcomes; 5) researcher, Qigong expert and menopausal participants analyzing and formulating a primary tentative QNTP; and 6) rigorous assessment (careful evaluation) of the primary tentative QNTP by both Qigong experts, health care providers, and women with menopausal syndromes.

3. Pilot study. A pilot study was conducted from September, 2005 to January, 2006, inclusive. The aim of this pilot study was to gain confidence in participatory action research techniques, and to develop a primary nursing approaches and participant activities for a QNTP program application. In this step, the menopausal participants and the researcher practiced a primary tentative QNTP at least three hours weekly to ascertain fit and to improve for later application.

Therefore, six primary nursing approaches and five participant activities were developed and presented in table 2.

Table 2.

Six primary Nursing Approaches and Five Participant's Activities

Nursing approaches	Participant activities
1. Establishing trust relationship 2. Understanding participants' background, menopausal syndromes, impacts, attitude and belief toward QNTP practice 3. Introducing the seven sections of QNTP and training 4. Exploring QNTP practice and the factors which promoted and inhibited QNTP practice 5. Recognizing participant's ability and accountability in QNTP practice 6. Evaluating QNTP practice	1. Discussing menopausal syndromes and managements. attitude and believe toward Qigong 2. Establishing mutual goals of QNTP practicing 3. Entering QNTP orientation 4. Reflecting on QNTP practice, outcomes and influencing factors 5. Suggestions for program changes

The tentative QNTP was developed underpinning Buddhism, Chinese philosophies, holistic nursing, and the pilot study. The program training was comprised of a booklet, a VCD guide, six nursing approaches and five participant activities.

Action Phase (QNTP Implementation)

During March 2006 – January, 2007 and September- December, 2008, the tentative QNTP was implemented with four steps of reconnaissance, planning, action, observing and reflecting, as well as revising the program in a spiraling cycle, step by step, until menopausal syndromes decreased or participants could cope with their menopausal syndromes.

Four Steps of Action Phase

The detailed four steps of QNTP implementation are as follows:

1. Reconnaissance. The researcher and the participant created the therapeutic environment to build up rapport in the relationship. Next, the researcher used various assessment techniques such as menopausal syndromes perception self list, physical examination, dialogue, interview and discussion to explore in-depth understanding of the menopausal syndromes. In addition, the researcher also helped participants to explore individual personal physical and psycho-social background, beliefs, lifestyle, menopausal management, attitudes and beliefs toward Qigong, personal caring, and the needs of QNTP practice.

2. Planning. The researcher and participants discussed strategies for reducing menopausal syndromes. The researcher introduced QNTP and further identified and developed mutual goals to overcome menopausal syndromes. The researcher and participants also attended a tentative QNTP training, discussing ways to overcome contradictions (barriers) of QNTP practice. In addition, the researcher and participants collaboratively presented critical ideas or innovative ways of problem solving to carry out the agreed-upon task and setting the priorities and strategies for QNTP in further implementation and evaluation of changes. The planning was flexible and adaptable to unforeseen outcomes or constraints, to adjust QNTP contents and processes practiced.

3. Acting, observing, and reflecting. Participants practiced QNTP following with observations and reflections on the process, the outcome, and the contents of QNTP.

In addition, the evaluation and the factors affecting QNTP practice. In addition, the participant reflected nonverbally through diary notes and a self–list whereas reflected verbally was documented on the researcher's field notes and interviews records.

The process of this action-phase (action, observation and reflection) was done continuously until the severity of menopausal syndromes decreased or the women with menopause could cope with their menopausal syndromes.

4. Revising-program. During this step, the researcher and the participant drew a conclusion of all reflections and lessons learnt from QNTP practice. Moreover, the researcher and participants collaboratively explored the meaning obtained from QNTP practices. Furthermore, the researcher and the participants also presented ideas for program revision. During this step, menopausal participants and the researcher also discussed the difficulties of QNTP practice, considered strategies and means to resolve those difficulties or problems. In addition, researcher, participants, and Qigong expert made decisions for modifying QNTP for the next trial or ending QNTP implementation.

Instruments of QNTP Implementation

In QNTP implementation phase, the nurse researcher acted as a program facilitator and evaluator as follows:

1. The role of program facilitator. Nurse researcher facilitated participants' physical and mental abilities on QNTP practice as follows:

1.1 Recognizing the participant's ability. Nurse researcher recognized participant abilities by allowing them to conduct QNTP after training and supporting for the natural development and unfolding of their capacity. In addition, the nurse researcher

also shared ideas of QNTP practice support adjustment of QNTP to a more appropriate form.

1.2 Protecting human rights. The nurse researcher protected participant's rights by choosing reliable and safe techniques for reducing menopausal syndromes. In addition, participants were free to participate in (and possibly withdraw from) QNTP at any time. Moreover, the personal data and theme of QNTP practice were kept confidential.

1.3 Communicating with participants and experts. The nurse researcher carried out two-way communication between participants and Qigong experts. The communications with participants consisted of QNTP orientation, QNTP clarification, QNTP demonstration, training, and coaching. Moreover, the nurse researcher also indicated any changes that related to QNTP practice. Furthermore, the nurse researcher also confirmed the findings of healing techniques by consulting Qigong expert before adjusting or adding some personal knowledge of healing techniques to QNTP.

1.4 Supporting participants and environment. The nurse researcher provided time free for QNTP practice, a supportive environment for training, environmental and nutritional advice. For example, nurse researcher showed how to stay in an oxygen-rich location, and how to find and consume the essential nutrients for this age group.

1.5 Providing conscious cultivation. The nurse researcher was a therapeutic partner who realized that QNTP was one part of menopause daily activities. QNTP was a mind-body strategy which could achieve harmony even with menopausal syndromes.

2. The role of an evaluator. The nurse researcher also acted as program evaluator in QNTP implementation as follows:

2.1 Understanding the participants' background. Personal background such as personal issues and her environment were assessed to identify the inhibiting and supporting factors for QNTP practice.

2.2 Participating in QNTP as co-practitioner. Researcher also conducted QNTP daily three-to-six days weekly along with the research process. In addition, she also shared her ideas of QNTP conduct and evaluation for transforming QNTP.

2.3 Individual reflection. During each visit, researcher allowed the participants to express their feeling toward QNTP practice, reflecting meaningful key concepts, and sharing some ideas of QNTP practice.

2.4 Evaluating QNTP outcome. QNTP outcomes were evaluated by observing and verbal expression of balance and decreased menopausal syndromes.

Instrument for Data Collection

The evaluation of QNTP practice uses multiple data collection techniques which consisted of demographic data, menstruation status, self-caring, physical examination, menopausal perception list, field notes, and diary records as follows:

1. Demographic data, menstruation data, health status, and self-caring.

1.1 The demographic data consisted of age, marital status, educational level, career, number of children, average monthly income, family atmosphere, stress events in life, and support.

1.2 Menstruation data charted menarche, menstruation period, characteristics of menopausal syndromes disturbances of menstruation, year of the last menstruation, the start-year of menopausal syndromes, attitude toward menopause and menopausal disorders.

1.3 Health status and caring data. Health status and caring data consisted of history of general health, chronic illness, breast disease, irregular medical usage, hysterectomy or oophorectomy, history of hormonal therapy, alternative medicine intake for reducing menopausal syndromes: exercise, meditation, food consumption, and expectations upon entering QNTP practice.

2. Physical examination and chief complaint data. The physical examination and chief complaint data consisted of blood pressure, heart rate, weight, height, the results of breast examination, and menopausal complaints. The investigation ran from the beginning and continued through every month.

3. Menopausal Symptom Perception List. The Menopausal Symptom Perception Lists are fifty items categorized into three groups of vasomotor instabilities, emotional disorders, and somatic disturbances. This instrument was developed from literature reviewed. Each item of this instrument asks frequency of menopausal symptom (F), and severity of menopausal syndromes occurrence, with a weighted 1-10 score (S) monthly. The menopausal syndromes perception list was collected at the beginning and every two weeks thereafter during QNTP practice to detect changes in each cycle.

4. Field Notes. Taking of field notes was conducted before hand for planning and recorded after each visit's QNTP practice. It consists of: 1) participant's background,

attitude, beliefs about menopause, menopausal management, and QNTP; 2) context and situation; 3) planning and theory support; 4) action and program evaluation; and 5) program revision or transforming ideas and so on.

QNTP practice and evaluation, in both process and outcomes, were collected by individual dialogue and participant's reflection during each visit. These open-ended questionnaires were used as follow:

1. How do you do QNTP?

2. What is happening during your conduct of QNTP?

3. How do you feel during doing QNTP, …….., and why?

Please describe your feelings in detail

4. What do you learn from doing QNTP?

5. What do you need to improve QNTP? Please suggest.

Individual dialogue was conducted to identify problems involved in QNTP practice over the length of the study. The interview questions guided as follows:

1. What were the effects of each procedure of QNTP on your health?

2. How do you feel, and why?

3. Please describe the exercises that you have carried out, and describe how they affected your health

4. Which exercise causes you feel bad?

. 5. Discuss the problems of a provisional QNTP practice.

6. According to your QNTP practice, do you have any suggestions for improvement?

5. Diary record. Diary record consisted of participant's QNTP practical items, which emphasizes: 1) frequency and duration of QNTP practice, 2) feeling toward QNTP practice (positive-negative), and outcomes.

Data Analysis

Content analysis was conducted integrally during data collection. The focal point was considered QNTP processing, outcome measuring in perception of menopausal syndromes, factors affecting both the supporting of and the inhibition of QNTP practice, as well as suggestions for changing program systematically. The steps of content analysis were adapted followed the qualitative data analysis of Miles & Huberman (1994):

1. Read all subject description to deeply understand whole situations.

2. Identify and categorize the meaningful data which both directly answer the research questions or deals with relating factors.

3. Create sub-theme and theme of each concept with critical thinking.

4. Create exhaustive descriptions, rich with information.

5. Verify conclusions by member-checking.

Final Phase (QNTP Articulation)

In the final phase, the nurse researcher concluded both the processes and outcomes and the influencing factors of QNTP implementation. Consequently the nurse researcher also analyzed, articulated and verified QNTP program to be a final QNTP.

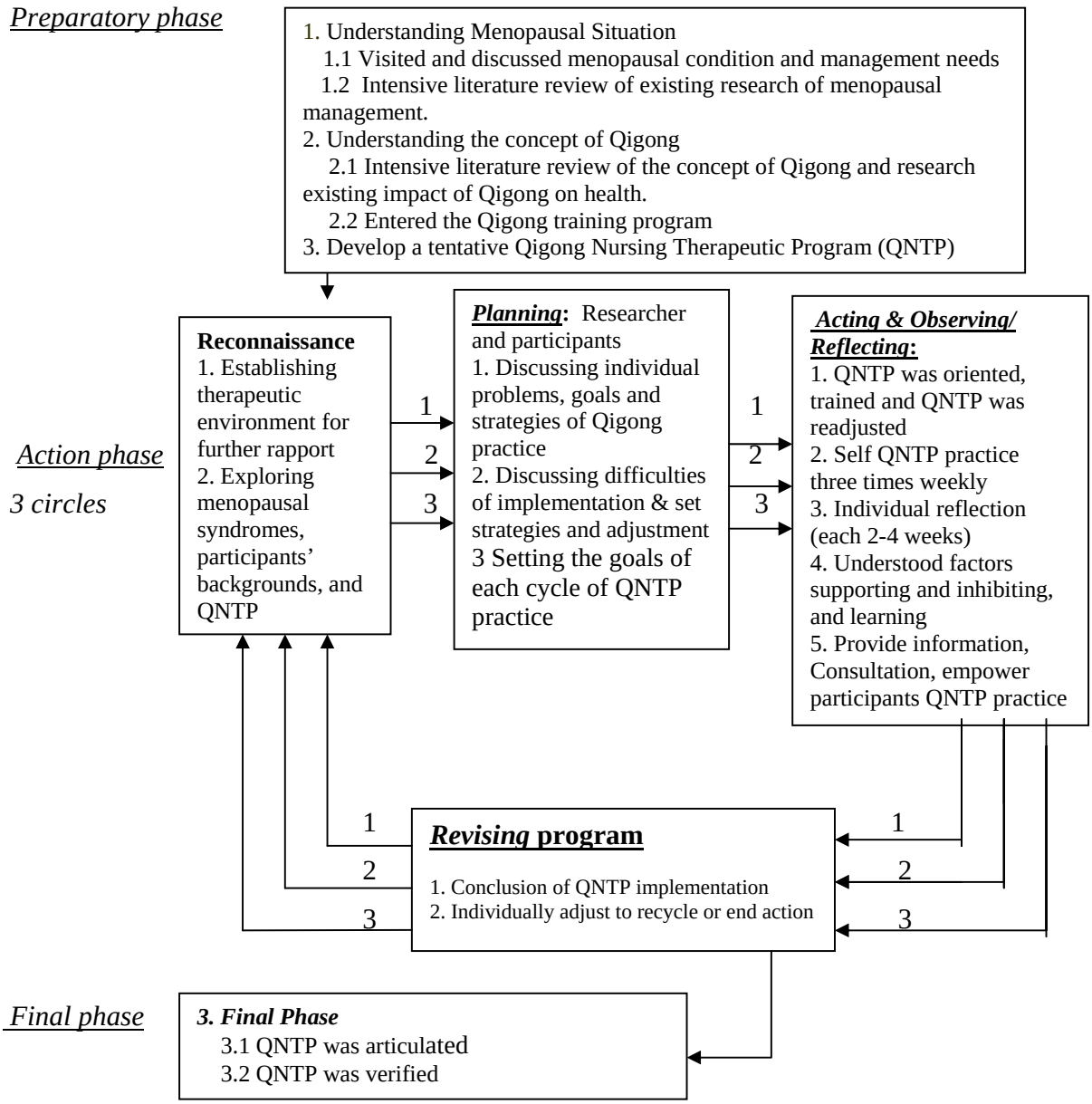


Figure5. The summary of QNTP Development

Notify: 1, 2, and 3 means cycle 1, 2, 3 of QNTP implementation.

Establishment of Trustworthiness

This study was conducted for trustworthiness as follows:

1. Credibility. Credibility or internal consistency: The credibility of this study referred to the researcher's ability to take into account all of the complexities that present themselves in study and to deal with patterns that were not easily explained. For this study the researcher conveyed and assured credibility as follows.

1.1 Triangulation. Triangulation means two or more confirmation. This research study used multiple research techniques including dept interview, field note, diary note, tape recording and self list in data collection, and multiple theories of three philosophies, holistic nursing especially King's concept to provide corroborative evidence.

1.2 Prolonged engagement. This research implementation took place during March, 2006- January 2007, and September- December, 2008. Each case took 3-6 months for QNTP practice. The researcher started by acknowledging various situations, introducing a tentative QNTP to the participants, and mutual goals setting. In addition, researcher also entered the program learning and sharing as program facilitator, and evaluator with persistent observation and asking for repeated reflection the whole duration of each 1-2 month period. Moreover, researcher also help participants altered the program by modifying & adapting it for daily life as program facilitator, practitioner and evaluator. In this process, the researcher learnt their life style, validated, analyzed, interpreted and synthesized the data integrally with data collection.

1.3 Peer review or peer debriefing (external checks). There were two steps of peer review in this study. Firstly, a primary tentative QNTP had its contents checked by three menopausal experts. Secondly, data interpretation and drawing of conclusions for QNTP contents were conducted by consulting action research experts.

1.4 Negative case. There was only one case of negative feeling toward the QNTP practice. She reported both positive and adverse outcomes of QNTP practice. The negative feeling was QNTP increased stress, joint pain, and feelings of uselessness.

1.5 Researcher's Qualifications. Researcher has learned and trained for Chinese Qigong with the renowned Qigong healer Yang Pei Serng, who is recognized by the department of alternative medicine, public health ministry of Thailand. In addition, researcher also has both experiences in qualitative and quantitative research efforts which helped assure proper data collection techniques.

1.6 Member checking. This study has member checking by sending the findings, interpretations, and conclusions back to participants to check the accuracy and further share some considerations to make further conclusions of this study.

1.7 Rich and detailed description. This study the researcher has described in detail. It enables readers to transfer information to another setting and to determine whether the findings can be transferred.

1.8 External audits. This program was developed provisionally under supervision by Qigong healer Yang Pai Serng and nurse healer Associated Professor Dr. Arphon Chuapraprisilp. This program was also validated by key menopausal experts. In addition, the implementation process and outcomes were shared for critical feedback with

Associate Professor Dr. Arphon Chuapraprisilp. Moreover, the accounts of accuracy of findings were confirmed by member checking. Furthermore, the interpretation and conclusions were carefully considered by both inner audit from team advisors and external audit by Associated Professor Bumpen Cheuwan and Associated Professor Dr. Benja Yodsongnern Attit, who are action research experts.

1.9 Referential adequacy. Themes within this study clearly draw from the record experiences and perspectives of participants. The reports and communications were grounded in language which was clearly understood.

1.10 Participants in this study are QNTP practitioners who are women directly faced with menopausal syndromes. Nine of them are nursing professionals, and one is a medical scientist. All of them are key informants to develop an appropriate QNTP. Both participants and researcher deeply observed and gave detailed reports of study in order to establish trust, learned QNTP in various lifestyles; to validate, analyze, interpret, and conclude QNTP implementation.

2. Conformability. Data were audited by various data collection techniques (field notes, diary record, and tape recording) and multiple repeated interviews with one-two-three and four-month individual reflection, and self reports with member checking**.**

3. Transferability. The researcher and participants shaped the nursing approaches, participant responsibilities and the components of QNTP for women with menopausal syndromes. The participants of this study are nine nurses and one medical scientist who are QNTP practitioners and key informants. They reflected both QNTP implement process and outcome. In addition, the program was revised carefully which may be an

appropriate incoming program. The outcome of study may be relevant elsewhere in other similar situations, by adapting both process and findings.

4. Dependability. For this research study, researcher provided detailed description for research process, outcome evaluation and influencing factors. The detail of the process will provide a framework for the context for the other coming study.

CHAPTER 4

RESULTS AND DISCUSSIONS

The aim of this study was to develop a Qigong Nursing Therapeutic Program (QNTP) for women with menopausal syndromes. The study was composed of three phases: 1) the preparatory phase (a tentative QNTP development), 2) the action phase (QNTP implementation), and 3) the final phase (QNTP articulation).

Phase I: The Preparatory Phase (*A Tentative QNTP Development)*

In the preparatory phase, the researcher developed a tentative QNTP underpinned by Buddhist, Chinese, and holistic nursing philosophies, consulting Qigong experts, and doing a pilot study with two menopausal women. Therefore, a tentative QNTP was developed. A tentative QNTP composed of seven contents sections, six primary nursing approaches, and five primary participants' activities. The tentative program consisted of three parts: 1) explanations about holism, essences of environment to increase Qi, 2) demonstrations, and training three preparatory body-mind practices: diaphragmatic breathing, energy concentration and abdominal massage with visualization, and 3) demonstration, and training six integrated Qigong nursing therapeutic exercises for reducing menopausal syndromes. In addition, this tentative program also included six primary nursing approaches, and five primary participants' activities.

Phase II: The Action Phase (QNTP Implementation)

In the implementation phase, the researcher conveyed a tentative QNTP through four steps of participatory action research. The results of this phase showed four aspects: 1) background of participants, 2) three emerging cycles, and 3) summary of the overall QNTP changes.

Part I: Backgrounds of participants

The backgrounds of participants were described individually; followed by a summary of participants' characteristics, their health history, menopausal syndromes and its impacts as well as self-care before entering QNTP.

Descriptions of Individual Participant

C1 was a married, 47 year old, nurse educator with a Master's degree in Social Science. She weighed 69 kilograms and was156 centimeters tall. She had two young school age children. She was also care both her own and her husband's parents and relatives. She was in the pre-menopausal period. The menopausal syndromes were: becoming stress easily, various muscle pains and anxiety due to increased weight. In addition, the perception of the most prominent menopausal syndromes were becoming irritated easily, stress, and neck pain. Menopausal self-care before entering QNTP were mindfulness meditation, jogging, eating vegetables and fruit.

C2 was a single, 49 year old, head nurse with a Master's degree in Nursing Science. She weighed 47 kilograms and was 156 centimeters tall. She lived with her school aged niece and nephew. She was also in pre-menopause. The menopausal syndromes were abdominal distention, stress, and insomnia. In addition, the prominent menopausal syndromes were easy irritation, neck and shoulder pain.

Menopausal self-care before entering QNTP were jogging, and eating vegetables and fruits.

C3 was a single, 48 year old, head nurse with a Master's degree in Nursing Science. She weighed 45 kilograms and was 150 centimeters tall. Her daily working hours were 7 am-6 pm. She was in the pre-menopausal period. Her menopausal syndromes were chest tightness, easy exhaustion, and hot flushes. In addition, the prominent menopausal syndromes were abdominal distention, and hot flushes. Menopausal self-care before entering QNTP were daily mindfulness meditation for 10 minutes and eating vegetables, fruits, and fish.

C4 was a single, 49 year old, nurse educator with a Master's degree in Nursing. She weighed 55 kilograms and was 169 centimeters tall. She had been menopausal for eight years. The menopausal impacts were emotional instability, allergies, and bone pain. In addition, the perceptions of the prominent menopausal syndromes were easy irritation and insomnia. Menopausal self-care before entering QNTP was mindfulness meditation, eating vegetables, fruits, and drinking soy milk (vegetarian).

C5 was a married, 51 year old, head nurse with a diploma in nursing and a Bachelor's degree in Health Education. She weighed 58 kilograms and was 153 centimeters tall. She had a daughter studying nursing in the United States. She had been menopause for two years. The menopausal syndromes were stress because of negative body image due to excessive sweating, physical weakness, frequent illness, hypertension and osteoporosis. In addition, the prominent menopausal syndromes were headaches, hot flushes, bone and joint pains. Menopausal self-care before entering QNTP were 30 minutes daily fitness practice, cycling, jogging, stick exercise. She has menopausal syndromes for four years. The history of menopausal

syndromes and body massage once a week, meditation practice, and eating vegetables and fruits.

C6 was a divorced, 54 year old, head nurse with a diploma in nursing and a Bachelor's degree in Health Education. She weighed 52 kilograms and was 160 centimeters tall. She had had two sons. The elder was married while the younger was studying in university. She had had menopausal syndromes for four years. Her menopausal syndromes were stress from a negative body image due to excessive sweating; physical weaknesses become stressed easily, dry skin, asthma, hypertension, and osteoporosis. In addition, the most prominent menopausal syndromes were excessive sweating, hot flushes, joint pain, neck and back pain. Menopausal self-care before entering QNTP were 30 minutes daily fitness practice, cycling, jogging, and eating vegetables, fruit, soy extracts, and taking calcium tablets.

C7 was a single, 51 year old, head nurse with a Bachelor's degree in Nursing. She weighed 46 kilograms and was 159 centimeters tall. She was in the pre-menopausal period. The menopausal syndromes were severe shoulder, neck and back pains. In addition, the prominent menopausal syndromes were severe shoulder, neck, back, and joint pains. Menopausal self-care before entering QNTP were walking, gardening, and eating vegetables and fruits.

C8 was a married, 50 year old nurse educator with a Bachelor's degree in Nursing and Master's degree in Education. She weighed 51 kilograms and was 153 centimeters tall. She had a son and a daughter who were born by caesarean section. The son died two years before the study while the daughter was studying in high school. She had been menopause for a year. The menopausal syndromes were muscle and joint pains. In addition, the prominent menopausal syndromes were hot flushes

and heavy sweating. Menopausal self care before entering QNTP were doing mindfulness meditation, yoga, walking, and eating vegetables and fruits.

C9 was a married, 53 year old, nurse educator with a Master's degree in Nursing Education. She weighed 53 kilograms and was 152 centimeters tall. She had a teenage daughter studying at university. She had been menopause for a year. The menopausal syndromes were stress and anxiety due to a negative body image, decreased efficiency at work, and physical weakness. In addition, the prominent menopausal syndromes were headaches and stress. Menopausal self care before entering QNTP were walking, eating vegetables and fruits.

C10 was a single, 53 year old, medical science educator with a PhD. She weighed 40 kilograms and was 150 centimeters tall. She had been menopause for three years. The menopausal syndromes was becoming stressed easily. In addition, the prominent menopausal syndromes were hot flushes, headaches, falling asleep. Menopausal self-care before entering QNTP were doing mindfulness meditation, eating vegetables, fruit, and sea food.

In summary, the ten participants were divided by their personal characteristics their health history, menopausal syndromes (vasomotor instabilities, somatic disturbances, and emotional disorders, as well as self care before entering QNTP as shown in table 3 and themes as follows.

Participants' Characteristics

Table 3.

Participants' Characteristics (N = 10 cases)

Characteristics	Frequency (N)
Age (year)	
47-50	4
51-54	6
Educational level	
Bachelor's Degree	3
Master's Degree	6
Ph. D.	1
Menarche	
12-13 years old	5
14-15 years old	4
Older than 15	1
Peri-Menopause	
Pre-menopausal	4
1-2 year menopause	2
Status	
Single	5
Married	4
Divorced	1
Income Level / Month (baht)	
27,000-30,000	2
30,001-40,000	4
More than 40,000	4
Menstruation Period (regular)	
3-5 days	7
5-7 days	3

Out of the ten participants of this study, eight participated fully in QNTP practice whereas two practice many times in one exercise. Participants' ages were 47–54. Five participants were single, one was a divorced and four were married. One participant had a Ph.D. degree, six held Master's and the three others Bachelor's degrees. All participants were government officers. Most participants were nurses and nurse educators, only one was a medical science educator. They were all peri-menopause.

