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**THE RELATIONSHIP BETWEEN SELECTED FACTOR AND
NURSING PERFORMANCE OF REGISTERED NURSES IN
HEALTH PROMOTION AND PREVENTION FOR
MENOPAUSAL WOMEN IN BANGKOK
METROPOLITAN ADMINISTRATION**

SUNIPA PRACHYANGPREECHA

อภินันท์นาการ

จาก

บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
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Stinipa Prach

.....
Mrs. Stinipa Prachyangpreecha
Candidate

Sunee Lagampan

.....
Asst. Prof. Sunee Lagampan, Ed.D.
Major – Advisor

Charuvan Hematorn

.....
Assoc. Prof. Charuvan Hematorn, M.P.H.
Co – advisor

Poonsook Shuaytong

.....
Assoc. Prof. Poonsook Shuaytong, M.Sc.
Co - advisor

Liangchai Limlomwongse

.....
Prof. Liangchai Limlomwongse,
Ph.D.
Dean
Faculty of Graduate Studies

Sunee Lagampan

.....
Asst. Prof. Sunee Lagampan, Ed.D.
Chairman
Master of Science (Public Health)
Major in Public Health Nursing
Faculty of Public Health

Thesis

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Major in Public Health Nursing

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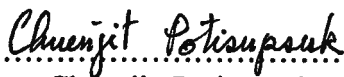
.....
Mrs. Sunipa Prachyangpreecha
Candidate




.....
Asst. Prof. Sunee Lagampan, Ed.D.
Chairman



.....
Assoc. Prof. Charuvan Hematorn, M.P.H.
Member



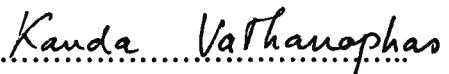
.....
Lecturer Chuenjit Potisupsuk, DrP.H.
Member



.....
Assoc. Prof. Poonsook Shuaytong, M.Sc.
Member



.....
Prof. Liangchai Limlomwongse
Ph.D.
Dean
Faculty of Graduate Studies
Mahidol University



.....
Assoc. Prof. Kanda Vathanophas, M.D.,
M.Sc. in Hygiene (P.H. Microbiology)
Dean
Faculty of Public Health
Mahidol University

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Sunipa Prachayangprecha

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M.Sc.(PUBLIC HEALTH)

KEY WORD : MENOPAUSAL WOMEN / HEALTH PROMOTION AND
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SUNIPA PRACHYANGPREECHA : THE RELATIONSHIP BETWEEN
SELECTED FACTORS AND NURSING PERFORMANCE OF REGISTERED
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WOMEN IN BANGKOK METROPOLITAN ADMINISTRATION. THESIS
ADVISORS: SUNEE LAGAMPAN,Ed.D., CHARUVAN HEMATORN, M.P.H.,
POONSOOK SHUAYTONG, M.S. 113 p. ISBN 974-665-137-4

Registered nurses have an important role in supporting health promotion and prevention for menopausal women who are at high risk of getting health problems if they do not receive proper health care.

This study was descriptive research and its objectives were to study the relationship between selected factors and nursing performance in health promotion and prevention for menopausal women. The sample group consisted of one hundred and ninety three public health nurses who worked in public health centers in BMA. Data was collected in the form of a self-administered questionnaire and SPSS/WIN was used for the data analysis. The statistics used were frequencies, percentage, arithmetic mean, standard deviation, chi-square, Pearson's product moment correlation and stepwise multiple regression analysis.

Results revealed that 48.4 % of the sample exhibited low nursing performance in health promotion and prevention for menopausal women. Chi-square test and Pearson's product moment correlation coefficient were applied and the results revealed that the most important factor, which was statistically and significantly related to nursing performance in health promotion and prevention for menopausal women (P -value < 0.001 , $r = 0.34$) was organizational support .When considering in each aspect it was found that work unit policy, resources, support from superiors were statistically and significantly related to nursing performance in health promotion and prevention for menopausal women (P -value < 0.001 , $r = 0.287$, P -value < 0.001 , $r = 0.267$, P -value < 0.001 , $r = 0.347$,respectively). Through the application of stepwise multiple regression, it was found that nursing performance in health promotion and prevention for these women could be explained by the use of the level of organizational support by 12.1 %.

Therefore, in order to promote nursing performance in health promotion and prevention for menopausal women, the organization of should support the RNs in aspect of the organizational support such as work unit policy, resources, and support from superiors. Registered nurses should have basic additional knowledge as well as be trained about menopausal women in order to use the knowledge in nursing performance.