Participants' Health Histories

All participants experienced menopausal syndromes. Six participants had personal illnesses: two had allergic rhinitis, two had chronic headaches, and other two had hypertension and osteoporosis. Only three used drugs daily. One took an anti-allergic drug; the other two took anti-hypertension drugs. Three took daily calcium supplements. One reported a hysterectomy and one cystic breast surgery.

Participants' Menopausal Self-Care before Entering QNTP

Most participants self-practiced to resolve menopausal syndromes before entering QNTP practice. There were nutritional practices, meditation, and exercise.

(1) Nutritional practice: All participants enjoyed eating vegetables and fruits. Three participants drank tea to reduce hot flushes. Nine obtained protein from eating sea food especially fish one ate vegetables to reduce temperature and hot flushes.

"I eat various vegetables and fish to reduce body temperature. After eating them, the hot flushes decreased." (C6)

"After I started eating vegetables and tofu, I had fewer hot flushes and less vertigo, and less sweating." (C4)

(2) Meditation practice: Six participants practiced mindfulness breathing daily to calm themselves and to increase concentration at work and to reduce menopausal syndromes. Three practiced yoga to reduce muscle pain and to increase well being.

For instance, C5 said, “I do meditation before sleeping everyday in order to calm down and not to be distracted by various conflicts. After I do mindfulness meditation, I sleep well and I have more endurance at work.”

(3) Exercise: Five participants exercised before entering QNTP. They did various types of exercises such as jogging, cycling, walking, working out fitness and stick exercise. Four participants felt that aerobic exercises reduced hot flushes and excessive sweating.

“Everyday, I walk from the residence to the nursing faculty and walk back in order to decrease hot flushes and increase leg strength.” (C8)

“I do jogging, cycling, and fitness practice every evening, and doing stick exercise in the morning once a week to decrease excessive sweating.” (C5)

Menopausal Impacts before Entering QNTP

Two menopausal impacts were found before entering QNTP:

1. Physical and mental weakness. Before entering QNTP practice, seven participants felt weak and ill. They complained of both physical and mental exhaustion, catching colds easily, and muscle and joint pains.

“The vasomotor instabilities caused me to be tired, emotionally irritable low resistance and catch colds easily.”(C4)

“Menopausal syndromes such as tiredness, hot flushes, headaches, abdominal distention, incontinence, and insomnia cause me to be sick.” (C5)

2. Work inefficiency. Six participants felt a decreased ability to work because of menopause. Four reported decreasing concentration due to physical discomfort. In addition, two reported decreasing concentration and increasing boredom at work due to repeated routine activities. Moreover, two participants who had frequent menopausal headaches had decreased concentration at work and were forgetful and excessively compulsive.

“Menopause causes me stress, I get tired and feel sluggish at work everyday. (C4)

"I feel menopause causes severe shoulder pain, which stresses me at work." (C7, C1)

Menopausal Syndromes before Entering QNTP

Three menopausal syndromes were expressed before entering QNTP practice

1. Vasomotor instabilities. Vasomotor instabilities were expressed differently by ten participants before QNTP practice. Seven participants reported hot flushes, six told of excessive headaches, five of insomnia, four of them palpitation, four of chest tightness, four of heavy sweating and three of vertigo. Some examples are given as follows:

"The major problems of menopause are how easily I get tired of daily tasks, get hot flushes, and sweating. I also feel shortness of breath, discomfort, chest tightness, vertigo, and have frequent headaches (C5)

"At night, I had to go to the toilet several times, and this caused me terrible sleeplessness." (C6)

2. Somatic disturbances. Somatic disturbances were expressed by the ten participants who attended QNTP. Menopausal somatic disturbances were expressed individually in dissatisfaction with skin and collagen tissue degeneration. Before entering QNTP practice, four participants complained of shoulder pain, six of abdominal distention, four of back pain, five of frequent urination, four of joint pain, four of skin itchiness, three of tired eyes, two of excessive body fat, two of numbness, two of incontinence, five of excessive hunger and two of constipation. Some participants described their somatic disturbances as follows:

"My skin has become dry and itchy since menopause, and I have the sensation of a needle pricking my face and extremities." (C3)

"My somatic problems were abdominal distention and joint pain. I feel gas moving in my stomach. I also feel stiffness in my finger joints and have hip and leg pain, this causes me to feel inert." (C5)

"The problems that I confront are severe shoulder, joint, and back pain, urinary incontinence and leaking." (C10)

3. Emotional disorders. Before entering QNTP practice, the emotional disorders were expressed individually with different levels of stress and emotional instability. Nine participants reported being easily irritated, six were easily angered, six had tensions, six tiredness, six fatigue, six boredom at work, six showed more nervousness, five anxiety, five loss of social interest, five poor concentration. In addition, five participants fell asleep at inappropriate times, five become easily upset, four had a loss of self-confidence, three had skin discomfort, two had a bad body image, two had feelings of loneliness, and two had loss of sexual interest. Samples of some participants' comments on emotional disorders follow:

"My emotional problems includes irritation, angering easily, feeling stressed and exhausted" (C4)

"Unstable emotions caused me to anger easily become easily irritated, anxious and nervous. I also felt stress and irritation because of hard work." (C9)

Conclusions and Discussions on Participants Backgrounds

Ten participants were well educated, and health personnel. Nine of them were nurses. All of them were disturbed with individually different menopausal syndromes. This finding agreed with many studies (Chaiput, 2003; Ieumsawasdikul, 1998; Im et al., 2004; Kaufert et al., 1998; Manopsil, 2004; Perz, 1997; Rousseau & Gottieb, 2004; Sierra et al., 2004). Moreover, before entering QNTP, most participants practiced natural therapies. They participated to find out the effects of QNTP on health and on its reducing menopausal syndromes.

Part II: Three Cycles of QNTP Implementations and Results

The tentative QNTP was implemented by participatory action research. Three cycles emerged: 1) situation realization and early learning cycle, 2) self learning, sharing and adopting into daily life cycle, and 3) program modification and confirmation cycle. Each cycle of QNTP implementation was presented in the

summary view through participatory action research activities and lessons learned. In addition, the descriptive claims, the nurse researcher would focus on menopausal syndromes situations, nursing approaches, participant activities and evaluations for improving QNTP practice. Moreover, at the end of each cycle the nurse researcher would provide the conclusions of the study.

Cycle I: Situation Realization and Early Learning

1. Reconnaissance:

Three menopausal syndromes (case)

1.Vasomotor instabilities: hot flushes (7 cases), headaches (6 cases), heavy sweating (4 cases), insomnia (5 cases), chest tightness (4 cases), vertigo (3 cases).

2. Emotional disorders: easily irritable (8 cases) anger easily (6 cases), tenseness (6 cases) tiredness (6 cases), tired eyes (5 cases), fatigue (6 cases), anxiety (5 cases), nervousness (5 cases) etc.

3. Somatic disturbances: abdominal distention (6 cases), frequent urination (5 cases),sleep difficulties (4 cases), back pain (4 cases), neck pain (4 cases), joint pain (4 cases), itchy skin (4 cases), numbness (2 cases), vaginal dryness (5 cases), dyspaurea (2 cases), nipple and breast pain (2cases),

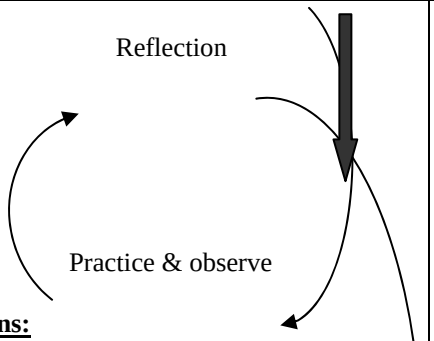
Menopausal impacts 1. Sickness, stress (7 cases) and work inefficiency (6 cases)

A tentative QNTP consisted of six integrated exercise of fixed duration

Extraneous Findings

Promoting factors

1. Positive belief and attitude toward natural therapy
2. Intention of QNTP practice



2 Actions:

Context: quiet atmosphere indoors and outdoors

Nursing approaches

Three nursing strategies:

1. Raising participants 'self awareness
2. Facilitating information
3. Evaluating QNTP practice

Seven nursing activities

1. Establishing a trusting relationship
2. Understanding the participants' background
3. Introducing QNTP contents, and conducting QNTP training
4. Establishing mutual goals
5. Providing information and consultation
6. Evaluating QNTP practices, outcomes, and influencing factors
7. Asking for QNTP revision

Participants' responsibilities

Three participant strategies:

1. Situation realization and self awareness
2. QNTP learning and training
3. Reflection and sharing experiences

Six participants' activities:

1. Understanding menopausal syndromes, impacts, and QNTP healing
2. Co establishing mutual goals
3. Learning and monitoring QNTP
4. Asking information and consultation
5. Reflection on QNTP practice, outcome and influencing factors
6. Suggestions for QNTP revision

2. Planning:

1. Establishing trusting relationships
2. Introducing a tentative QNTP
3. Setting aims of QNTP practice
4. Exploring QNTP practice and factors which promote and inhibit QNTP practice
5. Evaluating QNTP practice, outcomes and influencing factors

3. Results:

Decreased menopausal syndromes and impacts

1. Decreased headaches and tightness
2. Decreased abdominal distention and constipation
3. Decreased physical weakness
4. Decreased extremities pains
5. Decreased some emotion disturbances of upset, worry about body weight, and easy irritation

Improving health

1. Felt healthy
2. Increased breathing efficiency
3. Felt relaxed

Lessons learned:

1. Nurse learned: Data of menopausal syndromes were age sensitive, and participant's compliant came from faithfulness to researcher

2. Participant learned: Understanding holistic balanced menopausal syndromes and QNTP reduced menopausal syndromes

4. Revising plan: Go on QNTP self directed learning and integrating it flexibly into daily life

Figure 6. Summary of cycle I: situation realization and early learning (2-6 weeks)

Claims in cycle I: Situation realization and early learning cycle

Menopausal syndromes and their impacts

The menopausal syndromes and their impacts in the initial situation realization and early learning cycle were clearly expressed vasomotor instabilities, emotional disorders, somatic disturbances, physical and mental weakness and decreasing efficiency at work. Differences in participants' backgrounds presented in page 89-92 were exhibited.

A tentative QNTP

A tentative QNTP consisted of seven contents sections which composed of the explanation of holism, nutritional and environmental suggestions and six exercises for reducing menopausal syndromes supported by integrating diagrammatic breathing, visualizations and the slow movement of extremities. Each exercise of the tentative QNTP was of 36 rounds of fixed duration. In addition, the program also requested attendance of QNTP practices at least three hour weekly.

Contexts of cycle I

The context of cycle I was both indoors and outdoors in private surroundings of the Nursing Faculty and participants' residences during the weekend and weekdays, 6-7pm.

Nursing approaches

In the situation realization and early learning cycle, the nurse researcher performed three nursing strategies: 1) raising participants' self awareness, 2) facilitating information of menopausal management and QNTP, and 3) careful evaluation of QNTP practice. There were seven nursing activities as follows:

1. Establishing trusting relationships. The nurse researcher created trusting relationships by respecting participants' individual differences, listening to

participants' menopausal syndromes and their impacts on their lives, helping participants select a reasonable alternative technique (Qigong) to solve the syndromes, carefully explaining how QNTP could reduce various undesirable symptoms, continuously visiting and respecting participant suggestions for program revision.

2. Understanding participants' menopausal issues. The nurse researcher explored participants' menopausal syndromes, impacts and self-care through sympathetic dialogue, and active listening. Subsequently, the nurse researcher also explored attitudes and beliefs toward Qigong and offered knowledge of holitic techniques for reducing menopausal syndromes. In addition, the nurse researcher also provided various types of existing menopausal management to discuss and exchange ideas concerning care.

3. Introducing the seven sections of QNTP, training and co-practicing. In the beginning of the situation realization and early learning cycle, the nurse researcher introduced the seven sections of QNTP through orientation. In addition, she also conducted training and co-practiced sections six and seven of QNTP with the participants. Moreover, she also exchanged knowledge of QNTP practice by explaining, and discussing it with participants.

4. Establishing mutual goals for QNTP practice. The nurse researcher provided details of QNTP and informed the participants of some difficulties that might happen during the program. In addition, the nurse also discussed and supported individual by active learning and mutual goal-setting for practice.

5. Providing information and consultation. In the situation realization and early learning cycle, six participants were confused about the ankle bending exercise. Therefore, the nurse explained it and gave individual advice and training.

6. Careful evaluation of QNTP practice. In the situation realization and early learning cycle, the nurse not only closely observed participants' QNTP practice, but also elicited participants' ideas. In addition, she also tried to discuss factors which affected QNTP practice.

7. Asking for suggestions for revising QNTP. At the end of situation realization and early learning cycle, the nurse researcher directly asked participants' suggestions for program revision in order to address their needs.

Participant activities

In the situation realization and early learning cycle, participants used three strategies: 1) situation realization of menopausal syndromes, their impacts and self awareness, 2) QNTP learning and training, and 3) reflecting and sharing experiences. There were five participant activities as follows:

1. Understanding menopausal syndromes, impacts and QNTP healing. Each participant expressed her menopausal syndromes and its impacts on her life. In addition, they also discussed treatments of menopause and health practice before entering QNTP. Moreover, they also discussed alternative treatments, holism, QNTP, and their expectations of QNTP practice. Some of the participants' commented as follows:

"I try to eat various vegetables, fish, and do mindfulness meditation to reduce chest tightness, and hot flushes. Today I enter QNTP because I think it will reduce my menopausal syndromes."(C3)

"I read moral books to calm my mind to overcome menopausal syndromes. Today, I tried chest expansion to increase oxygen flow in order to reduce stress, tiredness, hot flushes and so on." (C9)

2. Co establishing mutual goals of QNTP practice. Most participants entered QNTP practice to relieve their menopausal syndromes and to promote

their well being. After understanding QNTP, all participants set goals for QNTP practice. A participant said,

"I intend to learn how Qigong reduces menopausal syndromes. In addition, I also want to check weather QNTP works" "I have a lot of time during the evening and at night. QNTP which you advise is a self-practice program. So, I plan to follow it at night."(C3)

3. Learning and monitoring QNTP. At the start of the situation realization and early learning cycle, most participants had difficulty learning and monitoring QNTP. After they realized their needs, they learned and monitored it with self-awareness.

"Practicing Qigong reminds me to have time for myself. At the beginning, although I spend only 5 minutes doing "horse-like standing" I felt exhausted and tired. However, this exercise helped me a lot with visualization. I felt more contemplative a month later."(C1)

4. Asking for information and consultation. In the situation realization and early learning cycle, six participants required in-depth explanations of the exercise step-leg to produce vital energy. The other four participants required flexible timing to do the finger moving with horse-like standing exercise.

"Can you show me the exercise of placing feet and bending ankles to promote vital energy again? In addition, the exercise of chest expansion, can I stand without bending my legs?" (C8)

5. Careful reflection on QNTP practice. In this cycle the participants learned QNTP step by step to understanding holism, awareness of self needs, and tried to practice QNTP efficient.

"My favorite exercise is chest expansion. I do it every day, because this exercise helps me explore myself. It means I must consciously breathe in and breathe out. After a month of practice, I feel a reduction in wrist pain. In the same period, I also started to eat less aiming to detoxify, so my body feels light and free."(C1)

"The chest expansion helps me concentrate on breathing and energy retention. I do it by myself everyday. After a month, I feel light, free, and comfortable." (C6)

6. Suggestions for program revision. Six participants required shortening the period of horse like standing and finger moving, In addition, five required adapting QNTP for daily life.

"I suggest the duration of QNTP practice for each exercise be flexible because it will be more relaxing, more interesting, and will increase concentration." (C3)

Factors influencing QNTP practice

The promoting factors in the situation realization & early learning cycle were positive attitudes and belief in Qigong, and the intention to learn QNTP.

1. Having positive attitude and belief in natural therapy and Qigong. All Participants believed that natural therapy would promote health and decrease menopausal syndromes. Most of them also had a positive attitude toward Qigong. For the same reasons, they also expected that QNTP practice would have further health benefits.

"I am Chinese. I heard about Qigong a long time ago. I tried to study it before because I am interested it. This is a time to gain knowledge and practice Qigong." (C6)

2. Intention of QNTP learning. In the situation realization and early learning cycle, most participants intended to practice QNTP to reduce menopausal syndromes and promote health. Although a long period was needed, however, most participants volunteered to investigate and to prove QNTP worked.

"I commit to practice and check QNTP step by step. In addition, I also need to discuss our findings each month." (C4)

Outcomes evaluation

In the situation realization and early learning cycle, outcomes were reported as decreasing menopausal syndromes and impacts, as well as improving health.

1. Decreasing menopausal syndromes:

Four menopausal disturbances decreased in this cycle.

1.1 Decreased abdominal distention. In the situation realization and early learning cycle, one participant reported that QNTP decreased abdominal distension after two weeks of practice. Another expressed decreasing abdominal distention after six weeks. One said,"I felt very wonderful. My abdominal distention decreased after I tried finger moving for two weeks." (C3)

1.2 Decreased headaches. Six participants had headaches before entering QNTP practice. After 4-6 weeks of QNTP practice, two reported that the headaches had decreased.

"I feel after a month of chest expansion, my headaches have decreased."(C9)

1.3 Decreased physical weakness and increased mental ability. Most participants noted that they breathed more efficiently. They also felt QNTP decreased physical exhaustion. Moreover, they felt that their mental ability became stronger and that they had more endurance. One said, "After QNTP practice, I felt less exhausted and weak., I also had greater mental endurance." (C4)

1.4 Decreased itchy skin. One felt that QNTP decreased itchy skin. She said,, "After a month of QNTP practice, I felt that my skin was less itchy."

1.5 Decreased extremity pain. Two participants felt numbness before entering QNTP. After a month of QNTP practice, one felt less numbness and one felt that it had disappeared entirely. One expressed "After a month of QNTP practice, I felt that the severity and frequency of extremity pain had decreased."(C3)

2. Improving health:

2.1 Feeling healthy. One participant reported a sense of well-being after practicing QNTP for two weeks. She said, "I felt fresh during Qigong, I felt my

internal organs contract and relax. Qigong is more than external body movements." (C6)

2.2 Increased efficiency in breathing. Two participants reported that QNTP practice increased breathing efficiency, increased lung expansion, and decreased chest tightness.

"The chest expansion helps me breathe more efficiently. I feel my lungs fully expand, and the waste air go out. This exercise is very good for my health, because it helps me breathe deeply. (C6)

2.3 Feeling comfortable. Participants felt more comfortable after QNTP practice while two felt lighter and airier after four weeks QNTP practice.

"I feel light after trying QNTP. I mean I feel that my body is cleaner and that I am lighter. I can move my hands as I need. I feel like I am standing surrounded by a waterfall that is pouring on me."(C4)

"After a month QNTP trial, I felt airy, lighter, freer, and more comfortable." (C5)

Lessons learned

The nurse researcher learned that menopausal syndromes and impacts were sensitive information needed careful assessment. Additionally, the participants' compliance came from the participants' trust in the researcher.

Participants understood the meaning of holism and that QNTP decreased menopausal syndromes.

Revision needs for cycle II

At the end of cycle I, two revisions were needed:

1. Extending the period of background assessment. The nurse researcher needed a period to create trusting relationships, and understanding participants' backgrounds.

2. Flexible timing in QNTP training. Two participants suggested increasing the time for QNTP training. One said, "I think the duration of training should be

adjusted individually. The participants who don't have any experience in meditation should talk and train more, because integrated techniques or complex procedures may confuse them." (C3)

Conclusions of the situation realization and early learning cycle

The nurse researcher created trusting relationships, understood the participants' backgrounds, introduced QNTP, trained and co-practiced, set mutual goals of QNTP practice, and supporting information and consultation. She learned that talking about menopause was a sensitive matter. In addition, the participants' cooperated to practice QNTP based on faith in the researcher. Moreover, they understood holism and how QNTP practice balanced menopausal syndromes and improved health. Individual participants spent two to six weeks in this cycle. At the end of this cycle, two participants reported a decrease in abdominal distention, two reported fewer headaches, five said their physical weakness decreased and three said that their skin was less itchy and four reported increase in work efficiency. Most participants felt healthier and fresher with freer breathing. However, many participants still complained of hot flushes, heavy sweating, headaches, joint pain, skin dryness, severe shoulder pain, urinary incontinence, and frequent urination. Most participants still needed further QNTP practice to reduce their menopausal syndromes.

Cycle II: Self Learning, Sharing and Adapting into Daily Life

Reconnaissance:

Menopausal syndromes

1.Vasomotor instabilities: hot flushes (7 cases), headaches (4 cases), insomnia (5 cases), palpitation (2 cases), sleeplessness (4 cases), heavy sweating (3 cases), vertigo(4 cases), and chest tightness(2 cases).

2. Emotional disorders: easily irritable (6 cases), tiredness (6 cases), anxiety (4 cases), falling asleep (5 cases), nervousness (4 cases), poor concentration (4 cases), loss of self-confidence (4 cases).

3. Somatic disturbances: neck and shoulder pain (4 cases), abdominal distention (4 cases), frequent urination (5 cases), joint pain (4 cases), itchy skin (4 cases), back pain (3 cases), numbness (1 case)

Menopausal impacts 1. Physical and mental weakness (5 cases), 2. work inefficiency (2 cases)

The intermediate QNTP*:* Six exercises conducted flexibly in daily life

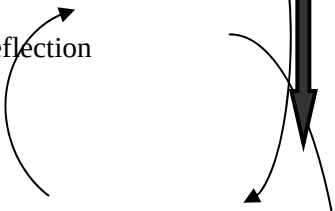
Extraneous Findings:

Promoting factors

1. Positive attitudes and beliefs toward natural therapies
2. Self recognition of lack of vitamin D
3. Programming practically

Inhibiting factors:

Stress of programming impact



Practice & observe

Actions:

Context: Practiced QNTP both indoors and outdoors (Emphasis on natural air flow and a quiet atmosphere)

Nursing approaches:

Three nursing strategies:

1. Supporting self directed learning and empowering QNTP learners
2. Helping participants adapt QNTP in daily life
3. Evaluation QNTP learning

Seven nursing activities:

1. Maintaining a trusting relationship
2. Sharing ideas and co-practicing
3. Recognizing participant abilities and accountability in learning
4. Providing information for self-directed learning
5. Consultation how to integrate QNTP into daily life
6. Evaluating QNTP practice, outcomes, and influencing factors
7. Asking for QNTP revision

Planning:

1. Adapting QNTP in daily life
2. Exploring feelings about QNTP practice
3. Exploring both promoting and inhibiting factors of QNTP
4. Evaluating QNTP practice outcomes and influencing factors
5. Facilitating continuous application of QNTP knowledge and practice

Results:

Decreased menopausal syndromes

1. Decreased headaches
2. Decreased hot flushes
3. Decreased frequency of urination
4. Decreased physical weakness
5. Decreased itchy skin
6. Decreased emotional disorders: irritation, tiredness, and feeing bad about skin changes and blemishes.

Improved health

1. Feeling healthy and strong
2. Increased efficiency of respiration
3. Increased waste excretion
4. Increased concentration and memory

Increased efficiency at work

***The negative outcomes** were muscle cramps, joint pain, and bone pain after ankle bending exercise

Lesson learned

Nurse researcher learned from programming:

1. Trusting relationships and integrating QNTP into individual

	***Participant responsibilities*.** **Three participant strategies** 1. QNTP learning and monitoring 2.Requiring information and consultation on integrating QNTP into daily life 3. Reflecting and sharing QNTP practice experiences. **Five participant activities:** 1. Self directed learning and, monitoring QNTP 2. Asking for information, consultation and empowering 3. Integrating QNTP in daily life 4. Careful reflection on QNTP practice, outcome evaluation, and influencing factors. 5. Suggestions for QNTP revision	daily life maintaining QNTP practice 2. Clear understanding of both process and outcome came from conscious step by step QNTP practice Participants learned from program practice: 1. Successful practice is based on positive attitudes to programming 2. Flexible monitoring increased continuous QNTP practice 3. Doing QNTP slowly increased consciousness and energy production 4. Visualization directed with meridian channel was more dynamic and increased concentration 5. Practicing chest expansion in the open air under gentle sunlight increased well being 6. Increasing glucose and calcium intake decreased muscle and joint pain 7. Massaging soles reduced headache**s** **Program revision needs:** Some exercises needed modification Finger moving should be gentle Ankle bending exercise should be eliminate Balance heart and kidney Qi should be changed from hitting to pressing Chest expansion should increase intensity of shoulder movement

Figure 7. Summary of cycle II: self learning, sharing and adapting into daily life (4-8 weeks)

Claims in cycle II: Self learning, sharing and adapting into daily life

Menopausal syndromes and their impacts

In the beginning of cycle II, three individual differences in three menopausal syndromes and their impacts were identified as mentioned previously in cycle I except the certain frequency differences as can be seen in reconnaissance of figure 7 page 102. There were vasomotor instabilities, emotional disorders, somatic disturbances and impacts of five physical and mental weakness and two working inefficiency.

Intermediate QNTP

This intermediate QNTP has the first revision of QNTP which still consisted of six exercises of breathing and visualization with slow movements of the extremities. The revision were changed each movement from 36 rounds to 10-36 rounds and adapted them to daily life needs. In addition, this intermediate QNTP also included some nutritional advice, environmental suggestions, nursing approaches and participant activities.

Context of cycle II

The context of self learning, sharing, and adapting into one's daily life cycle was indoors (in the living room, office or bedroom). Subsequently, at the end of this cycle, most participants moved their QNTP practice from indoors to outdoors (the emphasis of this cycle is conducting QNTP in the natural air flow and a quiet atmosphere)

Nursing approaches

In this cycle, the nurse researcher used three nursing strategies: 1) supporting self directed learning and empowering participants on QNTP practice, 2) helping participants adapt QNTP into their daily lives, and 3) evaluating QNTP practice. Seven nursing activities were done to support three strategies as follows:

1. Maintaining trusting relationships. In self-learning, sharing, and adapting into the daily life cycle, the nurse researcher maintained relationships of trusting by continued listening to participants' problems in a determined manner. In addition, the nurse researcher also helped participants increase their sense of responsibility towards QNTP practice.

2. Sharing ideas and co-practicing. The nurse researcher shared her feelings and ideas of QNTP practice with the participants. In addition, She also coached them in QNTP practice, and shared ideas of self-practice and self-evaluation.

*3. Recognizing participant abilities and accountabilitie*s. In the learning, sharing and adapting QNTP into the daily life cycle, the nurse researcher recognized participants' abilities and accountabilities by allowing them to conduct QNTP after training and encouraging them in the natural development and unfolding of their capacities. In addition, she also asked them to reflect upon their feelings toward the program, its outcomes, and influencing factors, and to give suggestions for program revision during home visits.

4. Providing information for self-directed learning and empowerment. The nurse researcher provided information for self-directed learning techniques for continuously QNTP practice. In addition, she also empowered participants to overcome difficulties and promote best practices, to remind participants to consciously cultivate Qi.

5. Consultation for integrating QNTP into daily life. The nurse researcher helped participants adopt QNTP into daily life process by listening to participants' problems, encouraging participants to talk freely, and by guiding them to integrate QNTP into their daily lives by practicing it from morning through bedtime.

6. *Carefully evaluated QNTP practices, outcomes, and influencing factors*. In this cycle, the nurse researcher evaluated the participants' feelings about QNTP practices, ways to overcome their difficulties, and outcomes of QNTP practice by close observation and in-depth interviews.

7. Asking for revisions of QNTP. At the end of this cycle, the nurse researcher not only asked participants for program revisions, but she also used a program

revision for two-way communication between participants and a Qigong expert. In addition, the participants' suggestions were used for confirming their real needs.

Participants' activities

In this cycle, participants employed three strategies: 1) QNTP learning and monitoring, 2) requiring for information, consultation with and empowering of participants doing, as well as 3) reflecting and sharing QNTP practice experiences. Therefore, participants gave five activities to support self-learning, sharing and adapting into their daily lives as follows.

1. Self learning and monitoring QNTP practice. During self learning, sharing, and adapting into daily life cycle, all participants shared QNTP step by step by consciously learning, observing, and recording their experiences.

"I mastered QNTP step by step with a strong intention to understand its details. I also practiced it fully but would like it changed to be more complete." (C4)

2. Asking for information, consultation with and empowering of participants doing QNTP practice. In this cycle, three participants still complained of confusion about conducting "step leg to promote vital energy." They asked for step by step explanation. Two other participants complained of wrist pain due to prolonged finger moving with horse-like standing. They asked the nurse researcher to be more flexible in time provided for QNTP practice.

"I still feel confused about how to follow the step leg to promote energy exercise. Can you help me more?" (C8)

"Horse-like standing causes calf pain; can I stretch my legs during this process?"(C1)

3. Integrating QNTP into daily life. Nine participants integrated QNTP into their daily life. Five participants integrated it into their daily exercise. Three integrated it into their daily pastimes and one integrated it into her daily work. One

participant said, "I try to adapt each exercise by integrating it into my daily life from I waked up until I go to bed."(C4)

4. Careful reflection on QNTP practice. In the self learning & sharing & adapting into the daily life cycle, the participants reflected on the details of QNTP practice, its outcomes, and the influencing factors as follows.

"I feel stress from the finger moving exercise because I pay a lot attention to the timing of each movement. I fear I can't get the most benefit from QNTP practice if I miss any of it. Unfortunately, I also need to decrease how much time I spend on it. Is that ok?" (C3)

"From my observation, when slowly moving both palms, I feel something absorb between fingers. I feel moving slowly more comfortable than moving fast. Moreover, I also feel after pressing Yongjoun, a wave moves from the pressing point into my body." (C10)

5. Suggestions for program revision. Five participants required modification of some exercises as follows:

"I would like to change the balancing heart and kidney from hitting Yongjoun to pressing because I don't feel any changes after hitting these two points 500 times. Additionally, the noise disturbs me" (C3)

"During hitting Yongjoun, I must separate myself from my family. I think pressing is better than hitting because I can watch television or massage my soles." (C8)

"I prefer reclining meditation because it helps me relax more and sleep well."(C5)

<u>Factors influencing QNTP practice</u>

1. Promoting factors. Three factors promoted QNTP practice in the self learning, sharing and adapting into daily life cycle.

1.1 Having positive attitudes and beliefs in natural therapies. All participants had positive attitudes toward natural therapies. They ate vegetables, fruit, and whole grains. Most participants got protein from fish and seafood. In addition, some of them did daily mindfulness meditation, yoga, and aerobic exercise. All participants strongly believed that meditation, breathing exercises, physical

movement, and nutrition of QNTP were good for health. After QNTP training, most participants altered their food intake by drinking soy milk, and taking calcium supplements. They also increased oxygen intake from their surroundings by practicing QNTP outdoors or in a room with good air circulation.

"I believe in natural therapy. Every Sunday, I have a body massage at Hat Yai hospital although I must pay 300 baht for each visit. Next week, I will go to Bangkok. Can I take this QNTP to teach my sister? In addition, I need to meet master Yang, can you tell me his address?"(C5)

"Normally, I like to eat vegetables, fruit, and grains. In addition, I also get protein from seafood." (C1)

1.2 Self recognized lack of vitamin D. Most participants' daily working hours were from7 am- 6 pm, and they had extra jobs during the weekend. After QNTP learning, five participants self recognized that they lacked natural vitamin D from sunlight. They tried to expose their skin to sunlight, and two of them started to take vitamin D tablets.

"After entering QNTP practice, I realized that I lacked vitamin D. So now I try to expose my skin to sunlight every morning for 10-15 minutes before going to work. After I expose my hands to sunlight, I feel fresh."(C6)

1.3 Programming practicalities. Two factors affected by programming.

1.3.1 Programming easily. Most participants felt that the slow and repetitive movements of each exercise were easy to practice. The visualizing meditation for increasing concentration and memory was directed through meridian lines was easy and dynamic. One participants said, "I feel that QNTP practice is easy. It doesn't require any special knowledge. I can do it just by thinking about it. While doing slow movements with visualizing following the meridian line, I feel that my concentration, and memory are raised up." (C3)

1.3.2 Programming flexibility. QNTP was conducted by participatory action research, which is flexible, practical and advantages for participants and

researcher. The participants in this study were accountable for directing their practice as needed.

> "I like QNTP because I put aside time to practice every night. I wake up late and am in a hurry to get to work. Therefore, I choose to practice QNTP at night."(C3)

> "Practicing QNTP allows the participant to self-direct learning. I can do it any time especially at night because I am free and I can do it slowly and consciously."(C6)

2. Inhibiting factors. One factor which inhibited QNTP practice in the self-learning sharing and adapting into daily life cycle was stress due to the impacts of some exercises

2.1 Long period QNTP practice. Three participants complained about each posture being too slow and taking too long (one and half hours) which caused boredom and reduced concentration.

> "The problem of QNTP practice is that the period of doing each exercise is too long and the movement of each exercise is too slow. In addition, there are too many repetitions of each exercise (36 rounds) which increases boredom and decreases consciousness in practice."(C2)

> "I spend a lot of time watching QNTP practice. I fear I can't have maximum benefit from QNTP practice if I miss any part of it."(C3)

2.2 Impacts of some exercise. Four exercises of the tentative QNTP caused tension, stress, and pain. Three participants reported leg cramps and ankle joint pain while they pressed heels on the floor and bent ankles. Two participants thought that hitting the soles was noisy and decreased concentration. In addition, three participants felt tension, pain, and tiredness in the finger movement exercise.

> "Pressing heels on the floor causes leg cramps, ankle joint pain, and bone pain." (C6)

<u>Outcomes evaluation</u>

There were both positive and negative feelings toward QNTP practice in this cycle. The positive feelings were decreased menopausal syndromes improved health

and increased work efficiency, whereas the negative feelings were pain in the bones, joints and boredom when the program went on for too long.

1. Decreasing menopausal syndromes

1.1 Decreased headaches. After 8 weeks of QNTP practice, two participants had fewer headaches; however, one still was confronted with vertigo and headaches.

"After 8 weeks of Qigong practice, I had fewer headaches and then they disappeared completely" (C8)

"After 2 months of QNTP practice, I feel headaches decreased. I can read the newspaper on the airplane whereas I can not do before. QNTP practice seems to increase the oxygen supply to my brain." (C5)

1.2 Decreased hot flushes. Seven participants were confronted with hot flushes and heavy sweating. Two participants reported that both the frequency and severity of hot flushes decreased gradually after two months of QNTP practice.

"I feel that the hot flushes decreased in the first two months of QNTP practice and it disappeared completely after two months."(C3, C10)

1.3 Slight decrease of skin dryness. After two months of QNTP practice, two participants felt their skin dryness was slightly less.

"After QNTP practice, I feel my circulation is better. Therefore, skin dryness and itchy skin are slightly less." (C4)

1.4 Decreased frequency of urination. After 8 weeks of QNTP practices, two participants reported less frequency of urination, and urine leakage also disappeared completely.

"After two months of QNTP practice, urine leakage disappeared. This means no signs of urine leakage on my underwear." "I feel urinary functions improved, and I can control urination." (C3)

1.5 Decreased physical weakness. After practicing QNTP for two months, five participants' physical weakness (exhaustion and tiredness) decreased. They also reported no longer catching colds after one to one and a half months of QNTP

practice. In addition, they also felt their mental ability become stronger and more enduring. Moreover, they also believed that QNTP increased activity and made them healthier.

> "After I started QNTP and eating vegetables, physical exhaustion decreased and the frequency of catching colds decreased too."(C4)

> "After QNTP practice for a month and a half, I breathe more efficiently. The crepitating and wheezing disappeared, and my body has become healthier again."(C5)

In addition, some participants felt that emotional disorders such as irritation, tiredness and bad of skin blemishes decreased.

2. Improving health:

2.1 Felt healthy and strong. Three participants reported feeling healthier and stronger after practicing QNTP for 6 weeks.

> "I feel healthier after QNTP practice. I feel my internal organs contract and relax and I have increased muscle strength. QNTP practice improves my health more than external body movements." (C6)

2.2 Increased respiratory efficiency. Two participants felt an increase in the efficiency of their respiration such as deeper, longer breathing and being able to expand their lungs fully. In addition, two of them could overcome tiredness, chest tightness, asthmatic attacks and allergic rhinitis.

> "Chest expansion helps me breathe more efficiently. I feel my lungs fully expanded and the waste air go out. This exercise reduces tiredness, chest tightness and asthmatic attacks. Last week, I was checked by Dr. T. He said my wheezing and crepitating had disappeared. This means I had not been cured by the drugs and the exercise that I did for a long time as apposed to two months of QNTP practice." (C6)

> "QNTP helps my intake of oxygen. My lungs expand well. Therefore, after practicing QNTP a month, I breathe more easily."(C8)

2.3 Increased waste excretion. Two participants reported that QNTP increases waste excretion. One reported waste excretion through sweating, after she

took a bath and stood in fresh air. She felt clean and free. Then after six weeks, she felt fresh and her skin itched less.

"After six week QNTP trials, I was heavily sweating. However, after bathing and sitting in the fresh air, my skin itch decreased. I also feel clean and as though standing surrounded by a waterfall." (C4)

2.4 Increased concentration and memory. Most participants pointed out that QNTP increased oxygen in the circulation, calmed down their minds, increased consciousness, decreased excessive compulsiveness, and increased memory.

"After 2 months of QNTP practice, I don't forget to close windows, I remember my ID card, and turn off the electricity before leaving the house." "I can recall much more than before, I know what I forget, and what I have done."(C6)

"Before QNTP practice, I was drowsy by 10 pm. If I had go to bed late, the following day I would feel irritable, and I couldn't concentrate on my work. After QNTP practice, I feel calm, and can concentrate on my work. I feel my concentration recovered. I can plan my work until midnight while I still feel fresh." (C3)

2.5 Increased body temperature and vital energy. During cycle II, two participants feel absorption among fingers while moving both palms in and out. In addition, three participants feel that pressing their soles increased energy. Moreover, one participant felt warmth in the Dan Tein (an energy cavity located in the lower abdomen) and felt energetic during QNTP practice.

"After replacing hitting by pressing Yongjoun for five minutes, and massage, I feel like a wave move from the pressing points through the body. I think it may be vital energy flow."(C5)

"After fully practicing QNTP for two months, I feel like I have vital energy to increase consciousness and sexual desire." (C6)

3. Increased working efficiency**.** After practicing QNTP for two months, five participants increased working abilities. One increased consciousness, memory, and was relaxed then working. In addition, one felt calm and had higher consciousness than by doing mindfulness meditation because QNTP visualization more dynamically

controlled the body and the mind to be calm. Therefore, she could work with more concentration and more efficiency.

"After two months of QNTP practice and reading moral books, my mind become quiet and I can work longer." (C9)

"After QNTP practice, my mind become calm. I feel fresh and can concentrate more on work."(C8)

Negative outcomes

Muscle cramps, joint pain, and bone pain. Four participants who had joint pain before entering QNTP reported pressing heels on the floor and bending ankles exercise increased muscle cramps, knee pain, bone pain, and hip pain.

"I feel placing heels on the floor and bending ankles exercise causes leg cramps and bone pain, back and hip pain." (C5)

Lessons learned

The nurse researcher learned relationships of trust greatly contributed to QNTP practice. In addition, she also acted as co-practitioner to better understand both process and outcome of self-learning, sharing and adapting QNTP into the daily life cycle.

In cycle II participants learned the following:

1. How to integrate each exercise of QNTP into daily life and daily working styles with increased relaxation and cooperation in QNTP practice.

2. Slow visualization in QNTP practice increased concentration more than doing mindfulness breathing did because QNTP visualization directed with meridian channels flow could be more dynamically practiced.

"I feel QNTP visualization is more dynamic than mindfulness meditation because there is less confusion. I can do visualization and finger moving."(C8)

"While practicing QNTP by moving both palms slowly, I feel better than by moving fast. During this movement, I felt something absorb between palms.''(C10)

3. Practicing chest expansion in the open air. Two participants felt fresh and then two weeks later their asthmatic attack decreased.

"I try chest expansion in the morning outdoors before going to work to gain rich oxygen in the fresh air. From the second week to the eighth weeks, I felt my asthmatic attacks decrease and disappear." (C6)

4. Reclining meditation is more relaxing. One participant changed from sitting meditation to reclining meditation. After a two-three month trial, she reported being more relaxed and concentrate able on daily work.

"I am really in favor of QNTP meditation. I do reclining meditation before sleeping every night. I feel more relaxed and healthier than when I did sitting meditation."(C5)

5. Increasing carbohydrate, calcium, and vitamin D intake decreased muscle pain and bone pain. Four participants reported increasing calcium intake to decrease muscle pain, joint pain, and bone pain. In addition, two felt that increasing carbohydrate and vitamin D intake decreased muscle pain.

"After drinking milk, my shoulder pain decreased. Shoulder and joint pains also decreased after taking calcium with vitamin D tablets. (C3, C7)

"I find that orange, guava and apple juice release muscles pain too."(C7)

6. Sole massaging decreased headaches. One participant said that sole massaging decreased headaches." (C7)

<u>Revision needs for cycle III (program modification)</u>

At the end of the self-learning, sharing and adapting into the daily life cycle, four exercises needed revision:

. 1. Finger moving. Four participants who were faced with finger joint pain reflected that finger moving should be done softly to prevent finger joint pain. One

participant said “Moving fingers causes finger joint pain, so I try it with gentle movement.” (C2).

2. Pressing heels on the floor and ankles bending exercise. After placing heels on the floor, three participants experienced leg cramps, and bone pain. Therefore, they suggested eliminating this exercise.

3. Balancing heart and kidney Qi. Most participants suggested pressing to replace hitting because hitting the soles made noise which disturbed family members.

4. Chest expansion. Three participants conducted chest expansion to reduce shoulder pain. After a month of QNTP practice shoulder muscle pain slightly decreased. Two participants suggested moving both arms up and down to increase the intensity of shoulder muscle movement.

Conclusions of cycle II

The nurse researcher maintained trust relationships, shared ideas and co-practiced QNTP, recognized participants’ abilities and accountabilities in QNTP learning and monitoring, supported information for self-directed learning and empowering and consulting on how to integrate QNTP into daily life. The study found three promoting QNTP practices in this cycle: positive attitudes and beliefs in natural therapies, self recognition of the lack of calcium and vitamin D, and programming practically (easy programming, programming flexibility). Participants spent 4 to 8 weeks of QNTP practice on this cycle, and the end of it, Two had less frequent headaches, five had less physical weakness, two had fever hot flushes, two had decreased frequency of urination, two had increased body temperature and vital energy, two gradually had less muscles weakness, two were less irritated, two were less tired, and two had reduced feelings of being upset. Although most participants felt healthier and stronger, breathed more easily, had increased concentration and

memory, as well as increased efficiency at work, however, some still complained: five of hot flushes, five of difficulty in sleeping, three of heavy sweating, three of skin dryness, two of headaches, four of shoulder pain. These participants still needed further QNTP practice in the modification and confirmation cycle.

Cycle III: Modification and Confirmation

Reconnaissance:

Menopausal syndromes

1.Vosomotor instabilities: hot flushes (5 cases), sleeplessness (4 cases), headaches(2 cases), vertigo (2 cases),palpitation (2 cases), insomnia (5 case), heavy sweating (3case)

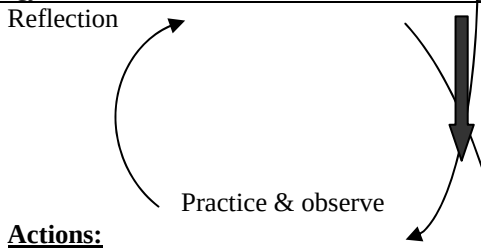
2. Emotional disorders: easy irritation (5 cases), tiredness (5 cases), falling asleep (5 cases), nervousness (4 cases), anxiety (4 cases), poor concentration (4 cases),loss of social interest (4 cases), loss of self-confidence (3 cases), easily upset (2 cases) et al.

3. Somatic disturbances: neck and shoulder pain (4 cases), vaginal dryness (5 cases), abdominal distention (4 cases), joint pain (2 cases), skin itchiness (3 cases), frequent urination (3 cases), back pain (3 cases),

Menopausal impacts: Continued work inefficiency at work (1 case)

Modified QNTP: Five exercises were selected to remain active: horse like standing, finger moving, chest expansion, pressing Yongjoun, and meditation. In addition, QNTP practice to be tolerable

Promoting factor
programming more practically



Actions:

Context: Modified QNTP was practiced both indoors and outdoors (emphasis on natural air flow or under gentle sunlight and in a quiet atmosphere)

***Nursing approaches*:**

Three nursing strategies:

1. Facilitating QNTP modification and testing
2. Supporting additional information and empowering QNTP practice continuously
3. Evaluation QNTP practice

Six nursing activities:

1. Facilitating QNTP modification
2. Recognizing participant abilities and accountabilities in self-directed learning and monitoring the modified QNTP practice
3. Empowerment the participants on QNTP practice
4. Providing additional information
5. Evaluation of the modified QNTP practice, outcomes, and influencing factors
6. Asking for sustainable QNTP

Participants' responsibilities:

Three participant strategies:

1. Modifying QNTP, self-directed learning and monitoring.
2. Requiring additional information and empowerment of participants
3.Reflecting and sharing experiences

Four participants' activities:

1. Self-directed learning, and monitoring the modified QNTP
2.Asking for additional information and empowerments of participants on QNTP practices
3. Reflection on food consultation and the modified QNTP practices
4. Suggestions for sustainable QNTP

Planning

1. Modifying QNTP and testing
2. Increasing QNTP effectiveness
3. Exploring both promoting and inhibiting factors of QNTP practice
4. Evaluating the modified QNTP practice and its outcomes
5. Finding ways to sustain QNTP practice

Results:

Decreased menopausal syndromes

1. Decreased difficulty in sleeping
2. Decreased heavy sweating
3. Decreased muscle pain
4. Slightly decreased skin dryness
5. Decreased some emotional symptoms of loss of social interest, difficulty in falling asleep and nervousness slightly decreased

Improved health

1. Increased sleep efficiency
2. Increased positive self-image
3. Decreased stress and anxiety

Lessons learned:

Nurse researcher learned programming effectiveness increased by continuous practice of QNTP

Participants learned to be more relaxed after the modified QNTP practices

Programming results

1. Menopausal syndromes decreased
2. The final program was articulated

Figure 8. Summary of cycle III: QNTP modification and confirmation (4 weeks)

Claims in cycle III: Modification and confirmation cycle

Menopausal syndromes and their impacts

In the beginning of cycle III, three individual differences in menopausal syndromes and one impacts were as mentioned previously in cycle I except the certain area of frequency differences as can be seen in reconnaissance figure 8 page 117. There were vasomotor instabilities, emotional disorders, somatic disturbances, and impacts of work inefficiency.

Modified QNTP

The third version was the modified QNTP. Five exercises remained active: horse-like standing, finger moving with horse-like standing, chest expansion, pressing Yongjoun, and visualizing meditation. In addition, the program also adapted the period to become more tolerable for practice.

Contexts of cycle III

The context of this cycle emphasized natural air flow under gentle sunlight in a quiet atmosphere. There were both indoors (living room, bedroom, and office) and outdoors (in the garden, on a running path, and the balcony of the residence).The period of modified QNTP practice was flexible but continuous from getting up until bed time.

Nursing approaches

In this cycle, the nurse researcher used three nursing strategies: 1) facilitating QNTP by modification and testing, 2) supporting additional information and empowering the continuous modified QNTP self-directed learning, and 3) evaluating the modified QNTP practice. There were six nursing activities supporting three nursing strategies as follows:

1. Facilitating QNTP by modification and testing. The nurse researcher acted as a mediator of the two-way communication between the participants and a Qigong expert. She encouraged the participants to talk freely about the limits of QNTP and to make suggestions for its modification as needed. In addition, she also acted as a problem solver and negotiator with the expert.

2. Recognizing participant abilities and accountabilities. In the modification and confirmation cycle, the nurse researcher recognized participant abilities and accountabilities by letting the participants individually self-direct QNTP practice in daily life and work. In addition, she also respected the participants' reflection on QNTP practice and their suggestions for program sustainability.

3. Empowerment of participants to modify QNTP practice. In QNTP modification and confirmation cycle, the nurse researcher reminded participants to be fully conscious of QNTP practice, warned them to be consciously aware of their practice and to reflect upon the modified QNTP practice with logical and scientific reasoning. She also encouraged them to practice continuously.

4. Supporting additional information. Nine participants needed additional nutritional information to reduce their menopausal syndromes. Five needed to discuss food supplements and cooking methods to maintain the nutritional value of their food intake.

5. Careful evaluation QNTP practice. In the modification and confirmation cycle, the nurse researcher continuously evaluated the modified QNTP practice, the factors both supporting and inhibiting the practice, and the outcome learned from modified QNTP practice in order to confirm its efficiency.

6. Asking for suggestions for sustainable QNTP practice. In the modification and confirmation cycle, the nurse researcher continued discussions to gain ideas for further sustaining the program.

Participant activities

Participants employed three strategies as follows: 1) QNTP self-directed learning and monitoring, 2) requiring additional information for supporting and empowering the continuous practice of QNTP, and 3) reflecting and sharing the modified QNTP practice experiences as follows:

*1. Learning and monitoring the modified QN*TP. In this modification and confirmation cycle, participants learned and monitored the modified QNTP with careful observation and flexible timing and manner in order to maintain program sustainability.

"When QNTP was modified, I could do finger moving integrated with horse-like standing, diaphragmatic breathing and visualization, concentrating at at length. In addition, I also enjoy doing it." (C3)

"I think pressing is better than hitting because it saves time. In addition, during pressing the soles, I can watch television and massage my soles."(C1)

2. Asking for additional information and consultation. During the modification and confirmation cycle, seven participants required nutritional consultation such as what foods to eat to reduce bone pain, leg cramps, and muscle pain. In addition, five participants needed to obtain vitamin D from sunlight without suffering skin discoloration. Moreover, three participants needed to adapt chest expansion to their work, and one case required sexual consultation.

"I am very busy during day time, because I work 7 days a week from 7 am until 6 pm for 2-3 months at a time. Only when visiting my parents is there a chance to expose my skin to sunlight. Ah…what should I do? I have almost no chance to expose my skin to sunlight."(C3)

"At this moment, I have thumb pain. Does it mean menopause causes bone degeneration? I eat fish and drink high-calcium milk every two days, is that enough for my bones? What time is the best sunlight? I try it at 8-9 am. Is that ok?" (C8)

"I try to adapt the chest expansion while I wait for the water to boil for both optimal health and working progress."(C9)

3. Careful reflection on QNTP practice. In the modification and confirmation cycle, participant**s** reflected on their feelings of being relaxed and being satisfied with both the process and outcomes of modified QNTP practice.