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ศุภิกา ปรัชญาวงศ์ปรีชา : ปัจจัยคัดสรรที่มีความสัมพันธ์กับการปฏิบัติการพยาบาลเพื่อส่งเสริมสุขภาพและป้องกันโรคในสตรีวัยหมดประจำเดือน ของพยาบาลวิชาชีพ สำนักงานมัย กรุงเทพมหานคร (THE RELATIONSHIP BETWEEN SELETED FACTORS AND NURSING PERFORMANCE OF REGISTERED NURSES IN HEALTH PROMOTION AND PREVENTION FOR MENOPAUSAL WOMEN IN BANGKOK METROPOLIITAN ADMINISTRATION.) คณะกรรมการควบคุมวิทยานิพนธ์ : สุนีย์ ละกำปิ่น, กศ.ศ., จารุวรรณ เหมะธร, M.P.H., พูนสุข ช่วยทอง, วท.ม. 113 หน้า ISBN 974-665-137-4

พยาบาลวิชาชีพมีบทบาทสำคัญต่อการสนับสนุนการส่งเสริมสุขภาพและป้องกันโรคแก่สตรีวัยหมดประจำเดือนซึ่งเป็นกลุ่มที่เสี่ยงต่อการเกิดปัญหาทางสุขภาพ ถ้าได้รับการดูแลที่ไม่เหมาะสม

การวิจัยนี้เป็นการวิจัยเชิงพรรณนา มีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างปัจจัยคัดสรร ได้แก่ ปัจจัยคุณลักษณะของบุคคล ความพึงพอใจในงาน และการได้รับการสนับสนุนจากองค์กรกับการปฏิบัติการพยาบาลเพื่อส่งเสริมสุขภาพและป้องกันโรคในสตรีวัยหมดประจำเดือน กลุ่มตัวอย่างคือ พยาบาลวิชาชีพ ที่ปฏิบัติงานพยาบาลครอบครัว ของศูนย์บริการสาธารณสุข สำนักงานมัย กรุงเทพมหานคร จำนวน 193 คน รวบรวมข้อมูลโดยใช้แบบสอบถาม วิเคราะห์ข้อมูลด้วยโปรแกรมสำเร็จรูป SPSS / WIN สถิติที่ใช้คือ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ไคสแควร์ สัมประสิทธิ์สหสัมพันธ์เพียร์สัน และการวิเคราะห์ถดถอยพหุคูณแบบขั้นต้น

ผลการศึกษาพบว่าพยาบาลวิชาชีพสำนักงานมัย กรุงเทพมหานคร มีการปฏิบัติการพยาบาลเพื่อส่งเสริมสุขภาพและป้องกันโรคในสตรีวัยหมดประจำเดือนอยู่ในระดับน้อย ร้อยละ 48.4 และระดับปานกลาง ร้อยละ 32.8 เมื่อวิเคราะห์ความสัมพันธ์ พบว่า การได้รับการสนับสนุนจากองค์กรมีความสัมพันธ์กับการปฏิบัติการพยาบาลเพื่อส่งเสริมสุขภาพและป้องกันโรคในสตรีวัยหมดประจำเดือน อย่างมีนัยสำคัญทางสถิติ ($P\text{-value} < 0.001$, $r = 0.349$) และเมื่อพิจารณาเป็นรายด้านพบว่า นโยบายของหน่วยงาน การได้รับการสนับสนุนด้านทรัพยากร การได้รับการสนับสนุนจากผู้บังคับบัญชา มีความสัมพันธ์กับการพยาบาลเพื่อส่งเสริมสุขภาพและป้องกันโรคในสตรีวัยหมดประจำเดือน อย่างมีนัยสำคัญทางสถิติ ($P\text{-value} < 0.001$, $r = 0.287$, $P\text{-value} < 0.001$, $r = 0.267$, $P\text{-value} < 0.001$, $r = 0.347$ ตามลำดับ) การได้รับการสนับสนุนจากองค์กรสามารถอธิบายการปฏิบัติการพยาบาลเพื่อส่งเสริมสุขภาพและป้องกันโรคในสตรีวัยหมดประจำเดือนได้ร้อยละ 12.1 อย่างมีนัยสำคัญทางสถิติ ($P\text{-value} < 0.001$)

การวิจัยนี้มีข้อเสนอแนะว่าควรให้การได้รับการสนับสนุนจากองค์กร ในด้าน นโยบายของหน่วยงาน ทรัพยากร ผู้บังคับบัญชา รวมทั้งการเพิ่มเติมความรู้และการฝึกอบรมเกี่ยวกับสตรีวัยหมดประจำเดือน แก่พยาบาลวิชาชีพของสำนักงานมัย เพื่อนำไปใช้ในการปฏิบัติการพยาบาลเพื่อส่งเสริมสุขภาพและป้องกันโรคในสตรีวัยหมดประจำเดือนต่อไป

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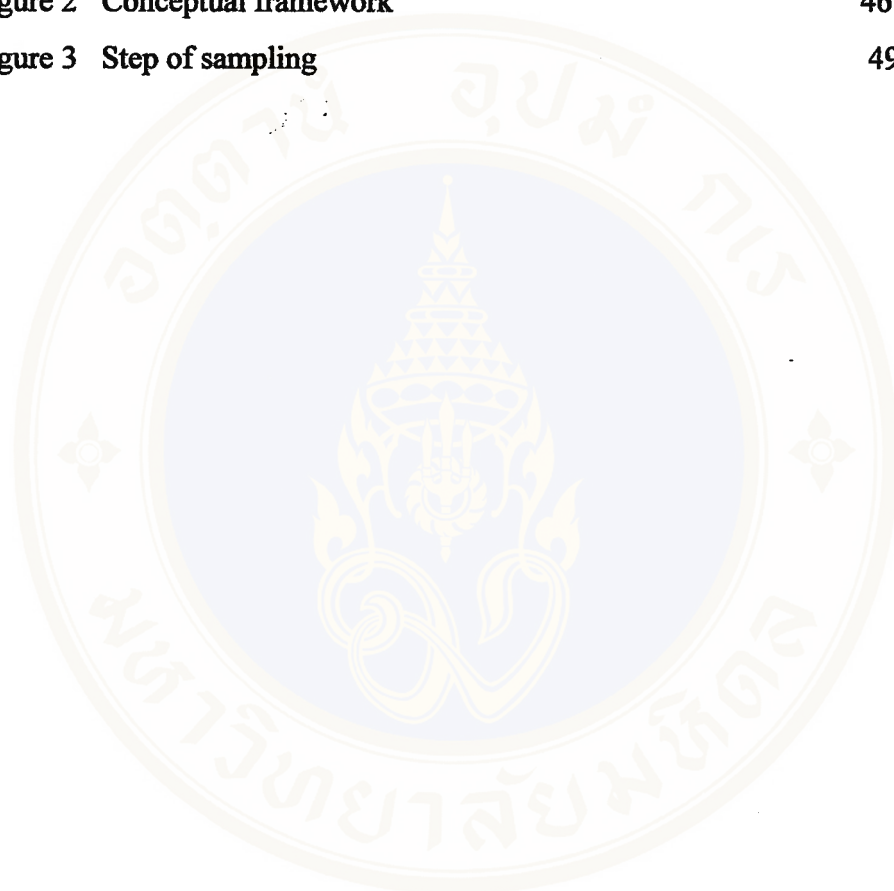
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CHAPTER I

INTRODUCTION

Background and Rational

Health care reform under national health policy emphasizes providing services to population. Health services have provided include health promotion, prevention and disease control, primary care and rehabilitation for individuals, families, and communities. A health center is a governmental unit under the Bangkok Metropolitan Administration (BMA) that works according to the national health policy and BMA's health policy. Forty four percent of health personnel working in health center are registered nurses. (RNs) (Na Barnng Chang, N. 1994:48). RNs work in all health centers in BMA and are responsible for physical, psychosocial, health behavior and socioculture and spiritual aspects, which affect health of all age groups of the population in Bangkok.

Bangkok is a very large metropolitan capital with a total population of 5,604,772 divided into 2,746,947 males and 2,854,825 females, out of 2,854,825 females, 611,193 female are between the age of 41 – 60 (The Bureau of Policy and Planning, BMA,1998:20-21) which is 10.9% of the total population of Bangkok. Females in the age group of 41-60 are considered a large group of population who are in pre-menopausal and post-menopausal period. The most significant event in these age group is the menopausal phenomenon which is caused by continuous decrease in estrogen hormone since the ovary can no longer perform the function of ovulation and estrogen production (Utain, 1990:48). The many effects of hormonal change include physical disorders such as hot flash and vasomotor instability, genital tract atrophy, skin, hair and nail change, increase lipid cardiovascular disease, skeleton disorder (osteoporosis), psychosocial problems and emotional disturbance such as depression and nervousness. All these

physical and emotional disorders affect the inevitable aging process as well as post-menopausal hormonal changes (WHO, 1996:1-30). These changes are caused by menopausal state and inappropriate health behavior which may disturb the menopausal women and extend to health problems in old age. The study of Thai menopausal women in Bangkok by Moopayuk, K. et al (1993) showed that 42.5% of menopausal women in Bangkok had disease, 7.5% had once been in a state of fractured bone, 81.0-94.0% had improper health behavior and 26.9% had insufficient exercise. Health analysis of the health of menopausal women in northeast Thailand found that illnesses that caused the most problems are chronic diseases such as cardiovascular disease, diabetes, high blood pressure, peptic ulcer, urithitis, arthritis, and joint pain and muscle ache all of which can be prevented (Chirawatkul, S. 1997:345). Additionally the study of Thai menopausal women in Bangkok by Chompootawee, S. et al. (1994:9-23) showed the following symptoms of disorders 45.5% dizziness, 41.1% irritation, 36.3% head ache, 34.2% palpitation, 34.2% insomnia, 22.3% hot flash, 17.5% night sweat, 8.2% depression, 59.4% decreased libido and 22.9% obesity.

There was evidence that many health problems of this age group of females, who which are in the pre-menopausal women and post-menopausal periods, can be prevented. The roles of RNs in health centers under BMA are to conduct progressive health care services including provision of home care for families and individuals in the communities. RNs should emphasize health promotion, prevention and disease control in all age groups including high health risk group such as menopausal women who need to be assistance and support for self care. RNs practice should practice holistic approach in providing quality health care services for special group such as menopausal women, which were assist in providing for good knowledge and competency in taking care of menopausal women. Currently, RNs work in families and communities based in Bangkok and therefore cannot provide coverage dimension services to all menopausal women.