"I felt the modified QNTP practice made it more practical. I can do it just by thinking. After I try, I feel relaxed in mind and body and I also feel stronger."(C3)

"Using the modified QNTP, I have increased concentration at work. I can also stand until midnight and I still feel fresh."(C3)

4. Suggestions for sustainable QNTP practice. In the modification and confirmation cycle, most participants suggested setting up a permanent Qigong clinic for consultation, research, training, and the distribution of information.

Factors influencing modified QNTP practices

1. Promoting factors: making the programming more practical with flexible periods of QNTP practice and flexibility in choosing exercises for practice.

1.1 Flexible periods for modified QNTP practices. One participant reported that she did the modified QNTP for longer periods than the fixed program. She also felt free and satisfied with the modified form.

"Since the periods of QNTP practice became more flexible, I feel comfortable, energetic, and I can do it for longer periods." (C3)

"After modifying QNTP practices, I can breathe in for longer periods. In addition, I try to integrate the modified QNTP into my daily life and I feel it is going very well."(C4)

1.2 Flexibility in choosing exercise. Two participants reported that they

modified QNTP by choosing one exercise to practice and integrate into their daily work or daily life style in order to save time. They felt more comfortable than practicing each step according to fixed schedule.

"Our age group is very busy in daily life. I can't work out for one hour because it takes too long. I adapt finger moving with jogging to save time."(C1)

"After changing from hitting to pressing Yongjoun, I feel it is not only more practical but it is also more comfortable. In addition, I can integrate it with sole massage."(C4)

Outcomes evaluation of cycle III

After modifying QNTP practices, participants felt decreasing menopausal syndromes and improving health.

1. Decreased menopausal syndromes

1.1 Increased sleep efficiency. In the modification and confirmation cycle, four participants practice modified QNTP increased sleep efficiency. Participants who practiced daily had better sleeping efficiency than those who practiced 2-3 days a week. For example:

"After practicing the modified QNTP, I slept well." (C4)

"After modifying QNTP practices, I felt asleep quickly, slept deeply and was fresh and active at work." (C4)

1.2 Decreased heavy sweating. Four participants suffered heavy sweating before entering QNTP practice. After three months, three reported slightly decreased sweating. Two reported they could cope with heavy sweating well.

"After 4 months of QNTP practice, my heavy sweating became much less." (C4)

1.3 Reduced severe muscle pain. One participant reported that it took more than four months of QNTP practice to relieve her shoulder muscle pain. She also needed acupunctures, western physical therapy and drugs to reduce to reduce the pain.

"After four months of QNTP practice with walking and physical therapy. I feel reduced shoulder pain. I can twist my trunk to hook my skirt, something I couldn't do before. Right now, I have even less shoulder muscle pain although I still have tension."(C7)

1.4 Decreased stress and anxiety. After three months of QNTP practice, most participants felt free and calm.

"After QNTP practice, I feel more endurance to face stress."(C5)

"I feel more relaxed and lively after reducing the duration of each exercise. I could do QNTP 60-90 minutes daily 4 times weekly regularly. I felt many menopausal syndromes disappeared. (C3)

"Although I feel my physical health strengthen after QNTP practice, I am still fat."(C1)

1.5 Decreased of others emotional disorder including less difficulty in falling asleep, reduced loss of social interest, and less nervousness.

2. Improving health

2.1 Increased positive self-image. Two participants increased positive emotions and self-esteem, and slightly decreased depression.

"I feel fresh, energetic, and powerful, my sexual desire has increased, and I am much happier in my life." (C6)

"After QNTP practice, I feel warm and emotionally stable. My feelings of tiredness decreased. I can concentrate more on work and feel increasing self-value." (C8)

2.2 Other outcomes. The other outcomes of this cycle were being increasingly relaxed having better fresher breathing and sleeping well.

<u>Lessons learned from cycle III</u>

The nurse researcher learned that non-rigid monitoring of QNTP increased continuous cooperation and the participants' satisfaction.

Participants learned that the modified QNTP together with flexible periods of practice made programming more practical and increased continuous cooperation of QNTP practice.

Conclusions of cycle III

The nurse researcher maintained QNTP practice into daily life or work and facilitated modifying and testing QNTP, explored the sustainability of QNTP and increased program efficiency. Five participants moved chest expansion to the morning and they conducted this exercise 5-10 minutes daily. Five participants integrated each modified exercise into daily life or work from morning until bed time in order to be more relaxed about time management. At the end of this cycle, some participants still had menopausal syndromes disturbances. However, nine out of ten participants felt better able to cope with menopausal syndromes. In addition, most participants also felt the modified QNTP was more practical and easier to handle.

Summary of Overall QNTP Changing

From three cycles of QNTP implementation, the researcher categorized the changes into three sets as part of the process of QNTP implementation, the outcomes of study, and lessons learned:

Process of QNTP Implementation

The process of QNTP implementation consisted of nursing approaches, participants' activities, and the influencing factors.

1. Nursing approaches. Nursing approaches in pre-entering and three cycles of QNTP implementation are presented in Table 4.

Table 4.

Nursing Approaches at Pre-Entering and Three Cycles of QNTP Implementation

Pre-entering QNTP implementation	Nursing approaches transitioning		
	Cycle I: Situation realization and early learning (2-6 weeks)	Cycle II: Self-learning, sharing, and adopting into daily living (4-8 weeks)	Cycle III: Modification and confirmation (4 weeks)
	Three strategies 1. Raising participant self-awareness 2. Supporting information of holism, menopausal management, and the concepts of healing in QNTP 3. Careful evaluation of QNTP practices	**Three strategies** 1.Supporting self-directed learning and empowering QNTP practices 2.Helping participants adopt QNTP into daily life 3. Careful evaluation QNTP practices	**Three strategies** 1. Facilitating QNTP modification and testing 2. Supporting additional information and empowerment participants in QNTP practice continuously 3. Careful evaluation of QNTP practice
Six approaches 1. Establishing a trusting relationship 2. Understanding situations 3. Introducing the seven sections of QNTP and conducting training 4. Exploring QNTP practice and influencing factors. 5.Recognizing participants abilities and accountabilities in QNTP practices 6. Evaluating QNTP practices	**Seven approaches** <u>Evaluating activities</u> 1. Understanding participants' background 2. Careful evaluation on QNTP practices, outcomes, and influencing factors 3. Asking for QNTP revision <u>Facilitating activities</u> 1. Establishing trusting relationships 2.Introducing QNTP and conducting training 3. Establishing mutual goals for QNTP practice 4. Providing information on QNTP practice and consultation	**Seven approaches** <u>Evaluating activities</u> 1.Careful evaluation of QNTP practices, outcomes, and influencing factors 2 Asking for QNTP revision <u>Facilitating activities</u> 1. Maintaining trusting relationships 2. Sharing ideas and co-QNTP practices 3. Recognizing participants' learning abilities and accountabilities 4. Providing self-directed learning and consultation on adopting QNTP into daily life	**Five approaches** <u>Evaluating activities</u> 1. Careful evaluation of the modified QNTP practices, outcomes, and influencing factors 2. Asking for program sustainability <u>Facilitating activities</u> 1. Facilitating QNTP modification and testing 2.Recognizing participants' abilities and accountabilities for self-directed learning and monitoring 3. Providing additional information and empowerment for QNTP practice

Table 4. Four nursing approaches increased after three cycles of QNTP implementation: 1) setting individual mutual goals QNTP practice, 2) facilitating QNTP modification and integrating it into daily living, 3) providing alternative information, consultation and empowering participants to overcome inhibiting factors, and 4) asking for suggestions for program revision and sustainability. After three

cycles of QNTP implementation, it was found that holistic nursing approaches were invaluable for continuous QNTP practice. The activities for holistic nursing approaches were categorized into two sets. The first set was activities done in all three cycles: they were an evaluating set and a facilitating set. The evaluating set activities were:1) understanding situations; 2) evaluating QNTP practices, outcomes, and 3) Asking for QNTP revision or sustainability, whereas the facilitating activities were: 1) establishing and maintaining trusting relationships; 2) providing information and consultation. The other facilitating activities varied by cycle including introducing the seven sections of QNTP, conducting training and setting mutual goals in cycle I. In addition, recognizing participants' abilities and accountabilities in learning, providing self-directed learning, empowering participants and consultation participants to adapt QNTP into daily living in cycle II. Moreover, facilitating and confirmation of the modified QNTP took place in cycle III.

In the conclusion of cycle I, three specific nursing strategies emerged**:** 1) raising participants' self-awareness, 2) providing resources and information on menopause and Qigong, and 3) evaluating QNTP practice. In cycle II, three strategies likewise emerged**:**1) supporting self-directed learning and exploratory learning, 2) facilitating the integration of QNTP into daily life, and 3) evaluating QNTP learning results. In cycle III, three strategies were produced: 1) facilitating QNTP modification and testing, 2) providing additional information and empowering participants for continuous self-directed learning, and 3) evaluating modified QNTP practices.

2. Participant activities. The participants' activities in pre-entering and the three cycles of QNTP implementation are presented in Table 5.

Table 5.

Participant Responsibilities at Pre-Entering and Three Cycles of QNTP Implementation

Pre-entering the QNTP implementation	Participants Responsibilities Transitioning		
	Cycle I: Situation realization and early learning (2-6 weeks)	Cycle II: Self-learning, sharing, and adopting into daily living (4-8 weeks)	Cycle III: Modification and confirmation (4 weeks)
	1.Situation-realization and self-awareness 2. QNTP learning and training 3. Reflecting on and sharing experiences	1. QNTP learning and monitoring 2. Requiring information and consultation to integrate QNTP into daily life 3. Reflecting on and sharing experiences	1. QNTP self directed learning and monitoring 2. Requiring additional information and empowering participants practice continuously 3. Reflecting on and sharing experiences
Five activities: 1. Understanding menopausal syndromes, their management, attitudes and beliefs toward Qigong 2.Understanding QNTP practices 3. Establishing mutual goals for QNTP practices 4. Reflecting on QNTP practices, outcomes, and influencing factors 5. Suggestions for continuous QNTP practice	**Six activities:** <u>Evaluating activities</u> 1. Understanding menopausal syndromes and their impacts 2. Reflecting on QNTP practices, outcomes, and influencing factors 3. Suggestions for revising QNTP <u>Learning activities</u> 1. Co-establishing mutual goals for QNTP practices 2. Learning and monitoring QNTP practices 3. Asking for information and consultation	**Five activities:** <u>Evaluating activities</u> 1. Reflection on QNTP practices, outcomes, and influencing factors 2. Suggestions for revising QNTP <u>Learning activities</u> 1. Learning, self-directed learning, and monitoring of QNTP practices 2. Asking for information, consultation, and empowering participants in QNTP practices 3. Integrating QNTP into daily living	**Four activities:** <u>Evaluating activities</u> 1. Reflection on food consultation and modified QNTP practices, outcomes, and influencing factors 2. Suggestions for sustainable QNTP practices <u>Learning activities</u> 1. Self-directed learning and monitoring of the modified QNTP 2. Asking for additional information and empowerment of participants in QNTP practices

Table 5. Many participants' activities were shown after three rounds of QNTP implementation. Four participant activities increased from the tentative QNTP. They were: 1) self-directed learning and monitoring; 2) asking for additional informational support, consultation, and empowerment; 3) individual integrating and maintaining QNTP into daily living and 4) making suggestions for program revision. Therefore, the final activities after a three cycle trial were categorized into two sets.

The first was done in all three cycles which consisted of three evaluating and one learning activity. Three evaluating activities were composed of: 1) understanding individual situations and QNTP; 2) reflecting on QNTP practices, outcomes, and influencing factors; and 3) making suggestions for program revision whereas the learning activity was learning about and monitoring QNTP practices; Other set of participant activities varied for each cycle. In cycle 1, mutual goals were establishing for QNTP practice. Cycle II included facilitating self directed learning and monitoring, consultation and empowering participants, as well as integrating QNTP into daily life. Cycle III, consisted of facilitating the modification of QNTP, testing it, and making suggestions for program sustainability.

The outcomes of QNTP implementation

The outcomes of QNTP implementation included decreasing menopausal syndromes and impacts and improving health.

Menopausal impacts decreased and disappeared after QNTP practices were presented as seen in Figure 9.

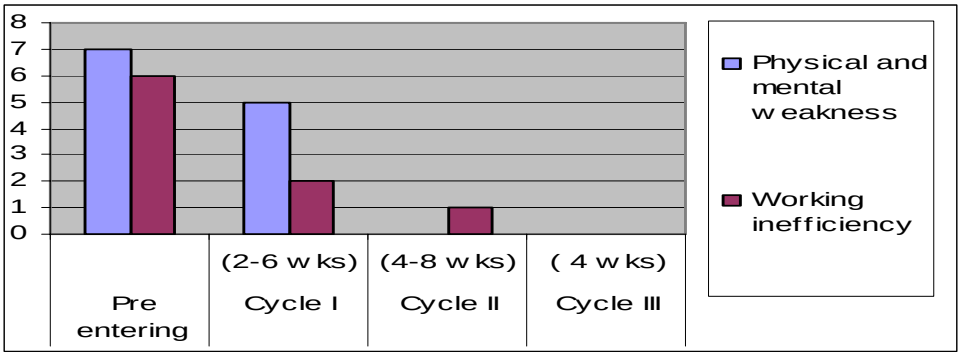


Figure 9. The number of participants with menopausal impacts at QNTP pre-entry and at the end of three cycles of QNTP implementation.

Figure 9. Two themes of menopausal impacts decreased and disappeared after three cycles of QNTP were completed. Two cases of physical and mental weakness decreased after QNTP practice in cycle I, and then these problems decreased in five

cases in cycle II. Four participants reported that working efficiency increased in cycle I, and one increased in the two later cycles.

The menopausal syndromes decreased and some disappeared after QNTP implementation as presented in Figures 10-12.

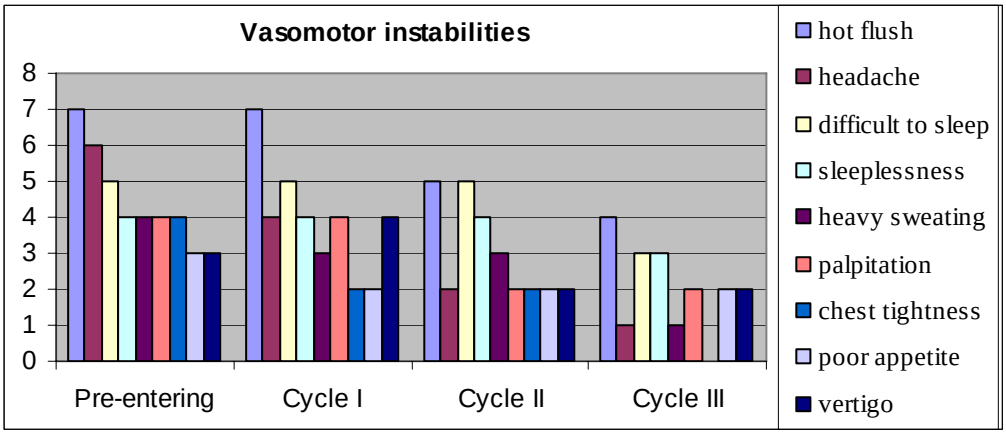


Figure 10. Number of participants with vasomotor instabilities at QNTP pre-entry and at the end of three cycles of QNTP implementation

Figure 10. Most participants' vasomotor instabilities decreased in cycle I through cycle II, but sleep difficulties only decreased in cycle III and chest tightness decreased in cycle I, and disappeared by the end of cycle II.

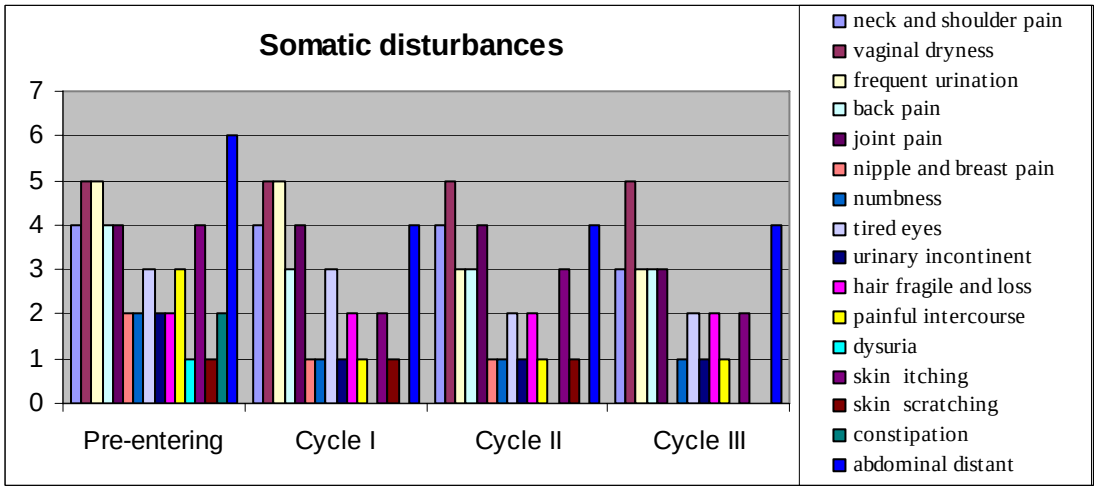


Figure 11. Number of participants with somatic disturbances at QNTP pre-entry and at the end of three cycles of QNTP implementation.

Figure 11. Most participants' somatic disturbances decreased slightly after QNTP practice. Nipple pain disappeared by the end of cycle II, and scratchy skin disappeared by the end of cycle III, whereas vaginal dryness and dysparurea showed no changes.

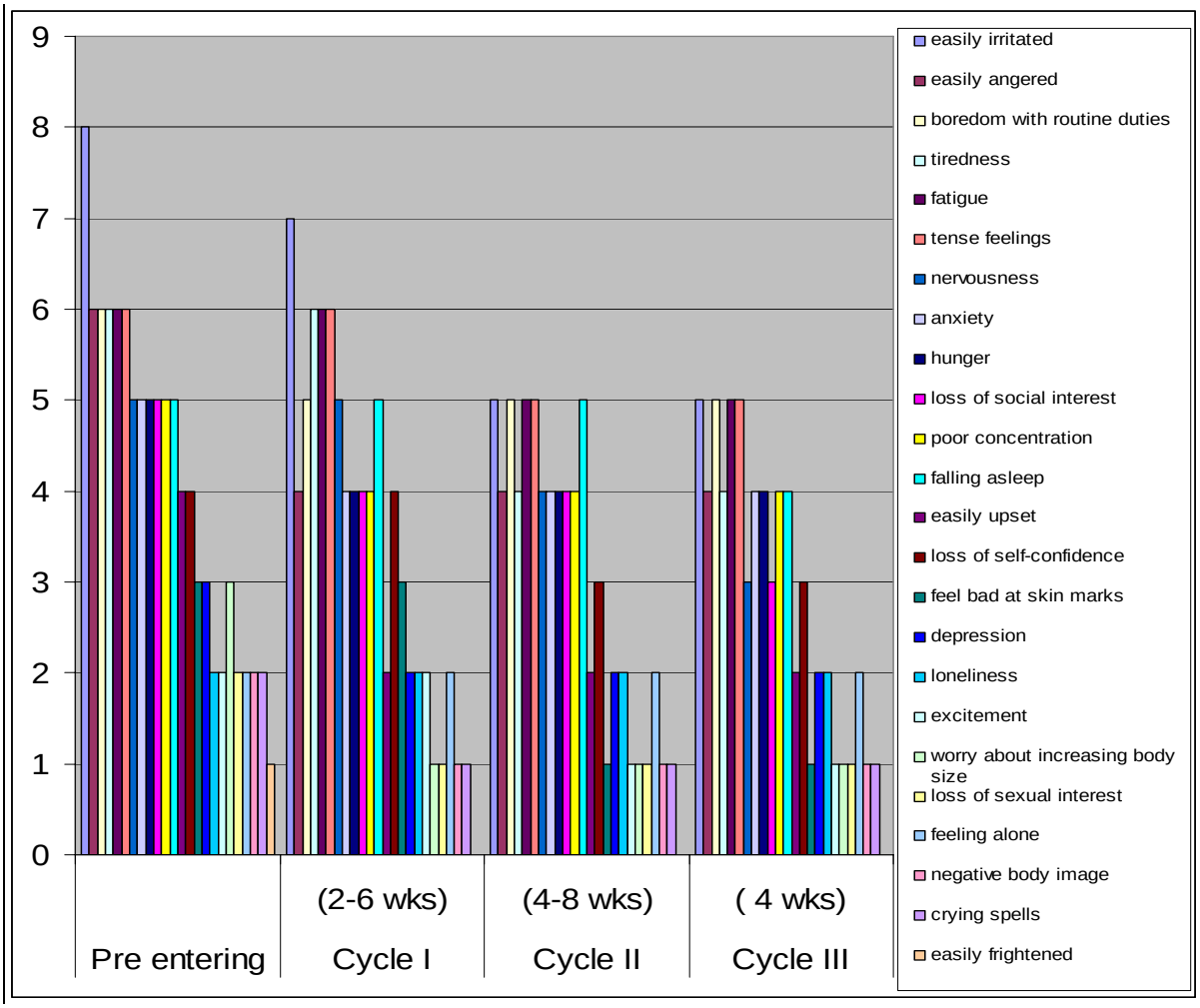


Figure 12. Number of participants with emotional disorders at QNTP pre-entry QNTP and at the end of three cycles of QNTP implementation

Figure 12. Most emotional disorders decreased by the end of cycle I, a few symptoms decreased in cycle II, and it was rare for any to decrease in cycle III. The attribute of frightening disappeared for one women in cycle I. However, one symptom of loneliness showed no change after QNTP practice.

Health improvements which emerged from three cycles of QNTP implementation was presented in Table 6.

Table 6.

Health Improvements in three Cycles of QNTP Implementation

Health improvements at the end of cycle I (2-6 weeks)	Health improvements at the end of cycle II (4-8 weeks)	Health improvements at the end of cycle III (4 weeks)
1. Felt healthy 2. Increased breathing efficiency 3. Facilitated relaxation and felt free	1. Felt healthy and strong 2. Increased respiratory efficiency 3. Increased waste excretion 4. Increased concentration and memory 5. Increased body temperature and vital energy * Negative outcomes were muscle cramps, joint pains, and bone pains when in the exercise of placing feet on the floor and bending ankles to promote vital energies	1. Increased positive self-concept 2. Decreased stress and anxiety 3. Increased sleep efficiency

Table 6. Many themes showed health improvements at the end of cycle I and II. Cycle I included a more healthy feeling, increased breathing efficiency, relaxation, and a greater sense of freedom. In cycle II, most participants reported greater sense of well being, stronger, better breathing, increased waste excretion, and increased concentration and memory. On the other hand, a negative outcome from this cycle was the presence of muscle and joint pains due to the placing feet on the floor and bending ankle exercise. After cycle III, some participants reported better sleep and mental well-being.

Lessons learned.

The lessons learned from three cycles of QNTP implementation are presented in Table 7.

Table 7.

Lessons Learned from three Cycles of QNTP Implementation

	Ending of Cycle I- Situation realization and early learning (2-6 weeks)	Ending of Cycle II- Self-learning, sharing, and adopting into daily living (4-8 weeks)	Ending of Cycle III- Modification and confirmation (4 weeks)
Learned from QNTP programming Or Nurse researcher learned	1. Data about menopausal syndromes were sensitive to this age group 2. Participant compliance came from faithfulness to the nurse researcher	1. The trusting relationships contributed to continuous QNTP practices 2. Clear understanding of both processes and outcomes of QNTP practices came from QNTP step-by-step co-practices 3. QNTP could be integrated into individual daily living and working	1. Broad-minded nurse researcher increased participants QNTP practice satisfaction 2. Non-rigid monitoring increased cooperation and persistence in QNTP practice
Learned From Practicing QNTP Or Participant learned	1. Understanding holism balanced menopausal syndromes 2.Understanding how QNTP practice reduced menopausal syndromes	1. QNTP could be integrated into individual daily living and working 2. Practice QNTP successfully based on practical programming 3. Doing QNTP slowly contributed to more consciousness and vital energy. 4. Visualization of QNTP through meridian channels increased concentration 5. Practicing chest expansion in open air under gentle sunlight increased oxygen and vitamin D intake 6. Increased glucose and calcium intake decreased muscle and joint pains 7. Sole massages reduced headaches	Practical programming increased cooperation in QNTP practice

Table7. Many learning themes showed that the nurse researcher learnt that menopausal syndromes were a sensitive issue, and participant compliance came from faithfulness to the nurse researcher in cycle I. In addition, she also learned that trusting relationships contributed to QNTP practice continuously, and a clear

understanding of both the process and the outcomes of QNTP practice came from step-by-step QNTP co-practice. In addition, QNTP could be integrated into individual daily living and working in cycle II. Moreover, the nurse researcher also learned that broad-mindedness helped participants to have higher satisfaction with QNTP practice. The practical monitoring increased cooperation and efforts to continue QNTP practice in cycle III. Furthermore, during QNTP implementation, the nurse researcher also found that flexible practice and giving opportunity to individually adapt some exercises increased participants' cooperation with the program.