The pilot study project conducted interviews of 16 RNs of health centers under BMA who were responsible for family and community nursing practice for menopausal women. The summarized result revealed that the most nursing service provided to menopausal women therapeutic nursing for chronic diseases such as diabetes and hypertension. Nursing practice for menopausal problems such as health promotion, and disease prevention is less. The reasons are that nurses have too much of other responsibilities as well as lack of clear policy, and no goal identification. When supervisors of mother and child health work at health centers under BMA was interviewed (Wongwisate,W.1999- the interviewee), she commented that RNs still failed to provide care service and that the services provided was concerned with sick person. Further the goal of caring for every age group as well as special age group was not completely accomplished.

There are several barrier factors, which influence quality of nursing care for menopausal women. Schermerhorn's concept (Schermerhorn, et. al. 1991:104-112) stated that internal factors which are individual attribute including demographic characteristics, knowledge, ability, psychological characteristics and work effort and external factors which is organizational support influenced performance of individuals..

The researcher is a registered nurse practicing in communities has realized the problem and hence became interested in studying the factors that are related to nursing performance in health promotion and prevention for menopausal women by RNs of the BMA Health Department. The researcher used modified concept of factors that influence the practices stated by Schermerhorn, et.al. (1991:104-112). The study focuses on some factors which are personal characteristics including age, length of governmental service, educational qualifications, work experience in community, training and knowledge about menopausal women; job satisfaction; organizational support including work unit polices; resources, and support from superior. Result of the study will be a guideline for managing nursing for menopausal women in the future.

Research Problems

1. What are nursing performance of BMA's RNs in health promotion and prevention for menopausal women?

2. Do factors of personal characteristics, job satisfaction and organizational support relate to nursing performance of BMA's RNs in health promotion and prevention for menopausal women?

3. Can factors of personal characteristics, job satisfaction and organizational support affect the nursing performance of BMA's RNs in health promotion and prevention for menopausal women? If so, how?

General Objective

To study the relationships between the following factors: personal characteristics, job satisfaction, organizational support and nursing performance of RNs working in the community under the Department of Health, BMA in health promotion and prevention for menopausal women.

Research Objectives

This research aimed to study:

1. the RNs' nursing performance in health promotion and prevention for menopausal women by RNs working in community under the Department of Health, BMA;

2. the relationship between personal characteristics, job satisfaction, organizational support and nursing performance in health promotion and prevention for menopausal women;

3. the variables which explain nursing performance in health promotion and prevention for menopausal women by using factors of personal characteristics, job satisfaction, and organizational support;

Research Hypotheses

1. The relationship between the RNs' personal characteristics and nursing performance in health promotion and prevention for menopausal women was expected to be as follows:

1.1 the RNs' age had positive relationship to nursing performance in health promotion and prevention for menopausal women;

1.2 the RNs' length of governmental service had positive relationship to nursing performance in health promotion and prevention for menopausal women;

1.3 the RNs' educational qualifications related to nursing performance in health promotion and prevention for menopausal women;

1.4 the RNs' work experience in community had positive relationship to nursing performance in health promotion and prevention for menopausal women;

1.5 the RNs' training on menopausal women related to nursing performance in health promotion and prevention for menopausal women;

1.6 the RNs' knowledge about menopausal women had positive relationship to nursing performance in health promotion and prevention for menopausal women.

2. Job satisfaction had positive relationship to nursing performance in health promotion and prevention for menopausal women.

3. Organizational support had positive relationship to nursing performance in health promotion and prevention for menopausal women as follows:

3.1 work unit policies had positive relationship to nursing performance in health promotion and prevention for menopausal women;

3.2 resources had positive relationship to nursing performance in health promotion and prevention for menopausal women;

3.3 support from superiors had positive relationship to nursing performance in health promotion and prevention for menopausal women.

4. Personal characteristics, job satisfaction, organizational support can be explain the variance in nursing performance in health promotion and prevention for menopausal women.

Research Variables

Independent variables are as follows:

1. personal characteristics including:
 - 1.1 age;
 - 1.2 length of government service;
 - 1.3 educational qualifications;
 - 1.4 work experience in community;
 - 1.5 training on menopausal women;
 - 1.6 knowledge about menopausal women;
2. job satisfaction;
3. Organizational support including:
 - 3.1 work unit policies;
 - 3.2 resources;
 - 3.3 support from superiors.

Dependent variable is nursing performance in health promotion and prevention for menopausal women.

Definition of Terms

1. Registered nurses (RNs) refers to nurses, who graduated with a certificate of advanced nursing and midwifery or bachelor degree in nursing, and are registered as

professional nurses with the Thai Council of Nursing and include all nurses who took responsibilities in health promotion and prevention for menopausal women under Health Center, Department of Health, BMA for a period of at least six months before February 2000

2. Nursing performance in health promotion and prevention for menopausal women refers to the practice of RNs in health promotion and disease prevention for menopausal women according to Spellbring's concept, which included the following activities:

2.1 assessment is the activity of physical, emotional, intellectual, social, spiritual assessment and laboratory investigation including blood and urine examination;

2.2 advocacy is the activity of providing health information and communication with menopausal women.