Participants learned that understanding holism and QNTP practice balanced menopausal syndromes in cycle I. In cycle II, participants learned that : 1) QNTP could be integrated into individual daily living and working ; 2) successful QNTP was based on practical programming; 3) Doing QNTP slowly helped participants gain in consciousness and vital energy; 4) Visualization of QNTP through meridian channels increased concentration; 5) Practicing chest expansion in open air under gentle sunlight increased oxygen and vitamin D intake; 6) Increased glucose and calcium intake decreased muscle and joint pain; and 7) Sole massages reduced headaches. In the final cycle, practical programming increased participants' cooperation in QNTP practice.

Therefore, QNTP contents changed from the tentative to the final QNTP are presented in Table 8.

Table 8.

Content Changes from the Tentative to the Final QNTP.

The tentative QNTP	Changes QNTP during the three cycles of implementation	The final QNTP
Orientation on three preparation techniques	Some participants asked demonstration and training should be added to the orientation period	Orientation, demonstration, and training on three preparation techniques
1)Diaphragmatic breathing with consciousness …… Repeat 36 times	Some suggested changing duration of QNTP practice from 36 rounds to be tolerable	1) Diaphragmatic breathing with consciousness' …… Repeat as long as tolerable
2) Concentration and pulling in energy …… Repeat 36 times	Some suggested changing duration of QNTP practice from 36 rounds to be tolerable	2) Concentration and pulling in energy …… Repeat as long as tolerable
3) Abdominal massage or energy retention …… Massage the lower abdomen…36 rounds	Some suggested changing the duration of QNTP practice from 36 rounds to be tolerable	3) Abdominal massage or energy retention ……Massage the lower abdomen as long as tolerable
Co-practicing and training of each technique with diaphragmatic breathing and mind intention to inhale wellness and exhale waste	Orientation lecture, co-practicing, and training in diaphragmatic breathing and mind intention to inhale wellness and exhale waste	Orientation, demonstration, co–QNTP practice, and training in each technique with diaphragmatic breathing and consciousness to inhale wellness and exhale waste
1) Horse-like Standing 2) Finger Moving ……	Notice: change from finger pressing to gentle finger movement with consciousness	1) Horse-like Standing 2) Finger Moving Notice: change to gentle finger movement with consciousness
3) Chest Expansion …… Repeat 3.2-3.3 36 rounds	Some participants suggested increasing movement intensity of both arms and reducing length from 36 rounds, to be tolerable	3) Chest Expansion …… Repeat 3.2-3.3. as long as tolerable (Increase intensity of movement as needed)
4) Place feet on the floor and ankles bending to promote vital energy …… Repeat 4.2-4.3 36 rounds	Most participants felt this exercise caused confusion. In addition, some aspects of this exercise caused joint pains, hip pains, and bone pains. Three participants needed to quit this exercise	Eliminate this exercise

Table 9. (Continued)

The tentative QNTP	Changes in QNTP during the three cycles of implementation	the final QNTP
5) Balance Heart and Kidney Qi …… 5.2 Lay the left ankle on the right knee by using the Laogong point of the right palm. Hit the Yongjoun point of the left sole 100-500 times	Some participants felt hitting …. caused noise. They replaced from hitting to pressing for 3-5 minutes	5) Balance Heart and Kidney Qi …… 5.2 Lay the left ankle on the right knee and follow with your right thumb pressing on the Yongjoun point of the left sole for 3-5 minutes (this exercise was adjusted to be more simple and practical)
5.3 Lay the right ankle on the left knee. Use the Laogong point of the left palm to hit the Yongjoun point of the right sole 100-500 times	Most participants needed to change this exercise to make it work simply and practically. In addition, they also needed to integrate it into daily living	5.3 Lay the right ankle on the left knee follow with your left thumb pressing on the Yongjoun point of the right sole for five minutes (this exercise was adjusted to be more simple and practical)
6) Sitting Meditation	One participant suggested reclining meditation as it was more comfortable	6) Sitting meditation or lying meditation (this exercise was adjusted to be more simple and comfortable)
The tentative QNTP consisted of six integrated exercises with directed with a fixed duration of movements thirty rounds of practice *Context:* day time in natural atmosphere		The finalized QNTP consisted of five exercises practiced with flexibility practice as tolerable, and integrated into individual daily life. *Context:* Self-directed learning, both indoors and outdoors, from waking until bedtime in natural air flow under soft sunlight and in a quiet atmosphere
Focus on empirical knowledge from philosophies and experts' commentaries		Focus on empirical, personal, ethical, and athletics knowledge from philosophies, experts, and women with menopausal syndromes (the participants)
Participant practice 1-1.5 hours daily (fixed practice), at least 3 times or 3 days weekly - A period of practice of at least 12 weeks	*Participant practice* Full QNTP practices (8 cases) -one to seven days per week -At the beginning nine participants practiced QNTP in the evening and at night. Only one practiced it in the mornings - At the end of QNTP practice, the other five participants were	*Participant practice* 1) Simple, practical, and flexible exercises during the period of practice 2) Integrate into daily living and working 3) Free choice of any exercise as needed 4) Program emphasis on practicing in a clean and quiet atmosphere

Table 9. (Continued)

The tentative QNTP	Changes in QNTP during the three cycles of QNTP implementation	A final QNTP
	done chest expansion in the morning to gain more oxygen intake After QNTP was modified, most participants changed to both indoors and outdoors QNTP practice. <u>During some parts of QNTP practice,</u> two participants chose one exercises and practiced them many times daily in order to correct their health problems	

As seen in Table 9, the final components of QNTP consisted of six main activities of visualization, breathing, slow body movement with consciousness, health education in holistic nutrition and the environment, the nine nursing activities, and the six participant activities (see detail in APPENDIX-H).

Phase III: QNTP Articulation

During this phase, the nurse researcher articulated a QNTP model on participatory action research which is presented in Figures 13-14, and a final QNTP for women with menopausal syndromes which is presented in APPENDIX-H

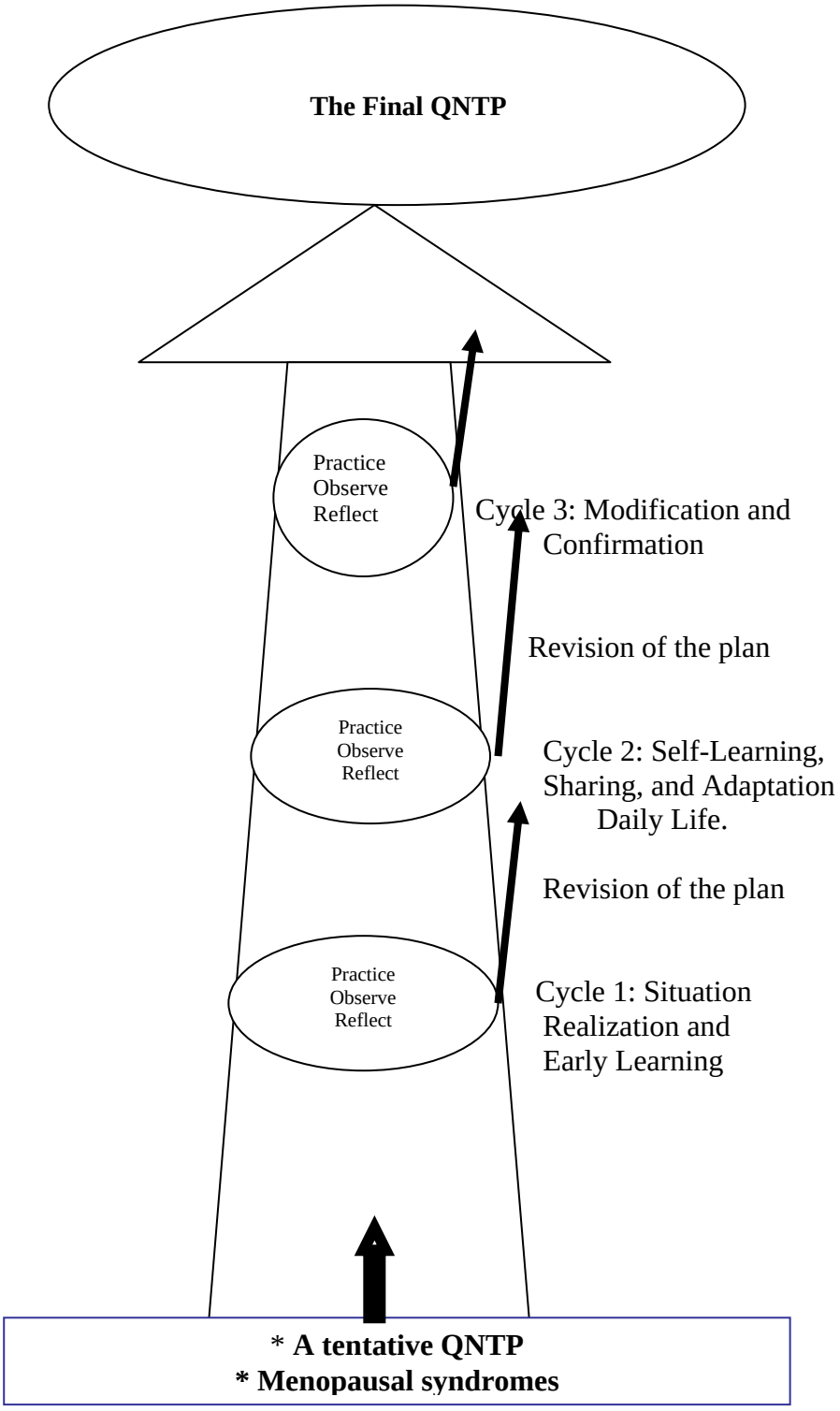
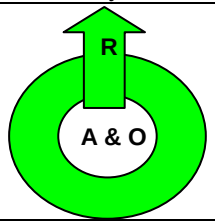
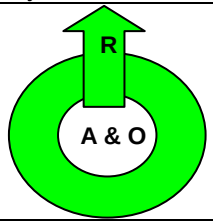
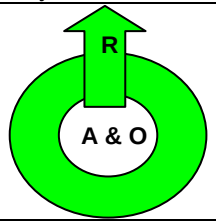


Figure 13. Qigong Nursing Therapeutic Program Implementation Model

Figure 13 showed the overall QNTP in participatory action research process which consisted of three learning cycles.

	Cycle I : Situation Realization & Early Learning	**Cycle II: Self-Learning, Sharing, & Adoption into Daily Life**	**Cycle III: Modification & Confirmation the QNTP**
The expected outcomes - transitioning	<u>1. Decreasing menopausal syndromes and its impacts.</u> 1.1 Decreased headaches 1.2 Decreased chest tightness 1.3 Decreased abdominal distention, constipation 1.4 Decreased pains in the extremities 1.5 Decreased physical weakness 1.6 Decreased emotional disturbances of anger, irritability, & anxiety <u>2. Improving health</u> 2.1 Felt healthy 2.2 Increased efficiency of breathing 2.3 Facilitated relaxation 3. Increased efficiency at work	<u>1. Decreasing menopausal syndromes and its impacts</u> 1.1 Decreased abdominal distention 1.2 Decreased hot flushes 1.3 Decreased headaches 1.4 Decreased frequency of urination 1.5 Increased body temperature and vital energy 1.6 Decreased physical weakness 1.7 Gradually decreased muscle weakness and skin defects 1.8 Decreased emotional disturbances of irritability, tiredness, felt bad at skin defect <u>2. Improving health</u> 2.1 Felt more healthy and stronger 2.2 Increased efficiency of the respiration 2.3 Increased waste excretion 2.4 Increased concentration & memory 3. Increased efficiency at work	<u>1. Decreasing menopausal syndromes and its impacts</u> 1.1 Increased sleep efficiency 1.2 Decreased headaches 1.3 Decreased heavy sweating 1.4 Slightly decreased skin dryness 1.5 Decreased severe muscle pain 1.6 Decreased emotional disorders of loss of social interest & nervousness <u>2. Improving health</u> 2.1 Increased positive self-concept 2.2 Decreased stress and anxiety 2.3 Increased efficiency of the respiration 3. Increased efficiency at work
Participatory Action Research			

Participant strategies	1. Situation realization and self awareness 2. QNTP learning and training 3. Reflection and sharing experiences	1.QNTP learning and monitoring 2.Requiring information and consultation on integrating QNTP into daily life 3. Reflecting and sharing experiences.	1. Modifying QNTP, self-directed learning and monitoring. 2.Requiring additional information and empowering QNTP practice 3. Reflecting and sharing experiences
Participant activities	<u>Evaluating activities</u> 1. Understanding menopausal syndromes, impacts, and QNTP healing 2. Reflection on QNTP practice, outcome and influencing factors 2. Suggestion for QNTP revision <u>Learning activities</u> 1. Co establishing mutual goals 2. Learning and monitoring QNTP 3. Asking information and consultation	<u>Evaluating activities</u> 1. Careful reflection on QNTP practice, outcome evaluation, and influencing factors. 2. Suggestions for QNTP revision <u>Learning activities</u> 1. Self directed learning and, monitoring QNTP 2. Asking for formation, consultation and empowering 3. Integrating QNTP into daily life	<u>Evaluating activities</u> 1. Reflection on food consultation and the modified QNTP practices 2. Suggestions for sustainable the QNTP <u>Learning activities</u> 1. Self-directed learning, and monitoring the modified QNTP 2. Asking for additional information and empowering for QNTP practices
Nursing strategies	1. Raising participants' self awareness 2. Facilitating information 3. Evaluation QNTP practice	1. Supporting self directed learning and empowering QNTP learner 2. Helping participant adapt QNTP into daily life 3. Evaluation QNTP learning	1. Facilitating QNTP modification and testing 2. Supporting additional information and empowering QNTP practice continuously 3. Evaluation QNTP practice
Nursing activities	<u>Evaluating activities</u> 1. Understanding the participants' background. 2. Evaluation QNTP practices, outcomes, and influencing factors 3. Asking for QNTP revision <u>Facilitating activities</u> 1. Establishing trusting relationships 2. Introducing QNTP contents, and conducting QNTP training. 3. Establishing mutual goals	<u>Evaluating activities</u> 1. Evaluation QNTP practice, outcomes, and influencing factors 2. Asking for QNTP revision <u>Facilitating activities</u> 1. Maintaining a trusting relationship 2. Sharing ideas and co- practice 3. Recognizing participant abilities and accountability in learning	<u>Evaluating activities</u> 1. Evaluation the modified QNTP practice, outcomes, and influencing factors 2. Asking for sustainable QNTP <u>Facilitating activities</u> 1. Facilitating QNTP modification 2. Recognizing participant abilities and accountabilities in self-directed learning and monitoring the modified QNTP practice

	4. Providing information and consultation	4. Providing information for self-directed learning 5. Consultation how to integrate QNTP into daily life	3. Empowering on QNTP practice 4. Providing additional information
Influencing Factors	<u>Promoting factors</u> 1. A positive believes and attitudes toward natural therapy 2. Intention to follow QNTP	<u>Promoting factors</u> 1. A positive believes and attitudes toward natural therapy 2. Self recognize lack of vitamin D and calcium 3. Practical programming	<u>Promoting factors</u> Practical programming accounting for flexible periods and the free choosing of exercise for practice
Contents of practice	The seven sections of QNTP orientation Three preparatory exercise: diaphragmatic breathing, concentration and pulling energy, abdominal massage Six exercises for reducing menopausal syndromes 1) Horse-like Standing 2) Finger Moving 3) Chest Expansion 4) Promote legs Qi 5) Balance Heart and Kidney Qi 6) Sitting Meditation Orientation & Training QNTP	Six exercises for reducing menopausal syndromes 1) Horse-like Standing 2) Finger Moving 3) Chest Expansion 4) Promote legs Qi 5) Balance Heart and Kidney Qi 6) Sitting Meditation Self learning and Adapt program into daily life	Five exercises for reducing menopausal syndromes 1) Horse-like Standing 2) Finger Moving 3) Chest Expansion 4) Balance Heart and Kidney Qi 5) Sitting or lying Meditation Modified and conducted QNTP as tolerantly and confirmation

P= Participant, R= Reflecting, A = Action, O= Observing, QNTP= Qigong Nursing Therapeutic Program

Figure 14. Detail of Qigong Nursing Therapeutic Program Implementation Model

Figure 14 showed the overall detail of QNTP implementation on action research process.

Discussions of QNTP Implementation

Seven areas of QNTP discussions consisted of: 1) setting and participants, 2) menopausal impacts and menopausal syndromes before entering QNTP practice, 3) nursing approaches, 4) outcomes evaluation, 5)factors influencing QNTP programming, 6) programming changes, and 7) a negative case.

Discussion of Setting and Participants

All participants practiced QNTP in the quiet and natural air flow because all of them stayed in quiet and clean natural areas. This setting agrees with the requirements of effective Qigong practice (Yang, 2003). In addition, all participants had also followed natural therapies through vegetable and fruits nutrition, mindfulness meditation and exercise. In addition, most participant were Thai Chinese. These are reasons why all of them had a positive attitude and positive belief in QNTP and collaborated on QNTP practices regularly. Moreover, all participants were well educated and were nurses. This may be one reason why details given by them were clear and more relevant.

Discussion of Menopausal Impacts and Syndromes before Entering QNTP

Two menopausal impacts were found in this study: physical weakness and decrease of working ability. Physical exhaustion was the most reported in many studies as for decreased work efficiency, it wasn't clearly mentioned. However, most reported that menopause decreased concentration and memory (Ieumsawadikul, 1998; Mongkoldee, 2000). These may have caused of decreasing working ability.

Regarding three menopausal syndromes before entering QNTP, all participants expressed vasomotor instabilities, emotional difficulties, and somatic disturbances.

These finding agree with many studies (Ieumsawadikul, 1998; Mongkoldee, 2000; Obemeyer, Schulein, Haj, & Azelmet, 2002; Sierra, Hidalgo, & Chedraui, 2004).

Discussion of Nursing Approaches

Discussion of nursing evaluation included careful evaluation and asking for suggestions as follows:

1. Careful evaluation of QNTP practice outcomes and influencing factors. were done overall in all three cycles of QNTP practice. It was one of the essential activities of the participatory action research process. The focal activity was respecting participant's feedback for change. Participants' conscious reflection helped them gain direct problem-solving strategies which were coverage, conciseness, and relevance to QNTP practice. In addition, data from participant's reflection increased personal knowledge beyond expectation. Moreover, conscious suggestions for program revision for daily living directly affected programming practicality and sustainability.

2. Asking for suggestions. This provided information for program revision and confirmed the real modification aspects that participants really needed for the next trial. In addition, careful suggestions for program revision for daily lives directly affected programming practicality and sustainability. Moreover, careful suggestions also reduced time-consuming, redundant portions and time strains of the program. Furthermore, participants consciously reflected and suggested in each cycle, displaying proper evaluation of the modifications and new knowledge for sustaining QNTP.

Discussion of nursing facilitations included establishing and maintaining trusting relationship, understanding participants' background, introducing QNTP and training, establishing mutual goals for QNTP practice, providing information,

consultation and empowering, recognizing participant abilities and accountabilities, and supporting self-directed learning and monitoring QNTP in daily living as follows:

1. Establishing and maintaining trusting relationships. The reasons for establishing trusting relationships in the first cycle and maintaining trust in the following cycle was an essential activity of this study because it established participants' faithfulness, commitment and cooperation in QNTP practice continuously. In addition, trust also helped assure validity and reliability of research data which was obtained from the study. These statements were supported by trust in positive expectations about another party's motives in risky situations (Das & Teng, 1998). In addition, trust also defined confidence in the other party's reliability and integrity. Moreover, it is the foundation of cooperation because it prohibits behaviors that harm other partners (John, 1984). Furthermore, trust is also a cumulative process of repeated and successful interactions. In marketing researchers defined trust as suggesting integrity, reliability, benevolence (Ganesan, 1994; Kumar, Scheer, & Steenkamp, 1995), and friendship between partners (Ganesan, 1994). Therefore, in this study, most participants committed and cooperated in QNTP practice continuously.

2. Understanding participants' background, menopausal syndromes, impacts and factors affecting QNTP practice. These guided nursing approaches fitted to individual needs. Because nursing approaches were dynamic supervisory situations, it was necessary to measure situational awareness with regard to specific events. In addition, understanding a situation by situational analysis helped the nurse-researcher capture a person's awareness relevant to specific activities at a particular point in time (Patrick, James, Ahmed, & Halliday, 2006).

3. Introducing QNTP and training. In this study, the nurse researcher introduced QNTP to build up knowledge about QNTP and instill a sense of practice. In addition, training increased practical skills which would increase confidence in QNTP practice. Moreover, the nurse researcher also co-practiced QNTP to gain insight for coaching participants during self-QNTP practices later. Furthermore, many participants showed that training improved practical abilities such as increasing competency of self-health practice (Liemponsaphutti, 1998), increasing compliance (Grogaard & Torp, 2009), and increasing problem-solving knowledge ability (Somchan, 2003).

4. Establishing mutual goals for QNTP practices. Setting mutual goals is important processes of a democratic atmosphere in participatory action research. In addition, it was one of the critical variables of King's goal attainment theory because goals are achieved in almost every situation and represent, outcomes in the transaction between nurse and participants (Johnson & Webber, 2005). Moreover, mutual goals also assist nurse and participants to adjust their decision base on the capacities, limitations, and priorities of their health (Alligood & Marriner-Tomey, 1997). For this study, participants committed to cooperate to strive for goal attainment. In addition, it also transformed participants into in QNTP which affected the practice throughout. All of these statements were supported by masterful achievement.

The goals achievement mastery pointed to positive associations between various cognitive, emotional and behavioral outcomes. These included self-regulated learning, adaptive coping with difficulty and failure, as well as positive well–being (Dweck & Leggett, 1988). Therefore, the mutual goals of this study included sharing and understanding goals among all parties involved as a criterion for success

5. Providing information, consultation and empowerment. Information-giving, consultation, and empowerment were related to overall QNTP implementation. In cycle I, information supporting, consultation and empowering helped participants understand QNTP by explaining and releasing inhibiting factors in QNTP practice. In cycle II, information-giving (reflective informing) also regulated and promoted participant self-QNTP practices and regulated QNTP practices throughout. The other additional informational support at the end of the program increased QNTP practice efficiency which could stimulate optimal health. The study information-giving that supported QNTP practices throughout were information-giving that improved students' performance (Lo, Lane, & Malloy, 2005), increased patient adherence and positive health outcomes (Bartlett et al., 1984), and increased satisfaction (Hall, Roter, & Katz, 1988).

In this study, consultation was also an essential activity in all three cycles of QNTP implementation in learning exchange, In addition, consultation also helped participants solve their individual inhibiting factors through adapting QNTP into daily life, and motivating them to learn QNTP continuously. The studies of consultation which promoted QNTP practice throughout were consultation increased learner satisfaction and greater autonomy (Goodchild, Skinner, & Parkin, 2005); increased positive motivation to learn (Hampton & Reiser, 2004), improved social skills, and increased problem solving abilities (Han, Catron, Weiss, & Marciel, 2005).

This study also showed that nurse empowered participants continued their QNTP practice. In addition, empowerment gave them more confidence to continue the program in spite of self limitations. The studies of empowerment which supported QNTP practice throughout showed that empowerment increased a patient's active role in treatment decision-making (Davision & Degner, 1997); increased inner strength to

levels of self efficacy; increased confidence in performing relevant self care in successful self-management (Anderson et al., 1995; Luoto & Katajisto, 1998), and compliance to treatment and changing behavior to promote physical and psychological well-being (Lev & Owen, 1998; Tsay & Healstead, 2002).

6. Recognizing participant abilities and accountabilities. In the QNTP learning atmosphere, the nurse-researcher recognized participant abilities and accountabilities in QNTP learning through respecting participants' rights and protecting them from disrespectful behavior from start through the end of QNTP practice. These activities supported a democratic environment which viewed as respectful of and valuing of actively encouraged participation in the decision-making process. Participants would be investing more in their learning and would take greater responsibility for their behavior. In addition, it encouraged a sense of ownership, belonging and engagement, which were beneficial for QNTP work out. In addition, the democratic atmosphere also emphasized cooperation, mutual goal setting, and shared responsibility. The learners in this environment behaved with much more self-control, having internalized the values of their environment. Many research studies showed that this climate improving attendance, academic progress and behavior.

7. Supporting self-directed learning and monitoring QNTP in daily living. Self directed learning and integration into daily living were essential techniques in adult education. It helped participants conduct QNTP purposefully and satisfactorily. The reasons of choosing self-directed learning in this study was that self directed learning is a form of voluntary, independent, and continuous learning for an individual (Guglielmino, 1977) which has six factors, including effective learning, fondness for learning, learning motivation, active learning, independent learning, and creative learning. Participants would learn with challenged self responsibility, self-

assurance and good planning (Teng, 1995). Additionally, self-directed learning better enhanced participants' individual learning needs while still functioning to meet the mutual goals. Moreover, self-directed learners would give participants' opportunities to better construct their own experiences on their own learning (Elshout-Mohr et al., 2000). Furthermore, self-directed learning might have helped them adapt to changing environments and to enhance creativity (Ramsey & Couch, 1994).

Conclusion of nursing approaches

Nurse facilitating activities were important not only for increasing participants QNTP learning ability but also to help participants' problem solving the inhibiting factors and adapt QNTP into daily life and work. In addition, nursing facilitating activities of consultation also mentally supported participants in their QNTP practices and daily living.

Discussion of Outcomes of QNTP practice

The decreasing of three menopausal syndromes and improving health were outcomes of QNTP practice.

Three menopausal syndromes included vasomotor instability, somatic disturbance and emotional disorders.