2.3 consultancy is the activities of using communication skills to provide consultation;

2.4 health education is the activity of teaching promotion activities and self-care activities to menopausal women;

2.5 promotion of self-care is the activity of stimulating menopausal women to establish their goal of self-care behaviors, choose different practices, set time frame, know how to make appropriate use of resources and learn how to make continuous assessment of their own health;

2.6 case management is the activity of assessing problems finding result needed health services, planning, implementing, and evaluating and reassessing.

In this research, nursing performance in health promotion and prevention for menopausal women was measured from questionnaire that the researcher designed using the responses of have or have not performed. Range of score was 0-58 A high total score refers to high nursing practice, a low total score refers to low nursing practice.

3. Selected factors refer to factors that were expected to influence nursing practice of caring for menopausal women. These factors are personal characteristics, job satisfaction and organizational support:

3.1 personal characteristics comprise of:

3.1.1 age, which refers to the age, counted in full years;

3.1.2 length of governmental service, which refers to the number of years that a RN has worked; the number of months over six months are counted as one year;

3.1.3 educational qualifications, which refers to the highest level of education of RN;

3.1.4 work experience in community refers to the number of years that a person practiced in communities within the area of BMA;

3.1.5 training on menopausal women refers to support from work unit for extension of knowledge in skills and experiences about menopausal women, using types of responses which are ever or never been training on menopausal women

3.1.6 knowledge about menopausal women refers to understanding the concepts of changing of the body and mind of menopausal women, ability in caring for suitable health, practice for menopausal women, measured by true or false tests designed by the researcher. The scores range from 0-20. A high total score mean high level of knowledge, a low total scores mean low level of knowledge.

3.2 Job satisfaction refers to positive or negative feelings towards characteristics of nursing practice including taking care of menopausal women. To identify whether the work is boring, challenging, creative, or whether the work is difficult or easy, or motivates the nurse to do her best physically and mentally so that nursing for menopausal women can reach its goals. Job satisfaction is measured by five level rating scales questionnaires. The scores range from 14-70. A high total score mean high level of job satisfaction, a low total scores mean low level of job satisfaction.

3.3 Organizational support comprises of:

3.3.1 work unit policies refers to support from work unit on identifying goals of work practice and explaining policies for strategy and work procedure;

3.3.2 resources refers to resources that are used in nursing practice for menopausal women, which include personnel, equipment, medical supply, documents and work manuals.

3.3.3 support from superiors refers to support from heads of RNs or director of health center including providing facilities and assistance, listening to problems, giving advice and comments and assisting in problem solving in nursing practiced of caring for menopausal women.

These variables were measured by the 5-level rating scale questionnaires.

CHAPTER II

LITERATURE REVIEW

The review of the literature is presented in five sections as follows:

1. knowledge about menopausal women;
2. nursing performance in health promotion and prevention for menopausal women;
3. concept of working performance;
4. relevant research.

1. Knowledge About Menopausal Women

Menopause is that point in time when permanent cessation of menstruation occurs following the loss of ovarian activity. (Utian, 1990: 48). The peri-menopause is the period immediately before and after the menopause. The climacteric is a more encompassing word, indicating the period of time when the woman passes through a transition from the reproductive stage of life to the post-menopausal years, a period marked by waning ovarian function.

More important than immediate symptoms of menopause are the effects of hormonal changes on many bodily systems. The most intensively studied of these are the cardiovascular and skeletal systems. Both are adversely affected by the inevitable aging process, as well as by post-menopausal hormonal changes (WHO, 1996).

The mean age of menopause throughout the world today is 50 years. Approximately 25% of women will experience menopause before age 45; 95% of women will be menopausal by 55 years of age (Charles, 1995:384-85).

1.1 Definition of Menopause

Although the term “menopause” has been widely used to refer to the loss of reproductive capacity, it most accurately refers to a single physiological event, which is the loss of menstrual period. Therefore, only after a lapse of time can there be any certainty as to such a diagnosis. In the absence of pregnancy or disease, a period of one year without spontaneous bleeding usually denotes that menopause has occurred (Happer,1991).

According to WHO (1981), the classification of menopausal status can be classified as follows:

1. menopause is the permanent cessation of menstruation resulting from loss of ovarian activity;
2. Peri-menopause is the period immediately prior to the menopause and at least the first year after it;
3. post-menopause is the period dating from the menopause, which can only be assessed in retrospect (Harper,1991; Fishbien, 1992).

1.2 Symptoms and Signs of Ovarian Failure

1.2.1 Menstrual Cycle Alterations

Soon after an adolescent woman has her menstrual cycle, regular, predictable menstrual cycles are established that continue until about 40 years of age. Around 40 years, the number of ovarian follicle becomes substantially depleted and subtle changes occur in the frequency and length of menstrual cycles. Women may note shortening or lengthening of her cycles. The luteal phase of the cycle remains constant at 13 to 14 days, whereas the variation of cycle length is related to a change in the follicle

phase. Women in their 20s and 30s will ovulate 13 to 14 times per year and, with advancing reproductive age, will decrease to 3 to 4 times per year (Charles, 1995:384-85).