1. Vasomotor instabilities. Most vasomotor instabilities further decreased after the triggering cycles respectively. Headaches further decreased in cycles I and II. Hot flushes and heavy sweating further decreased in cycles II and III, chest tightness further decreased in cycle I and disappeared in cycle II, the symptom of difficulty in sleeping decreased only in cycle III. Reducing vasomotor instability was supported by the mechanism of Qigong which shifted the autonomic nervous system toward a parasympathetic-sympathetic balance. In addition, these findings were also supported by many studies of Qigong on reduced neurotic symptoms (Leung & Sinhal, 2004),

reduced insomnia (Lee, Yang et al., 2005) and increased sleep activity (Thinhuatoey, 2003), reduced discomfort (Lee & Jang, 2005), increased cardiac function as energy expenditure and cardio-respiratory responses (respiratory rate, heart rate).

2. Somatic disturbances. Most somatic disturbances were decreased differently after QNTP practice. Abdominal distention and constipation were further decreased in cycles I and II, whereas frequent urination and skin problem were decreased in cycle II. Nipple pain disappeared in cycle II followed by crawling disappeared in cycle III. On the other hand vaginal dryness and dysparurea didn't change. The finding of reduced somatic disturbances was also supported by Qigong increased efficiency of the waste disposal systems. Qigong helped the lymphatic circulation to eliminate toxins, metabolites, and pathogenic factors from cells and tissues. In addition the diaphragmatic breathing also helped abdominal muscles, urinary muscles and perineal muscles to strengthen. All of these combine support to excrete waste products from the body. Moreover, these findings were also supported by many studies of Qigong on reducing pain (Chen & Lui, 2004; Lee, Yang et al., 2005), and decreasing musculoskeletal disabilities (Lee, Lee, & Kim, 2003),

3. Emotional disorders. Most emotional disorders further decreased in precipitating situations and the early learning cycle, Some emotional difficulties were reduced through cycle II, whereas a few were decreased in cycle III. One woman frightening disappeared in the end of cycle I. Only one symptom of loneliness didn't change after QNTP practice. These findings were supported by mechanisms within Qigong on increased self-psychological regulation. Qigong not only directs body restoring physiological functional equilibrium but also leads to balance of psychological disorders (Zhang, 2004). During Qigong the body is in a trance state, one subjectively feels free, calm, and open minded. These positive emotional states

fully recharge a person suffering from psychological stress, objectively changing neurological endocrine functions (Zhang,). In addition, these were also supported by many research studies of Qigong on reduced psychological disturbances such as reduced anxiety (Chen & Lui, 2004), reduced negative moods (Chen & Lui, 2004; Lee, Kang, et al., 2004), reduced fatigue (Lee, Yang et al., 2005; Lee & Jang, 2005), reduced depression (Gaik, 2003; Lee & Jang, 2005), improved psychosocial benefits (Tsang, Mok et al., 2003), increased calmness (Lee, Yang et al., 2005), a livelier appearance (Pirason, 1998), increased self-efficacy and cognitive functioning of understanding, and analysis (Lee, Yang et al., 2003; Lee, Lim, & Lee, 2004), increased concentration (Pirason), and increased positive social behavior (Witt et al., 2003).

Most emotional difficulties decreased sharply in the initial learning cycle, and slowed down in the following cycles. Probably during the early learning stage, participants may have felt hope. Therefore, it may have reduced emotional difficulties. However, as times went on fewer emotional problems decreased because participants could not clearly identify as to whether their condition had improved or not. It may have been due to the limitations of individual participant.

In addition, a further outcome was evident in improved health through general healthy tonus and strength, relaxation and freedom from tension, increasing concentration and memory power from psychological improvement, increased efficiency of the respiratory function and increased body temperature and vital energy as well as triggering better sleep from decreased vasomotor instabilities. Moreover, increased waste excretions through somatic disturbance improved overall energy.

Health and strength would decrease physical and mental weakness and increase working efficiency. These findings were supported by many studies of

Qigong on increasing cellular immunity of monocytes and lymphocytes while decreasing NK cell number (Lee et al., 2003; Thinhuatoey, 2003), gene expression of normal neutrophiles prolonged life span while the inflammation of neutrophiles accelerated death significantly when compared with healthy controls,(Lee, Lim et al., 2004; Li, Li et al., 2005), increased NK cell activity (Kimura et al., 2005; Lee, et al.,, 2001), increased neutrophiles' functions (time of super-oxide generation, and time of adhesion); increased neutrophiles super-oxide generation, and adhesion capacity (Lee, 2004); besides hormonal immunity was evidenced by increased plasma level of growth hormone, balanced insulin-like growth factors (Lee et al., 2004), increased beta endorphin (Ryu, 1996), normalized testosterone and estrogen levels (Ye, 1990 and Kaung, 1998 cited by Sancier & Hole, 2001), decreased plasma concentration of ACTH, cortisol (Ryu, 1998), and aldosterone (Lee et al., 2004), and decreased urinary catecholamine levels (epinephrine, norepinephrine and metanephrine) significantly (Lee, Lee, & Kim, 2003). Furthermore, increased efficiency of respiratory function was supported by many studies which increased ventilation increment (Chao et al., 2002; Lee, Lee, Choi, & Chung, 2003; Reuther & Aldridge, 1998) showed oxygen velocity and oxygen pulse both at a peak when exercise; and ventilator threshold of the Qigong group was higher than the control group at $p<.05$ (Lan et al., 2004), as well as reduced respiratory syndromes (Sancier, 1999).

Discussion of Factors Influencing QNTP Practice

Four promoting factors of QNTP practice were discussed:

Firstly, positive belief and attitude toward natural therapy led most participants to enter QNTP volunteer orientation, training, and collaborated by both training and practicing continuously. Observations related to this theme showed that most participants had positive attitudes to complementary alternative medicine

(CAM) and most used it (Chu & Wallis, 2007), although many reported attitude had little effect on health.

Secondly, intending to learn QNTP brought participants into QNTP learning and practice continuously.

Thirdly, participants self recognized their lack of calcium and vitamin D and tried to expose skin to sunlight at the certain times. Moreover, it also warned them to take calcium with vitamin D supplements that would help them to be healthy.

Fourthly, QNTP was conducted with participatory action research which emphasized collaboration, problem solving with flexible circumstances, changing to democratic atmosphere, theory development, and public results.

Therefore, QNTP implementation followed all concepts and characteristics of participatory action research helped participants conduct QNTP continuously.

On the other hand, an inhibiting factor was programming impact due to repetition stress from some exercises which brought boredom to participants, who lacked concentration and control of ongoing QNTP practice. In addition, participant's daily work caused most of them to practice QNTP in the evening or at night, which took away any chances to expose their skin to sunlight and to breathe in rich outdoor oxygen. Participants who have severely limited time need to adapt QNTP practice into their individual daily activities or working style.

Discussion on Exercises and Programming Changes

The exercises changes

The exercises for reducing menopausal syndromes have changed from six exercises to five exercises with the reason that the exercise fifth promoting leg Qi through placing heels on the floor and bending ankle exercise had caused leg clamp, bone and hip pain. In addition, this exercise also had caused participants to be

confusion during QNTP practice. Therefore, most participants needed to eliminate this exercise. For the other exercise such as the finger moving also caused bore of some participants however, after adapting the period of QNTP practice as tolerable, most participants accepted and remained this exercise in the program.

The programming changes

At the start, each exercise of QNTP programming (section 7) for reducing menopausal syndromes was practiced in a fixed period following Qigong experts' experiences. Then the program went on individually, the limitation and inhibit factors caused each participant to adapt QNTP practice from being of fixed duration to be as tolerable as possible in order to maintain QNTP practice continuously. This followed participatory action research assumptions to turn any flexible practices to participants advantages (Rory, 1998). Thus, all participants continued QNTP practice from the start through the end of the program.

Discussion of Negative Case

One woman showed negative outcomes (bone pain, wrist pain, and joint pain) from QNTP practice during the program until its end. The nurse researcher who identified this case had observed her three times during QNTP training in the first two weeks. After that she lost contact about two months long as she had a long meetings and long vacation in Bangkok. During the lost of contact, she sprained her ankle and had much stress from her daily work (caring for bomb victims and entertaining visiting government official). This condition caused the researcher to lose contact with her for a period. This might have caused her to have negative feelings toward the researcher and toward QNTP practice. However, she still kept her commitment to QNTP practice. She also gave many suggestions for program revision and sustaining.

This condition warned the researcher to carefully stay in touch with participants no matter problems occurred during the process.

CHAPTER 5

CONCLUSIONS, CONTRIBUTIONS, AND RECOMMENDATIONS

In this chapter, the researcher presented the key conclusions of program development, contributions for program application, recommendations for further researcher study, and addressed the strengths and limitations of this study.

Conclusions of this Study

QNTP was developed with three phases: 1) a tentative QNTP development phase; 2) QNTP implementation phase, and 3) QNTP articulation phase.

A tentative QNTP was developed underpinning Buddhist, Chinese, and holistic nursing philosophies, consulting Qigong expert experiences, and then carrying out a trial with the pilot study. Therefore, seven contents sections, six primary nursing approaches and five primary participant activities were included.

Then the tentative QNTP was implemented through technical Participatory Action Research in ten menopausal women. Three cycles emerged: 1) situation-realization and early learning, 2) self-learning, sharing, and adapting into daily life, and 3) modification and confirmation. There were two sets of lessons learned, nine nursing approaches, and six participants' activities included.

Nine nursing approaches composed of six facilitating and three evaluation activities. Six facilitating activities included of: 1) establishing and maintaining trust relationships, 2) introducing QNTP and conducting training, 3) mutual goal setting and co-practicing, 4) recognizing participant's abilities and accountability in QNTP learning, 5) providing information, consultation and empowerment for QNTP practice,

6) facilitating QNTP modification and testing. Three evaluation activities included of: 1) understanding menopausal suffering, its impacts and QNTP healing, 2) evaluating QNTP practices, outcomes, and influencing factors, and 3) eliciting suggestions for program revision or sustainability.

Six participants' activities composed of three learning and three evaluating. Three learning included of: 1) establishing mutual goal of learning and monitoring QNTP continuously, 2) self learning and adapting QNTP into daily living, 3) asking information and consultation, and empowering for continuous QNTP practice. Three evaluating included of: 1) understanding situations and self awareness, 2) careful reflection on QNTP practice, and 3) making suggestions for program revision and sustainability.

Two sets of lessons learned were: Firstly lessons learned from program management. Participants' compliance came from faithfulness to the nurse-researcher. In addition, a trusting relationship, greater positive attitudes and beliefs in natural therapy, the intention to learn more and to gain benefits from QNTP, practical programming and manageable scheduling contributed to continuous QNTP practice. Moreover, the nurse researcher's co-p practiced QNTP step by step with participants to increase understanding of both process and outcomes.. Furthermore, mental support increased participant satisfaction. Secondly lessons learned from QNTP practiced were that holistic healing methods could balance menopausal syndromes. In addition, successful QNTP practice based on (1) intentional and flexible periods of QNTP practice; (2) doing QNTP slowly gained more consciousness and energy; (3) QNTP directed visualization along the meridian channel is more dynamic for concentrating; (4) practicing chest expansion in open air under gentle sunlight caused greater oxygen and vitamin D gain; (5) increasing glucose and calcium intake decreased muscle and

joint pain; and (6) sole massage reduced headaches. Moreover, QNTP could be integrated into daily life, and daily work. Furthermore, the practical programming increased cooperation and relaxation.

The outcomes of three emerging cycles showed that nine participants out of ten experienced decreased vasomotor instabilities and decreased somatic disturbances, seven participants out of nine experienced decreased emotional difficulties, and seven out of ten subjects reported improving health. However, only one reported no change.

Therefore, the final QNTP was articulated with seven QNTP contents, nine nursing approaches and six participants' activities. The seven contents were: 1) life cycle and holism; 2) the nature of menopausal changes and their impacts; 3) existing knowledge of menopausal management today; 4) the concepts of Qigong, QNTP and methods of QNTP practice; 5) self preparation and essences for QNTP practice, 6) the three preparatory body-mind techniques of QNTP practice: diaphragmatic breathing, concentration on pulling in environmental energy as well as abdominal massage with energy retention; 7) the five integrated Qigong nursing therapeutic exercise for reducing menopausal syndromes. Each exercise of the five was integrated with three essential components of body movements, diaphragmatic breathing, and visualization in a natural quiet atmosphere with nutritional and environmental advice. In addition, there were nine nursing approaches in two sets of facilitating and evaluating as well as six participants' activities in two set of learning and evaluating. To reiterate, the Qigong Nursing Therapeutic Program composed of empiric and athletics knowledge from Buddhist, Chinese, and holistic nursing philosophies as well as the evidence base of literature reviews. In addition, it is also composed of personal and ethical knowledge from nine nursing approaches and six participants' activities. Thus, this program is

suitable to contribute to an alternative non hormonal menopausal symptom management for both menopause and peri-menopause.

Contributions for Program Applications

The findings of this study provide a QNTP for application to various nursing settings, and contribute nursing knowledge of program development through Participatory Action Research. In addition, the outcome of the findings also flashes researcher to extend QNTP into menopausal prevention and promotion program.

Contributions for Clinical Nursing Application

If a clinical nurse aims to apply QNTP as an alternative in nursing service, she should clearly understand holism, the seven QNTP contents, and nine nursing approaches which the researcher has written in detail in the final QNTP manual as seen in APPENDIX-H. Then the clinical nurse should experience QNTP practice step by step for at least two months. The movements within the program will teach the nurse self realization of calmness and greater health. In addition, she should accept this program as one of palliative care. Severe menopausal disturbances aren't included in this program. Moreover, she should also understand the concepts of Qigong, teaching techniques, and evaluation techniques.

There are two types of training outcome evaluation: summative and formative. The type of evaluation for training is based on the details of the trainer's needs. The contents of outcome evaluation are not only measured the menopausal sensations, but also includes participants' learning processes. The process of decreasing menopausal syndromes, and to improve health comes after self realization, self recognizing, self

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caring, and self healing. The process of self healing is time consuming. Therefore, mutual goal planning QNTP is essential for program achievement.

During QNTP practice, participants who were in the mindfulness meditation group and those in the non mindfulness experienced a few differences. The mindfulness group after taking three days orientation and training need some explanation and consultation to adapt it into their daily life, as well as some discussion to confirm their actions. For the non mindfulness experience group, the process of training at the start was longer, and the participants needed careful explanation on integrating techniques and empowerment.

Contribution for Application by Nurse Educators

The nurse educator who needs to develop a curriculum for teaching or training QNTP should further explore the three underpinning philosophies. Testing the program by extending studied on a large scale to the general menopausal group to determine some details that have to be addressed in program trainings and reference for general usage. The nurse may approach the training process as follows:

1. Assessing learner's attitude, knowledge of the three philosophies, and experience of meditation.

2. Presenting seven QNTP contents sections to the learner.

3. Setting mutual goals, scheduling training with the learner.

4. Giving information, explanation, and discussion during training.

5. Summative evaluating training activities and the outcome of QNTP performing abilities.

Contributed Nursing Knowledge for Program Development

QNTP is developed underpinned by thoughtful philosophies, consulting expert's experience, and technical participatory action research with peer review. These

are research techniques to develop new nursing knowledge in the present and the future. The important point of this nursing innovation is safety in practice. Therefore, the nurse developer should be eager and alert to all the knowledge development. A lot of checking should be done by various experts, both eastern and western for both validation and reliance. Therefore, this research design study is valuable for nurse developers learning as how to develop new nursing programs in the future by thinking about relevant philosophy or expert's experience in the further.

Contributed Extending QNTP for Menopausal Prevention

According to the findings QNTP included improved physical and mental health. Therefore, researcher would like to extend this program for wider usage in menopausal prevention program.

The program application for menopausal prevention and should include the following contents: The explanation of life in middle age and holism. The explanation of QNTP practice section 1-7 especially nutritional and environmental advice, three QNTP preparation techniques, and five integrated exercises for reducing menopausal syndromes. The details of the contents is presented in APPENDIX-H

In addition, the researcher would like to offer suggestions for program application as follows:

1. Participants should be those who have positive attitudes toward and belief in Qigong or natural therapy, with the intent of learning QNTP for reducing their menopausal syndromes.

2. Trainer or coach should be clear about the presentation of the seven sections in the contents, ability to create respect ability to explain the details of the program and coach participants along the same lines.

3. Five criteria for programming QNTP are as follows:

3.1 Menopausal syndromes and impacts will decrease or disappear while participants practice QNTP with consciousness and continue doing so long enough to develop self-healing.

3.2 QNTP practices don't affect long term menopausal syndromes or almost permanent damaging condition such as bone pain.

3.3 Each nursing facilitating activity such as creating trusting relationships, information giving, consultation, co practicing and empowering affect continuous and sustainable QNTP practice to correct menopausal syndromes and impacts. In addition, the promoting factors of QNTP such as positive attitude toward learning, self recognizing lack of calcium and vitamin D, and practical programming also affect QNTP practice continuously.

3.4 Although QNTP was developed for reducing menopausal syndromes and their impacts in the early transitional stage of menopause (reducing vasomotor instabilities, emotional disorders, and somatic disturbances). However, this research finding showed that QNTP not only reduced menopausal syndromes and impacts, but it also improved participants' health. Therefore, this program may contribute to general menopausal syndromes alleviation in the peri-menopause which needs further research to prove .its efficiency.

Recommendations for Continuing Research Studies

. Four recommendations for continuing research studies are:

1. Testing the finalized QNTP in a quasi study for the general menopausal group in order to promote QNTP to be of general therapeutic usage.

2. Extending the final QNTP for health promotion and prevention of menopausal syndromes in the general peri menopauses through quasi study.

3. Replicating this QNTP with technical Participatory Action Research on endopause and other minor discomforts to promote health, to release muscle pain and to prevent joint stiffness.

4. Choosing some exercises of the final QNTP such as horse like standing to promote leg strengthening, chest expansion to increase respiratory function for the long term menopause or the elderly.

Strengths and Limitations of this Study

This QNTP was conducted directly by health professional participants who intended to test and prove the efficacy of Qigong Nursing Therapeutic Program. Therefore, data of this study is valuable for further program elaboration. In addition, maintaining the trusting relationships and freedom of discussion also proved helpful in moving the program forward. However, this kind of implementation is limited to a particular setting for such a group or to groups which have similar context. Application to the general menopause setting is limited. Moreover, this final model was mostly developed by the researcher and health care providers. In addition, to develop a new nursing program with multiple philosophies and participatory action research is time consuming. Therefore, this study could not include sustainable program evaluation.

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APPENDICES

APPENDICE-A

List of Experts

Three consultants for QNTP development

1. Mr. Yang Pai-Serng

(Traditional Chinese medical doctor and Qigong healer)

2. Associate Prof. Dr. Arphon Chuapraprisilp

3. Miss Pakjira Benjapanya (Nutritionist)

Three examined the validity the QNTP and menopausal lists.

1. Dr. Suvipa Boonyahotara MD.

2. Assoc. Prof. Warinee Ieumsawasdikol

3. Assist. Prof. Wimonrat Chongchareun

APPENDICE-B

Consent Form for the Participant

You are invited to participate in the program "Development of a Qigong Nursing Therapeutic Program for Women with Menopausal Syndromes: A Participatory Action Research". My name is Srinuan Osotsatian. I am a doctoral candidate at the Faculty of Nursing; Princes of Songkhla University. The expected of this study outcome will gain a new nursing program for the menopause. I hope it will be benefited for nursing approach and other health professionals to provide the more appropriated caring for the menopause.

This tentative Qigong Nursing Therapeutic Program (QNTP) has checked for early safety by menopausal health providers. There is no cost and no any financial reward to the participants. Participants of this study will be trained with this tentative QNTP and require to commit for self practice follow this tentative QNTP 3 hours a week for three months long. In addition, each month self report and personal interview will be take place.

If you agree to participate, please complete a set of questionnaires. This questionnaires will take you approximately 30-40 minutes to complete. Please complete this questionnaires yourself, since the accuracy of this study depends upon your individual responses.

Participants of this study should not be harm and discomfort. You can withdraw from the study at any time. You are guaranteed anonymity each information as you rises. Therefore, all you responses will be confidential and you will not be identifiable in any way in the report of this study.

If you have any questions now or at any time during this study, please feel free to contact me at the following address.

Sincerely you,

……..

(Srinuan Osotsatian)

Ph. D. student computer room, Building 1 No 230
Faculty of Nursing, Prince of Songkhla University,
Mobile phone: ++++++++++++++

APPENDICE-C

Example of a Pilot Study

PART I Demographic data, Health Status and Caring in the middle aged women
Pleases fill in the bank as certainly
Demographic data
Age……48……..year Marital Status……singer…….. Education Level……MS Nursing)…….
Career……Nursing……..Number of child……0…….Averaged income/month……30,000 bath…….
Adequacy of Income/month ……*.enough……not enough.
Family atmosphere……stay alone at university hospital housing. 2-3 months visit my parents and councils 1 time…….
Stress event in life……No……..
Supporting persons……friends and my brothers…… ……
If don't have supporting person how do you take care yourself… I am healthy, I can take care myself, no matter to depend on the others
……..……..
Menstruation data
Menarche…12..years old. Duration of Menstruation period…3-7..days Character of Menstruation……* Regular….irregular…….
Have you ever sick related to Menstruation……No…….……..
The menstruation started irregularly in year……last year…….. …
Year of the last menstruation……last year…….
Attitude toward menopause……I fell it is the normal physiological changes in the middle age women. It can impact both body and mind that all can appear……..
Disorders related to hormonal changes……hot flush, abdominal distention, Finger pain and cold, emotion sensitive, and incontinent
Health status and caring data
History of your health……very well ……
History of hysterectomy or oophorectomy……no……
History of chronic illness……no……
History of breast disease……no……..…
History of regular medical sage……no……..
History of hormonal therapy……no……..…
History of alternative medicine therapy (vitamin /drug/herbal / massage) usages……no…….
History of health promotion practices……no……...….
Exercise practice……no…….
Meditation practice…mindfulness meditation 10-15 minutes 4 times/week…….

Food consumption I try to eat vegetables and fruits to gain fiber, the other I also drink coffee a cup/day after attend QNTP I try to drink milk 2-3 cups/week, Soy beam milk 2-3 cups/week
What do your expect on QNTP practices…I think Qigong will give some techniques for me to release the menopausal symptoms disturbances, and take care when I go Aging. ……

Physical Exam and Major complaint

Item	pre-QNTP	2 week	4 week	6 week	8 week	10 week	12 week	More than 12	Notify
Blood Pressure	130/80	130/80	130/80	130/80	130/80	130/80	130/80	130/80	
Heart rate	88	88	88	88	*84	84	84	84	After QNTP practice at 8 week
Respiration rate	16	16	16	16	15-16	16	16	16	
Weight/ height	150/49	150/49	150/48	150/48	150/48	150/48	150/48	150/48	
Breast Exam	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	
Menopause complaint	many	some	some	some	*No	No	No	No	After QNTP practice at 8 week

PART II Menopausal syndromes perception list

please mark frequency and severity of menopausal syndromes experience during a month as perception

F= Frequency of symptom occurrence S=Severity of menopausal symptom weight 1-10 score

Perception on Menopause-syndromes	Pre-QNTP		4 week		6 week		8 week		10 week		12 week		14 week	
	F	S	F	S	F	S	F	S	F	S	F	S	F	S
1. I feel headache.	2-3	3	1-2	2	1-2	2	0	0	0	0	0	0	0	0
3. I feel palpitation.	3-4	2	3-4	2	1-2	2	0	0	0	0	0	0	0	0
4 I feel hot flush.	Every day	3	Every day	2	Some	1	0	0	some	0	0	0	0	0
8 I feel tight.	1-2	2	0	0	0	0	0	0	0	0	0	0	0	0
9 I feel abdominal distended.	Every day	4	2-3	3	0	0	0	0	0	0	0	0	0	0
12 I feel irritation easily.	3	3	3	3	3	3	3	3	1	1	1	1	1	1
23 I feel tired.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
32 I feel bore of routine duty.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
41 I feel skin crawling.	Every day	4	Every day	3	some	2	few	1	0	0	0	0	0	0
49 I feel frequent urination.	4-5	3	4-5	3	4-5	3	4-5	3	3	2	3	2	3	0

The Field Note of Pilot Study

2 -3-06

Jen was a nurse who was diagnosis menopausal symptom. She refused to take daily sexual hormone. She intently chose the natural way to take care herself. She came with July into the computer room 1203 and told me that Dr. K suggested her to visit me for Qigong trainings. She and July needed to be volunteers. In 1203 of computer room. There were many Ph. D. students, so I asked them to talk in the next room. From our talking, I knew Jen had been a year climacteric symptoms. She still confronted with various menopausal symptoms. She has tried Vipassana meditation 10 minutes daily 4 days weekly to calm drown her mind for a half year. She came for practice Qigong with the her negative menopausal symptoms.

After I took a long period to understand Jen's personal background and check for inclusion criteria for QNTP training. We planed to talk again on 14-3-06.

Nursing activities today were 1) created the close relationship and private environment 2) listening to Jen talk by intention, 3) gradually understand the menopausal symptom, and it impact , and 5) understanding mindfulness or Vipassana meditation. Notify: During dialogue Jen talked with low pith sound and slowly responded toward her menopausal symptoms and it impact on her life. So, the menopausal symptom data might need careful to assess in the next meeting.

14-3-06

The second meeting, I met Jen after a long day working at the front of student nurse's hostel. This meeting was planed to discuss in privacy. This day Jen look relaxes. Jen talked more and detail of her menopausal symptoms disturbances, follow with menopausal managements. In addition, Jen also talked about her believes and attitude toward menopausal symptoms and Qigong, her purposed of Qigong practice. This day more information flows smoothly. I learnt how to collect the more sensitive data, and positive enforcements toward Qigong practice. The appointment for next meeting was 16-3-06.