With the change in the reproductive cycle length and frequency, there are concomitant changes in the plasma concentration of Follicle Stimulating Hormone (FSH) and Lutinizing Hormone (LH). More FSH is required to stimulate follicle menstruation. Beginning in the late 30s and 40s, the concentration of FSH begins to increase. This is the first chemical evidence of ovarian failure. The 5 to 10 year periods before menopause are termed perimenopause. During the perimenopause years, women begin to experience symptoms and signs of estrogen deficiency, as reproductive function becomes increasingly inefficient.

1.2.2 Hot Flashes and Vasomotor Instability

Coincident with the change in reproductive cycle length and frequency, the hot flash is the first physical manifestation of ovarian failure. Occasional hot flashes begin several years before actual menopause. The hot flash is the most common symptom of impending ovarian failure. More than 95% of perimenopause and menopausal women experience hot flash.

Hot flash has rapid onset and resolution. When the hot flash occurs, a women experiences a sudden sensation of warmth. The skin of the face and anterior chest wall become flashed for approximately 90 seconds. With resolution of hot flash, a women falls cold and will break out in to a "cold sweat." The entire phenomenon lasts less than 3 minutes. the hot flash is the result of declining estradiol-17 β secretion by the ovarian follicle. As women approaches menopause, the frequency and intensity of hot flashes increase. Hot flash may be disabling, producing diaphoresis, especially at night. When perimenopausal and postmenopausal women receive estrogen replacement, hot flashes usually resolve in 3 to 6 weeks. If a menopause women dose not receive estrogen

replacement therapy, hot flashes will usually resolve spontaneously within 2 to 3 years (Kronenberg, 1994:97-117, Charles, 1995:384-85).

1.2.3 Vaginal Dryness and Genital Tract Atrophy

The vaginal mucous, cervix, endocervix, endometrium, and myometrium are estrogen dependent tissues. With decreasing estrogen production, these tissues become atrophic, resulting in various symptoms. The vaginal epithelium becomes thin and cervical secretion diminishes. Women experience vaginal dryness while attempting or having sexual intercourse, leading to diminished sexual enjoyment. Atrophic vaginitis may also present with itching and burning related to sexual activity. The thinned epithelium is also more susceptible to becoming infected by local flora.

The endometrium also becomes atrophic, sometimes presenting with postmenopausal spotting. The vaginal tissues that support the bladder and rectum become atrophic, resulting in possible bladder (cystocele) and rectal (rectocele) prolapsed. In addition, uterine prolapsed is more common in the hypoestrogenic patient. Because of atrophy of the lining of the urinary tract, there may be symptoms of dysuria and urinary frequency. The senile urithritis often improves dramatically with estrogen-replacement therapy, leading to loss of the symptoms of urgency, frequency, and dysuria (WHO, 1996:1-30, Charles, 1995:384-85).

1.2.4 Osteoporosis

Bone demineralization is a natural consequence of aging. Diminishing bone density occurs in both men and women. However, the onset of bone demineralization occur 15 to 20 years earlier in women than in men and is accelerated after ovarian function ceases. Bone demineralization not only occurs with natural menopause but also has been reported in association with decrease estrogen production in certain groups of young women. This factors contribute to the risk of osteoporosis.

The role of estrogen in stimulating and maintaining bone density is unclear. Estrogen receptors have been demonstrated in osteoblast. This finding suggests a permissive and perhaps even essential role for estrogen in bone formation. Bone density diminishes at the rate of approximately 1 to 2% per year in menopausal women compared with approximately 0.5% per year in perimenopausal women. Of all the therapies used for the prevention and treatment of osteoporosis, estrogen replacement seems to be most effective.

Calcium supplementation is not a substitute for estrogen replacement. In several studies comparing estrogen with calcium, patient who received calcium alone had a stabilization of bone mineral mass. It is appropriate, however, to recommend 1000 to 1500 mg of daily calcium as a supplement for menopausal woman (Charles, 1995:384-85).

1.2.5 Cardiovascular Lipid Changes

With approaching ovarian failure, change occurs in cardiovascular lipid profile. Total cholesterol increases high-density lipoprotein (HDL) cholesterol decreases, and low -density lipoprotein (LDL) cholesterol increases.

The administration of exogenous estrogen to perimenopausal and post-menopausal women promotes normalization of the cardiovascular lipid profile. Women who receive estrogen-replacement therapy have a lowered incident of myocardial infraction and stroke than women who do not receive estrogen-replacement therapy.

1.2.6 Skin, Hair and Nail Changes

Estrogen influences skin thickness. With declining estrogen production, skin tends to become thin, less elastic, and eventually more susceptible to abrasion and trauma. Estrogen replacement helps restore the thickness and elasticity of skin.

Some women will notice changes in their hair and nails with the hormonal change of menopause. Estrogen stimulates the production of sex hormone binding globulin, which binds androgens and estrogens. With declining estrogen production, there is less available sex hormone-binding-globulin, which results in freer testosterone. This may result in increase facial hair. Moreover, change in estrogen production affects the rate of hair shedding. Hair from scalp is normally lost and replaced in an asynchronous way, with changes in estrogen production, hair is shed and replaced in a synchronous way, resulting in the appearance of increase hair loss from the sculp. This is a self-limiting condition and requires no therapy, but patients do require reassurance. Nail becomes thin and brittle with estrogen deprivation.

1.2.7 Mood Changes

Perimenopausal and postmenopausal women often complain of volatility of effect. Some women experience depression, apathy, and “crying spells.” These may be cause directly by estrogen deficiency, by estrogen deficiency associate sleep disturbance, or by both. Not only are these emotional symptoms disturbing to a women but her inability to control these feelings is equally of concern. The physician should provide counseling and emotional support as well as medical therapy. The role of estrogen in central nervous system's function is unknown. However, it is well established that sex steroid hormone receptors are protean in the central nervous system. Estrogen replacement in perimenopausal and postmenopausal women often diminish these mood swings.

Conclusion

Menopause has been overladen with negative symbolism. Many of behavioral complaints at the time of menopause, however, can be explained by psychological and sociocultural influences. That is not to say that important interactions between biology,

psychology, and culture do not occur, but it is time to stress the normalcy of this life event. Post-menopausal women do not suffer from a disease (specifically a hormone deficiency disease). Hormone replacement therapy should be viewed as specific treatment of symptoms in the short term and preventive pharmacology in the long term.

Menopause serves a useful purpose. This physiological event brings clinicians and patients together, providing the opportunity to enroll patients in a preventive health care program. Contrary to popular opinion, menopause is not a signal of impending decline, but rather a wonderful phenomenon that can signal the start of something positive, a good health program.

2. Nursing Performance in Health Promotion and Prevention for Menopausal Women.

2.1 Health Promotion and Prevention.

The most important difference between health promotion and illness prevention is in the underlying motivation for the behavior on the part of individuals and aggregates. Health promotion is motivated by a desire to actively avoid illness, detect it early, or maintain functioning within the constraints the illness describes. Prevention or health prevention is taking action against disease processes. This is a problem-oriented approach in which emphasis is placed on finding ways to modify the environments, behaviors and bodily defenses so that disease processes are eliminated, slowed, or changed (Pender, 1996:7).

In contrast, health promotion means taking action to enhance the quality of the flow of life in the human – environment interactive process (Pender, 1996:7).

According to the World Health Organization (WHO, 1986) health, promotion includes encouraging healthy lifestyle, creating supportive environments for health, strengthening community actions, reorienting health services, and building healthy public policies.

Health prevention may be accomplished by measures designed to promote general health by specific prevention of individuals against disease agents, decrease risk factors(WHO, 1994). As soon as the disease process is detectable, and also include preventing sequel and limiting the disability .

In conclusion, health promotion and prevention refers to encouraging health lifestyle, creating supportive environments for health, and taking actions to thwart disease processes, a problem – oriented approach in which emphasis is placed on finding ways to modify the environments, behaviors and bodily defenses so that disease processes are eliminated, slowed, or changed.

2.2 Nursing's Role in Health Promotion and Prevention for Menopausal Women.

Menopausal women nursing in health promotion and prevention is a public health service that requires specific knowledge and skills. Nursing has to be planned appropriately according to changes that occur in menopausal women as a result of decrease in estrogen hormone in the body. That is to maintain the state of health and to prevent disease or complications that may occur.

Ann Marie Spellbring (1991:804-815) suggested the roles of nurses in health promotion and prevention for menopausal women set forth below.

1. **Assessment.** The first important step in health promotion is potential assessment. Ranlins, et al. (1992: 786-793) suggested that assessment should be done in all 5 dimensions as set forth below:

1.1 **physical dimension.** Apart from checking the general appearance that shows deterioration according to age, menopausal women should be examined physically concerning:

1.1.1 **obesity** because of over consumption together with lack of exercise. There are a lot of people who are assessed to be obese after critical events in life such as death of a family member, losing job, or troubled marriage. There can be numerous critical events that happen to middle age women, therefore physical examination in this system should be done in detail;

1.1.2 **symptoms** that occur because of reduced level of estrogen, both short and long term as previously mentioned. Women who received hormone replacement therapy (HRT) must be especially assessed physically at intervals to be able to immediately diagnose symptoms that occur from hormone treatment;

1.1.3 **sleeping pattern** - it is normally found that middle age people begin to have trouble sleeping at night such as sleeping early and stay awake in the middle of the night, the number of sleeping hours decrease, or light sleeping. Sleeping problems are found most in women with age around 50.

1.2 **emotional dimension.** Past studies have found that middle age people had emotional problems that arose from many factors and caused several levels of worry and depression, such as fear and being angry. These feelings mostly begin with the people who are close to them such as husband and children. Next is the concern with work and economy. Depression risk factors in middle age women include having to be separated or having a failed relationship with a member of the family, those who are facing losses in life, and having depression in family history;

1.3 **intellectual dimension.** Middle age people will begin to have deterioration of short-term memory, sight and hearing, and decision making. They have to make use of intellectual and with instead. Therefore, the decision to change health behavior may

cause some problems. But women usually are more adaptable to changes than men. Apart from this deterioration, nurses have to assess defense mechanism that particular women should use;

1.4 social dimension is the assessment of the environment and all individuals that are related to women of this age, which are particularly influential to the women's mental state. This is the assessment of social roles and relationships.