16-3-06

The third meeting, Jen and July came for learning Qigong. I started with overview about menopause and menopausal syndromes; demonstrated a Qigong practice step by step integrating body movements, diaphragmatic breathing, and visualization. Jen and July returned demonstrate and practices. In addition, we also set up the appointment for next Qigong practice together. Moreover, we had discussed the path of Qigong on menopausal syndromes control.

20-3-06

The forth meeting, Jen and July came to joint me in Qigong practice 1 hour. Jen showed her ability in conduct Qigong property. She also helped July in the difficult breathing techniques. Today, we are relaxation. Jen shared her competency in advice breathing technique for July.

22-3-06

Jen not only practiced Qigong property, she also coached July and some new participants to practice Qigong .

30-3-06

I met Jen at the front of nursing faculty. Jen looked cheerful. She reported that her menopausal symptom were few. There were some practical obstructed. She needed some judgments from me (detail in dialogue).Nursing approaches today were 1) evaluated and reflected Jen abilities of Qigong practice and Qigong practice out come, 2) reflection, 3) and nursing consultation in QNTP practiced.

17-4-06

I met Jen at the front of student nurse's hostel. Jen still looked cheerful. She told me that she was healthy, and all of her menopausal symptoms decreased. She required taking vitamin D and calcium from food and drugs, because of her working hour 7 am-6 pm daily. In addition, she required to adapt Qigong to one exercise and needed to set duration of practice. Therefore, nursing activities today were 1) evaluated the QNTP practice, and outcome, 2) reflected the source of vitamin D and

calcium in foods, 3) gave the information of vitamin D, 4) discussed the exercise and duration of practiced, 5) psychological supports for continuing QNTP practice.

17-5-06

I met Jen at her residence. Jen still looked well. She told me that her menopausal symptom decreased. She felt herself very well. She told that after setting time for practice Qigong, she feel more relax and enjoy. Therefore she caused increasing her practice Qigong from 1 hour to 11/2 -2 hours daily 4 days weekly. Nursing activities today were 1) evaluated QNTP practice and out come, 2) asked for daily record, 4) gave consultation. Jen activities were 1) reflected both process and outcome of QNTP practice.

15-6-06

I met Jen at her ward for 1) continuous visiting 2) critical thinking and reflecting QNTP proceeding, 3) listening and consulting QNTP practice, 4) explored psychological supports, and nutritional advising.

The Diary Notes

sign	Items	Frequency and duration/week	Feeling of qigong practice (Positive-Negative)	Problem-contradiction and initial problem management
	Nutrition consuming	Fruits and vegetables Milk, Soy bean 2-3 days weekly	Food is essential for health, the menopause should eat few food, but thinking more about it benefits and essential for life long	No
	Sunlight consuming	5-10 minute	No time to take it more, because of working hour from 7 am -6 pm daily	Long day working
	Fresh air consuming	Every evening after working 10-15 minutes	I feel good, I do every day. I plan to do it more.	
	Drinking fresh water	1-2 liters daily	I have known that it is good for my health. I feel fresh every time I drinking. It is essential for this age to drink 1-2 liters daily.	
	Diaphragmatic Breathing	1 month 5-6 times weekly 2-3 month 4 times weekly	I feel fresh every time I do it., although the initial I feel tense, It is ok	

	Concentration and Energy Pulling	1 month 5-6 times weekly 2-3 month 4 times weekly	I feel more concentration	
	Abdominal Massage/ Energy Keeping	1 month 5-6 times weekly 2-3 month 4 times weekly	At the start I forget to do this exercise. After a month I do it atomically. This exercise intent me to strengthen abdominal muscle.	
	Horse like Standing	1 month 5-6 times weekly 2-3 month 4 times weekly	At the star I feel tense, and tired. After a month practice I feel very enjoy this exercise. I can stand in this exercise 1-2 hour without moving. I feel my legs very strong	
	Fingers moving	1 month 5-6 times weekly 2-3 month 4 times weekly	This exercise helps me how to visualize more dynamic than I done mindfulness meditation.	
	Chest expansion	1 month 5-6 times weekly 2-3 month 4 times weekly	This exercise intent me to do chest exercise and upper trunk movements	
	Place your feet and bend your ankles for promoting energy	1 month 5-6 times weekly 2-3 month 4 times weekly	This exercise makes me confuse at the beginning. I prefer to raise my leg more than press the heels with the floor.	Changing the exercise press leg with the floor by benching the legs in the raise position
	Balance Heart and Kidney Energy	1 month 5-6 times weekly 2-3 month 4 times weekly	At the start hitting the palm with sole, I feel no any changing, After changing to press yongjoun and lougong I feel relax and enjoy to practice more	changed hitting to be pressing yongjoun and lougong
	Sitting and Meditation	1 month 5-6 times weekly 2-3 month 4 times weekly	This exercise done to calm down the mind. There is no any difference from Vipassana meditation	

APPENDIX-F

Summary of Individual Menopausal Symptoms (severity)

	Before entering QNTP	Ending cycle I	Ending the cycle II	Ending the cycle III	Remark
C1	**Vasomotor instabilities** vertigo (2) hot flushes (3) sleep difficulties(3) **Emotional disorders** easily irritated(4) fatigue(3) tense feeling(4) nervousness(3) feel anxiety(3) hunger(4) loss of social interest(3) poor concentration(4) loss of self confidence(4) bore of routine (3) depression(4) **Somatic disturbances** neck & shoulder pain(4) Frequent urination(3) tiredness eyes (3) dry vagina (2) urinary incontinence (3)	**Vasomotor instabilities** vertigo (2) hot flushes (3) sleep difficulties(3) **Emotional disorders** easily irritated(2) fatigue(2) tense feeling(4) nervousness(3) feel anxiety(3) hunger(4) loss of social interest(3) poor concentration(4) loss of self confidence(4) bore of routine (4) depression(4) **Somatic disturbances** neck & shoulder pain(4) Frequent urination(3) tiredness eyes (3) dry vagina (2) urinary incontinence (3)	**Vasomotor instabilities** vertigo(2) hot flushes (0) sleep difficulties(3) **Emotional disorders** easily irritated(0) fatigue(2) tense feeling(3) nervousness(2) feel anxiety(4) hunger(3) loss of social interest(3) poor concentration(4) loss of self confidence(3) bore of routine (3) depression(3) **Somatic disturbances** neck & shoulder pain(4) Frequent urination(3) tiredness eyes (2) dry vagina (2) urinary incontinence (3)	**Vasomotor instabilities** vertigo(1) hot flushes (0) sleep difficulties(0) **Emotional disorders** easily irritated(0) fatigue(2) tense feeling(3) nervousness(0) feel anxiety(4) hunger(3) loss of social interest(3) poor concentration(4) loss of self confidence(3) bore of routine (3) depression(3) **Somatic disturbances** neck & shoulder pain(4) Frequent urination(3) tiredness eyes (2) dry vagina (2) urinary incontinence (3)	
C2	**Vasomotor instabilities** sleeplessness(2) poor appetite(1) **Emotional disorders** easily irritated (10) easily angered(10) tiredness(4) fatigue(5) tense feeling(3) hunger(1) loss of social interest(2) poor concentration(2) depression(1) falling asleep (2) bore of routine duty (7) **Somatic disturbances**	**Vasomotor instabilities** sleeplessness(2) poor appetite(1) **Emotional disorders** easily irritated (9) easily angered(8) tiredness(3) fatigue(5) tense feeling(2) hunger(1) loss of social interest(2) poor concentration(2) depression(0) falling asleep (2) bore of routine duty (7) **Somatic disturbances**	**Vasomotor instabilities** sleeplessness(2) poor appetite(1) **Emotional disorders** easily irritated (8) easily angered(8) tiredness(4) fatigue(5) tense feeling(2) hunger(1) loss of social interest(2) poor concentration(2) depression(0) falling asleep (2) bore of routine duty (6) **Somatic disturbances**	**Vasomotor instabilities** sleeplessness(2) poor appetite(1) **Emotional disorders** easily irritated (10) easily angered(10) tiredness(5) fatigue(5) tense feeling(4) hunger(1) loss of social interest(2) poor concentration(2) depression(0) falling asleep (2) bore of routine duty (7) **Somatic disturbances**	

	neck and shoulder pain(9) joint pain(5) abdominal distention (2)	neck and shoulder pain(9) joint pain(5) abdominal distention (2)	neck and shoulder pain(7) joint pain(5) abdominal distention (2)	neck and shoulder pain(4) joint pain(5) abdominal distention (2)	
C3	**Vasomotor instabilities** Hot flushes (3) vertigo(3) palpitation (2) chest tight (2) **Emotional disorders** easily irritation(3) tiredness (2) bore of routine working (2) **Somatic disturbances** nipple pain (2) numbness (4) frequent urination(3) abdominal distention(4)	**Vasomotor instabilities** Hot flushes (2) vertigo(2) palpitation (2) chest tight (0) **Emotional disorders** easily irritation(3) tiredness (2) bore of routine working (2) **Somatic disturbances** nipple pain (1) numbness (3) frequent urination(3) abdominal distention(3)	**Vasomotor instabilities** Hot flushes (0) vertigo(0) palpitation (0) chest tight (0) **Emotional disorders** easily irritation(2) tiredness (2) bore of routine working (2) **Somatic disturbances** nipple pain (0) numbness (2) frequent urination(3) abdominal distention(0)	**Vasomotor instabilities** Hot flushes (0) vertigo(0) palpitation (0) chest tight (0) **Emotional disorders** easily irritation(1) tiredness (2) bore of routine working (2) **Somatic disturbances** nipple pain (0) numbness (0) frequent urination(2) abdominal distention(0)	
C4	**Vasomotor instabilities** feel hot flushes(3) vertigo(2) palpitation (3) sleep difficulties(5) sleeplessness(6) heavy sweating (5) chest tight (5) **Emotional disorders** easily irritated(7) easily angered(6) abdominal distention (3) tense feeling (4) fell bad at skin (2) tiredness (4) fatigue (4) bore of social (2) loss of self confidence (3) bore of routine working (5) falling asleep (5) **Somatic disturbances** back pain (5) neck and shoulder pain(4) hair dry and fragile (6)	**Vasomotor instabilities** feel hot flushes(3) vertigo(2) palpitation (3) sleep difficulties(3) sleeplessness(5) heavy sweating (4) chest tight (4) **Emotional disorders** easily irritated(7) easily angered(6) abdominal distention (3) tense feeling (4) fell bad at skin (0) tiredness (4) fatigue (4) bore of social (2) loss of self confidence (3) bore of routine working (5) falling asleep (5) **Somatic disturbances** back pain (5) neck and shoulder pain hair dry and fragile (6)	**Vasomotor instabilities** feel hot flushes(3) vertigo(2) palpitation (3) sleep difficulties(3) sleeplessness(5) heavy sweating (4) chest tight (4) **Emotional disorders** easily irritated(6) easily angered(6) abdominal distention (4) tense feeling (3) fell bad at skin (0) tiredness (4) fatigue (4) bore of social (2) loss of self confidence (2) bore of routine working (5) falling asleep (4) **Somatic disturbances** back pain (5) neck and shoulder pain(4) hair dry and fragile (6)	**Vasomotor instabilities** feel hot flushes(0) vertigo(0) palpitation (3) sleep difficulties(1) sleeplessness(1) heavy sweating (0) chest tight (1) **Emotional disorders** easily irritated(1) easily angered(1) abdominal distention (0) tense feeling (1) fell bad at skin (0) tiredness (4) fatigue (1) bore of social (0) loss of self confidence (1) bore of routine working (1) falling asleep (1) **Somatic disturbances** back pain (1) neck and shoulder pain(1) hair dry and fragile (1)	
C5	**Vasomotor instabilities** feel hot flushes(9)	**Vasomotor instabilities** feel hot flushes(9)	**Vasomotor instabilities** feel hot flushes(4)	**Vasomotor instabilities** feel hot flushes(1)	

	vertigo (9) heavy sweating (9) abdominal distention(4) **Emotional disorders** feel anxiety(4) **Somatic disturbances** neck and shoulder pain(0) joint pain (9)	vertigo (8) heavy sweating (9) abdominal distention(4) **Emotional disorders** feel anxiety(0) **Somatic disturbances** neck and shoulder pain(0) joint pain (8)	vertigo (5) heavy sweating (4) abdominal distention(1) **Emotional disorders** feel anxiety(1) **Somatic disturbances** neck and shoulder pain(8) joint pain (6)	vertigo (0) heavy sweating (1) abdominal distention(1) **Emotional disorders** feel anxiety(1) **Somatic disturbances** neck and shoulder pain(4) joint pain (1)	
C6	**Vasomotor instabilities** feel hot flushes(8) headaches(5) palpitation (5) sleep difficulties(5) sleeplessness(5) heavy sweating(10) chest tight (4) abdominal distention (7) vertigo (6) constipation(4) **Emotional disorders** easily irritated(6) easily angered (2) fatigue(6) nervousness(3) feel anxiety(2) tense (4) hunger(6) constipation (4) bad at body image (4) poor concentration (5) loss of self confidence (2) easily upset (5) loneliness(5) falling to sleep(6) bore of routine (5) depression (2) **Somatic disturbances** neck and shoulder pain(8) vaginal dryness(5) Frequent urination(5) joint pain (10) numbness(3) itchy skin (4) schatchy skin(4) tiredness eye (8) dry vagina (5)	**Vasomotor instabilities** feel hot flushes(8) headaches(5) palpitation (2) sleep difficulties(4) sleeplessness(4) heavy sweating (5) chest tight (2) abdominal distention (7) vertigo (5) constipation(2) **Emotional disorders** easily irritated(0) easily angered (2) fatigue(5) nervousness(0) feel anxiety(2) tense (2) hunger(0) constipation (2) bad at body image (5) poor concentration (2) loss of self confidence (2) easily upset (2) loneliness(4) falling to sleep(6) bore of routine (4) depression (0) **Somatic disturbances** neck and shoulder pain(8) vaginal dryness(5) Frequent urination(4) joint pain (8) numbness(0) itchy skin (4) schatchy skin(0) tiredness eye (8) dry vagina (2)	**Vasomotor instabilities** feel hot flushes(2) headaches(0) palpitation (0) sleep difficulties(4) sleeplessness(4) heavy sweating (4) chest tight (0) abdominal distention (6) vertigo (0) constipation(0) **Emotional disorders** easily irritated(0) easily angered (0) fatigue(0) nervousness(0) feel anxiety(0) tense (0) hunger(0) constipation (0) bad at body image (2) poor concentration (0) loss of self confidence (0) easily upset (0) loneliness(0) falling to sleep(4) bore of routine (0) depression (0) **Somatic disturbances** neck and shoulder pain(0) vaginal dryness(5) Frequent urination(0) joint pain (8) numbness(0) itchy skin (4) schatchy skin(0) tiredness eye (6) dry vagina (0)	**Vasomotor instabilities** feel hot flushes(2) headaches(0) palpitation (0) sleep difficulties(0) sleeplessness(0) heavy sweating (1) chest tight (0) abdominal distention (5) vertigo (0) constipation(0) **Emotional disorders** easily irritated(0) easily angered (0) fatigue(0) nervousness(0) feel anxiety(0) tense (0) hunger(0) constipation (0) bad at body image (2) poor concentration (0) loss of self confidence (0) easily upset (0) loneliness(0) falling to sleep(4) bore of routine (0) depression (0) **Somatic disturbances** neck and shoulder pain(0) vaginal dryness(5) Frequent urination(0) joint pain (8) numbness(0) itchy skin (4) schatchy skin(3) tiredness eye (5) dry vagina (0)	

C7	**Vasomotor instabilities** feel hot flushes(2) sleep difficulties(6) palpitation (2) abdominal distention(1) poor appetite (1) **Emotional disorders** easily irritated(1) easily angered(1) nervousness(2) tiredness (4) fatigue (4) **Somatic disturbances** neck and shoulder pain(8) back pain (7) joint pain (5) tiredness eye (2) itchy skin (1) bore of routine duty (7)	**Vasomotor instabilities** feel hot flushes(2) sleep difficulties(6) palpitation (2) abdominal distention(1) poor appetite (1) **Emotional disorders** easily irritated(1) easily angered(1) nervousness(2) tiredness (4) fatigue (4) **Somatic disturbances** neck and shoulder pain(8) back pain (7) joint pain (5) tiredness eye (2) itchy skin (1) bore of routine duty (7)	**Vasomotor instabilities** feel hot flushes(0) sleep difficulties(1) palpitation (0) abdominal distention(1) poor appetite (1) **Emotional disorders** easily irritated(1) easily angered(1) nervousness(2) tiredness (4) fatigue (2) **Somatic disturbances** neck and shoulder pain(0) back pain (5) joint pain (3) tiredness eye (0) itchy skin (0) bore of routine duty (6)	**Vasomotor instabilities** feel hot flushes(0) sleep difficulties(0) palpitation (0) abdominal distention(1) poor appetite (1) **Emotional disorders** easily irritated(1) easily angered(1) nervousness(2) tiredness (4) fatigue (2) **Somatic disturbances** neck and shoulder pain(0) back pain (2) joint pain (1) tiredness eye (0) itchy skin (0) bore of routine duty (6)	
C8	**Vasomotor instabilities** feel hot flushes(8) sleep difficulties(6) sleeplessness(6) heavy sweating (7) constipation(2) **Emotional disorders** easily irritated(5) exciting(4) nervousness(5) tense feeling(5) easily angered(5) bore of routine duty(6) tiredness(6) fatigue(4) feel anxiety(5) hunger(5) loss of social interest(5) poor concentration(4) falling to sleep(4) easily upset (3) loss of self confidence(4) bad at skin mark(5) depression(3) loneliness(4) worry of increasing body size(6) loss of sexual interest(8)	**Vasomotor instabilities** feel hot flushes(8) sleep difficulties(4) sleeplessness(4) heavy sweating (8) constipation(2) **Emotional disorders** easily irritated(4) exciting(4) nervousness(4) tense feeling(4) easily angered(4) bore of routine duty(6) tiredness(6) fatigue(3) feel anxiety(4) hunger(5) loss of social interest(4) poor concentration(4) falling to sleep(4) easily upset (3) loss of self confidence(4) bad at skin mark(5) depression(2) loneliness(3) worry of increasing body size(6) loss of sexual interest(8)	**Vasomotor instabilities** feel hot flushes(4) sleep difficulties(5) sleeplessness(5) heavy sweating (5) constipation(0) **Emotional disorders** easily irritated(3) exciting(4) nervousness(4) tense feeling(4) easily angered(3) bore of routine duty(6) tiredness(6) fatigue(4) feel anxiety(4) hunger(5) loss of social interest(4) poor concentration(4) falling to sleep(4) easily upset (4) loss of self confidence(4) bad at skin mark(6) depression(3) loneliness(3) worry of increasing body size(6) loss of sexual interest(8)	**Vasomotor instabilities** feel hot flushes(3) sleep difficulties(3) sleeplessness(3) heavy sweating (4) constipation(0) **Emotional disorders** easily irritated(2) exciting(4) nervousness(3) tense feeling(3) easily angered(2) bore of routine duty(6) tiredness(6) fatigue(3) feel anxiety(3) hunger(3) loss of social interest(3) poor concentration(4) falling to sleep(4) easily upset (3) loss of self confidence(4) bad at skin mark(6) depression(2) loneliness(3) worry of increasing body size(6) loss of sexual interest(8)	

	bore of routine work (3) crying spells(8) **Somatic disturbances** neck and shoulder pain(1) vaginal dryness(4) Frequent urination(5) back pain (1) joint pain (4) numbness(2) hair fragile and loss (3) dysuria (4) skin itching (1)	bore of routine work (2) crying spells(8) **Somatic disturbances** neck and shoulder pain(1) vaginal dryness(4) Frequent urination(5)) back pain (1) joint pain (3) numbness(2) hair fragile and loss (3) dysuria (4) skin itching (1)	bore of routine work (3) crying spells(7) **Somatic disturbances** neck and shoulder pain(1) vaginal dryness(4) Frequent urination(5) back pain (1) joint pain (2) numbness(1) hair fragile and loss (3) dysuria (3) skin itching (2)	bore of routine work (3) crying spells(7) **Somatic disturbances** neck and shoulder pain(1) vaginal dryness(4) Frequent urination(5) back pain (1) joint pain (0) numbness(1) hair fragile and loss (3) dysuria (2) skin itching (1)	
C9	**Vasomotor instabilities** chest tight (3) vertigo (7) abdominal distention (3) **Emotional disorders** easily irritated(4) easily anger (4) nervousness(4) feel anxiety(4) tense feeling(4) hunger(4) **Somatic disturbances** Frequent urination(3) painful intercourse (1)	**Vasomotor instabilities** chest tight (3) vertigo (7) abdominal distention (3) **Emotional disorders** easily irritated(4) easily anger (4) nervousness(3) feel anxiety(3) tense feeling (3) hunger(3) **Somatic disturbances** Frequent urination(1) painful intercourse (0)	**Vasomotor instabilities** chest tight (0) vertigo (0) abdominal distention (0) **Emotional disorders** easily irritated(0) easily anger (0) nervousness(1) feel anxiety(1) tense feeling (0) hunger(0) **Somatic disturbances** Frequent urination(1) painful intercourse (0)	**Vasomotor instabilities** chest tight (0) vertigo (0) abdominal distention (0) **Emotional disorders** easily irritated(0) easily anger (0) nervousness(1) feel anxiety(1) tense feeling (0) hunger(0) **Somatic disturbances** Frequent urination(0) painful intercourse (0)	
C10	**Vasomotor instabilities** feel hot flushes(7) headaches(3) vertigo (1) falling asleep (3)	**Vasomotor instabilities** feel hot flushes(7) headaches(3) vertigo (1) falling asleep (3)	**Vasomotor instabilities** feel hot flushes(6) headaches(2) vertigo (1) falling asleep (2)	**Vasomotor instabilities** feel hot flushes(4) headaches(2) vertigo (0) falling asleep (1)	

APPENDIX-H

Final QNTP for Women with Menopausal Syndromes

Introduction

Nearly middle-aged women go through the process of ovarian failure. This process causes several short-term changes such as vasomotor instabilities, mood disorders, musculoskeletal degeneration, urogenital atrophy, and skin changes. Long-term menopausal changes include silent conditions such as osteoporosis, cardiovascular disease, and colorectal cancer. Women with these conditions require caring and support.

The focus of menopausal managements today is on hormonal replacement and non-hormonal methods. Direct menopausal syndromes management by hormonal replacement causes anxiety, fear, and depression in some women because this process rise to the risk of breast cancer, pulmonary embolism, thrombophlebitis, heart disease, and stroke (Rousseau, 2002, as cited by Hackley & Rousseau, 2004). Hence, the trend for menopausal syndromes management today is primarily on non-hormonal methods.

There are several non-hormonal methods to reduce menopausal syndromes. They include taking soy and soy extracts (Kroneberg & Fugh-Berman, 2002), calcium, magnesium, and supplements of vitamins B6, B12, E, and D (Cutson, 2000), as well as meditation (Thaweeratana, 2003; Intaphueak, 2003) and aerobic exercise (Sansern, 2002).

Qigong is a mind-body practice that has not yet been officially approved for reducing menopausal syndromes. However, there were many existing studies showing that Qigong released various symptom disturbances in humans. Therefore, the nurse researcher considered it to be a non-hormonal management strategy for reducing various symptoms of menopause. Qigong includes body movement, deep respiration, and visualized meditation. Practicing Qigong results in improved psychological functioning including increased psychological benefits (Tsang, Mok, Yeung, & Chan 2003), increased calmness (Lee, Yang, Lee, & Moon, 2005), increased self-efficacy, improved cognitive functioning in the areas of understanding and analysis (Lee, Yang et al.; Lee, Lim, & Lee, 2004), increased concentration (Pirason,1998), and improved social behavior (Witt, Becker, Bandelin, Soellner, & Willich, 2003). Further benefits included a reduction in dysmenorrheal symptoms (Jang, Lee, Kim, & Chong, 2004), decreased nightmares, and sleeplessness (Thinhuatoey, 2003; Lee, Yang et al.), as

well as improved circulation (Wang, Xu, and Qian, 1995 cited by Sancier & Hole, 2001), improved cardio-respiratory functioning (Chao, Chen, and Lai, 2002; Lee, Lee, Choi, & Chung, 2003; Reuther & Aldridge, 1998), and reduced pain (Chen & Lui, 2004; Lee & Jang, 2005; Lee, Yang et al.).

Several symptoms which have been relieved by Qigong are similar to menopausal syndromes such as nightmares, poor cardiovascular functioning, poor blood circulation, muscle weakness, and muscle pain. QNTP of this study was designed with six principles : 1) a holistic nursing approach, 2) body movement that directly and indirectly stimulates the Qi, which has been proven to reduce psychological disorders and physiological syndromes and to slow down bone loss in menopause (Chan et. al., 2004), 3) diaphragmatic breathing with mind concentration has been proven to reduce hot flushes (Feedman & Woodwarty, 1992), 4) Vipassana meditation has been proven to reduce psychological problems, vasomotor instability, and musculoskeletal pain (Thaweeratana, 2003; Intaphueak, 2003), and 5) nutritional and environmental education which have been proven to reduce menopausal syndromes.

Objective

Menopausal women who practice QNTP can reduce menopausal syndromes and impacts.

Sub-Objectives

1. Understanding a woman's life cycle and taking a holistic view of women with menopausal suffering.

2. Understanding the nature of body changes due to menopause, and its management.

3. Understanding the healing effects of QNTP on women with menopausal syndromes.

4. Providing training in QNTP for menopausal women..

5. Evaluating QNTP practice, its outcomes, and influencing factors.

Context: A quiet place, under gentle sunlight in a natural atmosphere with free airflow.

Period of QNTP Practice:

1. Orientation - three days 2. Situation-realization and early learning – one month
3. Self-learning, sharing, and adopting into daily life – one month
4. Modification and confirmation – one month

Target Population This program will accept women who are concerned about menopausal syndromes, and impacts, and committed to practice QNTP for at least three to four consecutive months.

Expected Outcome: The woman will assert that QNTP reduces menopausal syndromes.

Orientation Schedules

Date	Timing	Objectives	Activities
1	9.00 -10.45	Introducing QNTP	Introduction to QNTP
		Understanding life cycle and menopause	Lecture about life cycle and menopausal syndromes
		Understanding the nature of body changes due to menopause	Overview of menopausal changes
	10.45-11.00	Rest	Herbal drink
	11.00-12.00	Understanding existing methods for reducing menopausal syndromes	An overview of the existing methods for reducing menopausal syndromes
	12.00-13.00	Rest	Lunch
	13.00-15.00	Understanding holism and Qigong	Discussion on the concept of holism and Qigong
	15.00-15.15	Rest	Herbal drink
	15.15- 17.00	Understanding QNTP, its principles, advantages, and preparation for the program	Discussion on QNTP and its' benefits.
2	8.30-10.30	Understanding the three preparatory techniques for QNTP	Lecture and demonstration on three preparation techniques: 1) Diaphragmatic Breathing with consciousness 2) Concentration on pulling in energy 3) Abdominal massage or energy retention
	10.30-10.45	Rest	Herbal drink
	10.45-12.00	Ability to conduct the three preparatory techniques for QNTP	Training in the three preparation techniques: 1) Diaphragmatic breathing with mind intention 2) Concentration on pulling in energy

			3) Abdominal massage or energy retention
	12.00-13.00	Rest	Lunch
	13.00-17.00	Understanding QNTP (five exercises) for reducing menopausal syndromes	Lecture and demonstration on integrating diaphragmatic breathing, body movement, and mental visualization for bringing wellness in and taking waste out of the body. 1) Horse-like standing 2) Finger moving 3) Chest expansion 4)Balancing heart and kidney Qi 5) Sitting or recling meditation
3	8.30-10.30	Ability to conduct QNTP (five exercises) for reducing menopausal syndromes	Training in each exercise with diaphragmatic breathing, body movement, and mental visualization for bringing wellness in and taking waste out. 1) Horse-like standing 2) Finger moving 3) Chest expansion 4) Balancing heart and kidney Qi 5) Sitting or reclining meditation
	10.30-10.45	Rest	Herbal drink
	10.45-12.00	Ability to conduct QNTP (five exercises) for reducing menopausal syndromes	Training in each exercise with diaphragmatic breathing, body movement, and mental visualization for bringing wellness in and taking waste out. 1) Horse-like standing 2) Finger moving 3) Chest expansion 4) Balancing heart and kidney Qi 5) Sitting or reclining meditation
	12.00-13.00	Rest	Lunch
	13.00-15.30	Ability to conduct QNTP (five exercises) for reducing menopausal syndromes	Training in each exercise with diaphragmatic breathing, body movement, and mental visualization for bringing good

			in and taking waste out. 1) Horse-like standing 2) Finger moving 3) Chest expansion 4) Balancing heart and kidney Qi 5) Sitting or reclining meditation
	15.30-15.45	Rest	Herbal drink
Week 1-12		Ability to conduct QNTP (five exercises) regularly and continuously	Practice QNTP a hour daily for 3-5 days per week for 3 months continuously

Procedures:

Nursing Approaches: Two sets of nursing approaches were suggested in this program: facilitating set and evaluating set.

1. The facilitating set included: 1) creating and maintaining trusting relationships, 2) introducing the seven sections of QNTP and conducting training, 3) establishing mutual goals for QNTP practice, 4) recognizing participant responsibility for self-directed learning and monitoring, 5) providing information, 6) consultation, and empowering for QNTP practice.

2. The evaluating set included:1) understanding the participants' backgrounds, 2) careful evaluation of QNTP practices, outcomes, and influencing factors.

The details of each approach were presented as follows:

1. Establishing and maintaining a trusting relationship. A trusting relationships not only creates a therapeutic environment, but it also creates opportunities for further in-depth research findings. The nurse researcher establishes and maintains trusting relationships with participants by first undergoing Qigong training to increase knowledge and skills in order to help participants when conducting QNTP. In addition, during QNTP implementation, the nurse researcher listens to participants' menopausal syndromes, their impacts, and any obstacles in QNTP practice. Moreover, the nurse researcher also maintains relationships by visiting participants regularly, conducting frequent discussions on QNTP practice, and helping participants to adopt QNTP into their daily life.

2. Understanding participants' backgrounds and situations.

Understanding participants' backgrounds and specific situation before entering each cycle of QNTP practice is necessary to better treat menopausal situations and attend

to participants' basic needs. In addition, it is important for program planning, continuous practice, program revision, and ending of program adjustment. The nursing activities for understanding participants' situations include listening to participants' complaints, holding in-depth interviews followed by semi-structured questionnaires, and observing the context of participants' situations.

3. Introducing QNTP and initial training. Introducing QNTP and initial training are also important activities for the success of the program. QNTP orientation involves: 1) choosing menopausal women to be participants, 2) setting up a workshop for orientation and training, 3) keeping an open mind about program suggestions, 4) creating learning environment, and 5) announcing and presenting the program in an interesting and attractive manner. QNTP training is to be conducted both in small groups and individually. The training process starts with the nurse researcher selecting a suitable volunteer, and continues with step-by-step QNTP training in a flexible atmosphere.

4. Setting mutual goals. Setting mutual goals is also an essential activity for the success of QNTP because the goals direct the entire program and its practice. The process of mutual goal-setting consists of the nurse researcher and QNTP participants cooperating in discussion on QNTP practice and setting the participant's goals for practicing QNTP. In addition, the nurse researcher and the participants also set up QNTP practice plan individually to attain individual goals.

5. Providing informational support. At the beginning and in the early learning cycle, the nurse researcher provided information for facilitating the process of QNTP practice through discussion. In the end of program, the nurse researcher supported additional knowledge to develop a more efficient program.

6. Consultation. Consultation is also an essential activity in the whole process of QNTP implementation. At the beginning, the nurse researcher listens to participants' needs and then chooses a healing strategy. In the process, the nurse researcher also listens to participants' needs, provides a discussion within a friendly context, explains information willingly, helps participants overcome inhibiting factors and helps individual adopt QNTP into their daily life. At the end of the program, time management is especially important for participants' consultation.

7. Empowering. During QNTP practice, empowering participants is an important step for the program to run continuously. During practice period, the nurse researcher can empower participants from the start by raising their self-awareness

regarding setting goals for program practice in order to meet self needs. During the process, she can empower participants by praising positive actions and helping participants in QNTP practice. In addition, the nurse researcher can encourage continuous QNTP practice by pointing out its' positive outcomes and supporting participants in their efforts to carry out QNTP practice continuously.

8. Recognizing participant responsibility. Nurse researchers recognize participant responsibility through several activities: 1) establishing mutual goals for practicing QNTP, 2) facilitating participant reflection on QNTP practices, 3) warm communication, 4) allowing participants to freely express themselves, and 5) encouraging participant cooperation in modified QNTP practice and adapting it into daily living.

9. Maintaining and sustaining QNTP practices. The nurse researcher maintained and sustained QNTP practice in the participatory action research study. In this study, the nursing researcher activities include:1) maintaining trusting relationships through regular visitation, 2) empowering, supporting, and consultation participants continuously, 3) mutual programming, 4) maintaining positive attitudes and beliefs toward QNTP; 5) helping participants adapt QNTP into daily life, and 6)increasing participants' time-management abilities.

10. Careful evaluation of QNTP practice. Careful evaluation is an important nursing activity both during the process and ending of the program. Each cycle requires evaluation of the process, outcomes, and influencing factors. The evaluation includes careful assessment, logical comparison, and differentiated data analysis.

Participant Activities: Two sets of participants' activities: learning and evaluating.

1. Learning set. The learning set includes: 1) understanding menopausal syndromes, impacts, and management; 2) learning and monitoring QNTP practice with various techniques; 3) asking for information, consultation on QNTP practices.

2. Evaluating set. The evaluating includes careful reflection on QNTP practices, outcomes and influencing factors.

The details of participant activities are as follow:

1. Understanding the situation. Understanding participants' situations is the basic for evaluation of QNTP efficiency. To understand a participant's situation in QNTP involves: 1) the participant feels free to express her feelings, 2) the participant and the nurse researcher cooperate to analyze the situation, 3) The nurse researcher

explains menopausal syndromes and relates holistic Buddhism thoughts such as: There is nothing of menopausal syndromes. The situation will not last forever. QNTP practice is a path to calm down and free the mind from various conflicts. Let mind and body be free to gain optimal benefit from QNTP practice.

2. Understanding QNTP practice. Understanding QNTP is an essential key to its practice, because it will bring out the best of the practice and the clearest goal setting. The process of understanding QNTP consists of: 1) entering its orientation and training, and 2) exchanging knowledge and practice with the nurse researcher regularly.

3. Learning and monitoring. Learning and monitoring are also essential activities of QNTP practice. At the beginning, participants need to learn QNTP step-by step and develop training skills. During the process, participants start self-directed learning, share their practice experiences and outcome evaluations. In addition, participants also need consultation to integrate QNTP into their daily living. Finally, participants need to modify QNTP and test it to confirm practicality..

4. Reflecting on QNTP processes and outcomes. Reflection is an essential activity which is accomplished by obtaining participant feedback on their QNTP practice, outcomes evaluation, and influencing factors on QNTP practice.
The process of reflection includes: 1) participants observe their QNTP practice, the outcomes, and influencing factors several times and 2) participants provide feedback on their QNTP practice.

5. Required information, consultation, and empowerment participant. Participants required information, consultation, and individual empowerment. They obviously require basic informational support during the start of the program. Then in the middle step, they need self-directed learning and regulation. Most participants require informal consultation and empowerment for their QNTP practices and on integrating it into their daily life. At the end of QNTP practice, most participants require information about modified QNTP practice, and additional alternative healing techniques.

Seven Content Sections of QNTP

Section I: Life cycle and a holistic way of life

A human's life cycle starts at fertilization. Then the baby is born and grows up to adulthood and then on to middle age (40-56 year). The end life, organs start to degenerate.

Life is not only physical appearance, but also involves dynamic interaction with the environment, society, nature and civilization. The way to understand the nature of life is to be aware that life is composed of physical, mental and spiritual aspects. So life is nourished by the five elements and a harmonious. In addition, a person has to be calm, peaceful, and confident to confront reality.

Section 2: Nature of menopausal changes and its impacts

The physiological changes in middle-aged women include three patterns as follows: 1) gradual decrease of menstruation, 2) radical decrease of menstruation, and 3) non specific decrease of menstruation. There are two stages of menopausal change as follows:

Table 14 Menopausal Impacts in Different Menopause Stages.

Stage	Menopausal impacts
Early Stage	Autonomic nervous changes: These will be expressed as hot flushes, perspiration, hot trunk but cold extremities, forgetfulness, irritation, vertigo, headaches, loss of confidence, and loss of concentration. Emotional changes expressed as anxiety, depression stress, and pain. Skin, tissue, muscle systems degenerate: These will be expressed as: , dry, itchy and fragile skin, dry and thinning hair, numb extremities, back pain, muscle pain and fatigue Reproductive and excretory systems degenerate: These express as dry vaginal mucosa, painful intercourse, urinary incontinence, frequent urination, painful urethra.
Late Stage	Cardiovascular changes: These will be expressed as: fat deposits, hypertension, and cardio-vascular diseases. Bone changes: These will be expressed as: osteoporosis, spinal collapse, hump back and easily broken bones.

Physical Assessment of Menopause

A physical check up is necessary both yearly and before entering the QNTP management program. There are two types of check up as follows:

1. Laboratory check up: Several laboratory tests are done consisting of blood sugar, triglyceride, calcium, magnesium, bone density, blood urea nitrogen, creatinin, uric acid, and sexual hormones.

2. General physical check up: The physical examination includes pulse rate, blood pressure, body weight, EKG, vaginal examination, bone density, chest x-ray, and visual acuity, hearing ability, muscle tone and bone density.

A physical check up is necessary because decreasing ovarian hormones can cause various menopausal syndromes (hot flushes, dry skin, dryness and itching of the vulva, muscle pain, irritation, tendency to anger easily, and lack of concentration, fat deposits, hypertension, excessive weight gain, diabetes, cardiovascular disease, gall stones, and joint pain). The check up is important to gather baseline information about the health of women with menopausal syndromes.

Section 3: Existing knowledge of menopausal management today

There are two existing ways to manage peri-menopausal syndromes: hormonal replacement and non-hormonal replacement as follows:

1. Hormonal replacement. Estrogen and progestin are two hormones that have been proven effective for reducing menopausal syndromes. However, they can cause reproductive cancer, vascular thrombosis and embolism which may progress to heart diseases and strokes in some women.

2. Non-hormonal managements: These are alternative means of reducing menopausal syndromes. Several means proven to reduce menopausal syndromes are as follows:

2.1 Nutritional supplement. The principles of nutritional supplements for menopause include adequate intake of the five groups of nutrients, while decreasing carbohydrates, unsaturated fat, and sweet desserts. An increase in fruits, vegetables, food which is rich of phyboestrogen, calcium and vitamins (B6, B12, E, D) are recommended.

2.2 Exercise. Exercise through systemic body movement results in muscle relaxation and makes one feel stronger and refreshed. There are several types of exercise such as aerobic, Yoga, and Tai Chi. For women with menopausal syndromes. Aerobic exercise is proven to reduce hot flushes, perspiration, and stress, increase sleep time, increase parasympathetic action, decrease cardiovascular diseases, hypertension, diabetes, constipation, anxiety, and depression. In addition various exercises can contribute to the anti-aging process.

2.3 Meditation. There are many types of meditation such as Prayer, Vipassana, Reki, Tai Chi Chun, and Qigong. The principle of QNTP meditation is to induce calmness and concentrate the mind to regulate self-healing. In menopause

Vipassana meditation has been proven to reduce hot flushes, anxiety, and depression and increase thepain threshold.

Section 4: The concept of Qigong and QNTP practices

Qigong is a type of mind-body exercise used to produce vital energy. It is an ancient art of the Chinese way of life and Chinese medicine. Qigong is a wonderful wisdom, which integrates a long series of varying Chinese wisdoms that have been known for centuries. There are four philosophies supporting Qigong: Taoism, Buddhism, Martial arts and Traditional Chinese Medicine. The theories of medical support are five elements yin and yang theory, energy, and the theory of zang-fu organs. Qigong is composed of at least three principles diaphragmatic breathing, body movements and visualization meditation. Practicing Qigong helps regulate body movement, refines the mind, regulates breathing, and involves acupressure, acupuncture and eating nutritional supplements**.**

Qigong Nursing Therapeutic Program for Menopause (QNTP) composed of four major principles as follows:

1. Body alignment and body movement. Body alignment and body movements of this program are simple, soft, slow movements that follow sound and focus on the flow of Qi in each meridian channel. There are three techniques for preparation and five exercises for reducing menopausal syndromes.

2. Breathing exercise. Breathing in this program is diaphragmatic and lower abdominal muscle breathing with mind focusing technique. The character of breathing is slow and gentle taking in clean air in at a quiet natural setting.

3. Meditation: Meditation in this program is visualizing meditation. This involves the practice of relaxation of all the muscles in the body while imagining. Qi carries oxygen and nourishes nutrients to the cells of the whole body. Then Qi carries the waste products away from each cell through the palms and soles to the earth.

4. Holistic nursing approach. A holistic nurse participates in this program in order to welcome, recognize, understand, involve, protect, and support the menopausal participants. In addition, the nurse researcher acts as environmental provider and nutritional advice relates to the QNTP.

Section 5: Preparation of self and essences for QNTP practice

Physical and mental readiness before entering QNTP practice was essential for the program to be sustained.

Physical readiness

Woman with menopausal syndromes should be in an energetic state and with enough essences. QNTP practice should be conducted in a garden surrounded by clear, and clean air, in the morning or evening under sunlight. Clear weather and sunlight will provide not only oxygen and vitamin D but also provide vital energy.
In addition, menopausal women who have had a long working life need vital energy to continue their work. During QNTP practice cotton clothing and sport shoes or bare feet are appropriate for this climate and this type of practice. Moreover, adequate amounts of nutrition including several vegetables, several fruits, various kinds of cereals, and protein from fishes are also important. They are:

1) Phybo-estrogen: Phybo-estrogen is an estrogen hormone from plants. Sources include several bean products, unpolished rice, cereals (corn, millet, and sesame), pumpkin, carrot, papaya, guava, and coconut water. Woman with menopausal syndromes need phybo-estrogen to replace the natural estrogen deficit.

2) Vitamin E: Foods rich in vitamin E come from plant oils such as: cereal oil, sun flower oil, sat flower oil, and bean oil. Women with menopausal syndromes may take vitamin E supplement 400-1000 iu daily. Vitamin E prevents anemia and insomnia and coping with hot flushes.

3) Vitamin B6: Women with menopausal syndromes should consume vitamin B6 from cereal, milk, green vegetables, algae, papaya, and fish. The amount of vitamin B6 recommended is 1.6-2 milligrams daily or 100-200 milligrams daily from food such as an orange or half a fish. Vitamin B6 is essential for neurotransmission, nourishment of cerebral matter, decreased vomiting, reduced depression, prevented leg cramps, improved appetite and allergic reactions. In addition, it is essential for magnesium metabolism to be pyridoxal 5 phosphates for women with menopausal syndromes.

4) Vitamin B12: A woman with menopausal syndromes needs food that is rich in vitamin B12. It is obtained from milk, cheese, eggs, fish and meat. She needs 2 micrograms daily. Vitamin B12 is an essential food to better the mood, reduce irritation, anxiousness, prevent headaches, muscle pain, reduce gastroenteritis, and reduce forgetfulness.

5) Vitamin D: A woman with menopausal syndromes needs 5 micrograms vitamin D daily from fish oil or from daily sunlight. Vitamin D is essential for calcium absorption to prevent muscle cramps, is deodorizing and prevents colorectal cancer.

6) Calcium: 1-1.5 grams calcium is required daily from plants, animals and other supplements. Plant calcium can be obtained from morning glory leaves, yellow beans, and black and white sesame. Animal calcium comes from milk, eggs, and seafood. Both plant and animal calcium are essential for promoting bone formation, preventing osteoporosis, decreasing dental caries, and reducing bone fracture.

7) Magnesium: Magnesium is obtained daily from green vegetables, cereals, and dry fruits. It is essential for preventing and reducing muscle cramps, muscle pain, extremity numbness, reducing confusion, hallucinations and controlling body temperature.

8) Protein**:** A woman with menopausal syndromes needs protein from plant products. The amount required is 1 gram per kilogram body weight daily. The essential protein is from food which is rich in phybo-estrogen. These can be obtained from cereals, as well as sea foods, dried fishes and dried prawns.

*9) Carbohydrates and fat*s: It is suggested that a menopausal woman reduce both carbohydrate and sugar because of increasing triglycerides, and cholesterol. Excessive carbohydrates and fats increase body weight, cause hypertension, diabetes, colorectal cancer, and heart disease.

Mental readiness

During QNTP practice, mental readiness is also essential as: 1) strong belief in QNTP practice to enhance body strength and health, 2) to be strongly determined to QNTP practice, 3) to be committed to regular QNTP practice, and 4) to continuously search for reliable knowledge which is related to increasing Qi.

Section 6: Preparatory techniques of QNTP

There are three preparatory techniques for beginners.

1. Diaphragmatic breathing. This technique increases oxygen intake, and increases gut peristalsis.

1.1 Stand with legs apart with head, neck and back straight

1.2 Slow breathe in oxygen while abdominal muscle moving up and forward and the mind visualizes a waterfall.

1.3 Breathe out by blowing out carbon dioxide while abdominal muscles move down, backward and the mind visualizes waste products leaving from the body.

Repeat 1.2-1.3 36 rounds or as long as it is tolerable.

2. Concentration and pulling in environmental energy

This technique will increase concentration and strengthen urogenital muscle.

2.1 Stand with legs apart, bend both knees while head, neck and back straight.

2.2 Place both palms together. Then rub both palms slowly and gently followed by stretching out both hands, and rub the wrists against each other with a circular motion until there is a feeling of warmth between both palms.

2.3 Move both palms out while the mind focus on both palms Moving.

2.4 Breathe in slowly while both palms move in with the mind visualizes movement of vital energy between both palms.

2.5 Breathe out slowly while both palms move out and the mind visualizes movement of the waste from both palms through the air.

2.6 Move both palms in while breathing in, and contracting your perineum and urinary sphincter.

2.7 Move both palms out while breathing out, and relaxing your perineum and urinary sphincter.

Repeat 2.6-2.7 36 rounds or as long as it is tolerable.

3. Abdominal massage or energy keeping.

This technique will increase Qi and blood supply to lower abdominal muscle and urogenital organs, strengthen perineum muscles in order to improve urinary floor muscles.

3.1 Stand with legs apart, head, neck, and back straight.

3.2 Place the left palm on the right hand, and then put both hands on the lower abdomen.

3.3 Massage lower abdomen with a slow,firm action in clockwise direction 36 rounds or as long as it is tolerable. In addition, during clockwise abdominal massage, take a deep breathe in and visualize Qi moving clockwise slowly under palms.

3.4 Massage the lower abdomen with a slow and firm action in an anticlockwise direction 36 rounds or as long as it is tolerable, breathe out and visualize Qi moving anticlockwise under palms.

Section 7: Five exercises for reducing menopausal syndromes

1. Horse Like Standing (5 minutes at least)

This exercise will strengthen both legs and free Qi flow in body while Qi and blood flow freely, the body will self regulate illness will be healed and any disturbances reduced. For the woman with syndromes, these conditions will reduce autonomic nervous system disturbance.

1.1 Stand with legs apart, bending knees, head, neck, and back straight. Then extend both arms with both palms down in front of the body (the angle of upper arm and lower arm should be 100-120 degree).

1.2 Using diaphragmatic breath cleans air through the nose while the mind visualizes the moving of oxygen essence through each meridian channel to the organ and cells of the body and the cells absorbing the oxygen from the blood. Then participants visualize the cells excreting waste products through lymphatic vessels, both palms and both soles to the earth.

2. Fingers moving

This exercise in which each finger in turn moves down helps Qi and blood flow freely to the internal organs. For the menopausal condition, the finger moves down helping balance yang, and to reducing muscle pain and headaches.

2.1 Horse like Standing

2.2 Move your fingers down as follows:

Move both index fingers in turn down 45 degrees from the hand, and then use visualization guided meditation for 50 seconds, and moved the finger back to its normal position 10 seconds.

Move both ring fingers the same as index fingers

Move both thumbs in turn down 90 degrees from the hand, and then use visualization guided meditation for 50 seconds, and moved finger back to its normal position 10 seconds.

Move both little fingers and middle fingers the same as index fingers

Breathing and Meditation: During moving each finger down, using diaphragmatic breathing and visualizing Qi flowing freely through the meridian

network to visceral organs and then carrying carbon dioxide and waste products by breathing out through the nose and the mouth slowly and gently.

* Repeat 2.1-2.3 three rounds; then conduct Horse like standing (for at least 5 minutes)

3. Chest expansion

This exercise helps strengthen the muscles of arms, shoulders and chest; increases lung capacity and the amount of oxygen flowing through the body. For the women with menopausal syndromes, this exercise will decrease chest tightness, and reduce shoulder and upper back pain.

3.1 Stand with legs apart, clenching your hands and put your hands at the middle of your chest with both arms parallel to the floor.

3.2 Use diaphragmatic breathing in while moving both shoulders and upper arms back while the chest moves up and expands while the mind visualizes oxygen flowing freely through both lungs.

3.3 Use diaphragmatic breathing out with both arms fully extended out while visualizing carbon dioxide excreted through both palms and both soles to the atmosphere.

* Repeat 3.2-3.3 36 rounds or as long as it is tolerable.

4. Balance heart and kidney energy

This exercise balances yang and yin in menopause. It reduces insomnia, anxiety, depression, headaches, forgetfulness, chest tightness, hot flushes, buzzing in the ears, long sightedness, and aging.

4.1 Sit on a chair. Close your eyes, place both hands with palms up on your knees. Then taking a long deep breathe in and breathe out slowly and regularly while relaxing all the muscles of the body.

4.2 Lay the left ankle on the right knee followed by the right thumb pressing on Yongjoun point of left sole for 5 minutes.

4.3 Lay the right ankle on the left knee followed by the left thumb pressing on Yongjoun point of right sole for 5 minutes.

5. Sitting or reclining meditation (10 minutes or as long as it is tolerable)

This exercise calms your mind, decreases hot flushes, decreases anxiety, depression and excitability.

Sitting on chair or laying in bed, close your eyes with your head, neck, and back straight. Then place both palms up on your knees; hold your head rose slightly. Follow this by taking a long deep breath in slowly and regularly. Then exhale with the mind focused on breathing.

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