1.5 spiritual dimension. When entering into middle age, many people become religious and use their faith as mental refuge in order to obtain life goals. Therefore, it became an interesting issue that faith in religion can result in mental health promotion.

2. Advocacy. Nurses become advocates by providing effective health information to women for them to make health decisions themselves (both in caring for themselves and receiving services from doctors). After the women had decided, nurses must give them support so that the health decision can reach the goals. This particular role of nurses includes using skills in helping the women to find out what they really want for themselves, using effective communication, and defining definite problems and activities to solve the existing problems. This role can be accomplished if the nurse has knowledge in making use of resources in the community to the best extent.

3. Consultancy. This is an important role of nurses that uses skills in communication, understanding, accepting, showing that they are genuine and building confidence in the advice seeker to be able to solve their problems themselves.

4. Health education. Work in health education by nurses in the past had to rely on basic medical concepts such as educating about diseases and treatment cooperation. But presently, the basic health education has to be changed to more health promoting behaviors, especially in women who have chronic health problems both physically and mentally. Nurses have the important role of teaching women and their families to have

skills in caring for themselves and to be able to face problems so that they may live happily.

5. Promotion of self care. This is done by stimulating the women to set goals of self care behaviors, choose method of practice, set time frame, learn to use resources suitably and learn to conduct continuous self assessment. In this work of health promotion, both nurses and service receivers have to change their concepts to be in line with the new health service. The work can be successful only through the cooperation and practice of both sides and is not mainly the task for nurses as previously done.

6. Case management. Because past health services had been organized as holistic care, menopausal women who have several problems should be helped in solving these problems until they can independently conduct their own roles as much as possible. The process of case caring to promote health have steps that are the same as steps in nursing process which including reflecting on the assessment of problems in order to find the need of health services, planning, following up to find results and reassessing.

Apart from true above, the Public Health Ministry had set up regulations in caring for menopausal women. Standard regulations in health care of each age group are set forth below (Department of Nursing, 1997). During post reproductive age (45-59), the women must receive health care concerning:

1. health problem monitoring such as mental health assessment and laboratory testing of both blood and urine;
2. health promotion services such as menopausal women clinic, provision of advice and health education, promotion of exercise and nutritional state, organization of menopausal women club, coordination with specialists and forwarding patients to be treated by specialists.

Standard care those menopausal women should receive including (Department of Health, 1998:3):

1. The women must have correct postmenopausal knowledge, attitude and self-behavior;
2. They should receive the following health examinations:
 - 2.1 pap smear checking at least once in 2 years;
 - 2.2 breast examination to be conducted by the themselves women at least once a month in order to look for possible changes, when there is doubt, the women should be examined by public health official and the women should receive examination by public health official at least once a year;
 - 2.3 The women should be weighted, measured, and have their blood pressure checked at least once a year;
 - 2.4 The women should be checked for diabetes.

Panpilai Sriarporn (1994:178-190) suggested the roles of nurses in the practice for menopausal women nursing as set forth bellow:

1. Health State Estimation of Menopausal Women, as follows:

- 1.1 general personnel and family history, marriage, pregnancy, delivery and birth control;
- 1.2 food habit - characteristics of daily diet should be estimated, the choice of food, general knowledge concerning food intake since childhood, teenage years, until the present. There also should be estimation of daily food intake to find out whether there is enough nutritional value such as calcium and whether there is enough and suitable intake of protein and phosphorus;
- 1.3 estimation of additives consumption such as smoking, alcohol, tea and coffee in order to find out the amount of daily intake.
- 1.4 exercise including type and consistency of exercise;

1.5 general physical checking, especially on age, race, height, weight, breast, pelvic, rectum, sight, hearing and bone structure;

1.6 observation of symptoms of various abnormalities in various systems, including the endocrine system;

1.7 finding out whether the women received laboratory checking or special checking as follows:

1.7.1 at 35, these women should receive first mammogram checking, and should be checked at intervals until they are 50, after which they should be checked every year;

1.7.2 at 40, they should have their blood tested to find occult blood and lipoprotein once every 5 years;

1.7.3 at 60, they should be estimated concerning the thyroid glands once every 2 years and should be tested to find haematocrit once every year.

2. Nursing Diagnostics of Menopausal Women

Nursing diagnostics of menopausal women concerns with, lack of knowledge of how to care for oneself, discomfort, pain, risk of having accidents, or imbalance of nutritional state follows:

2.1 concern about entering menopausal age.

2.2 reduced self worth.

2.3 changing pattern of sexual intercourse including being painful when having intercourse and reducing interest in sexual activities;

2.4 discomfort because of a set of symptoms of menopausal age;

2.5 reduced ability in doing tasks;

2.6 risking osteoporosis because calcium intake is less than body needed;

2.7 lack of knowledge of the cause, prevention and curing of osteoporosis;

2.8 nutritional imbalance because of changes in metabolism;

2.9 risk of bone fracture or accidents;

2.10 risk of genital tract and urinary tract infection.

3. Nursing Practice

3.1 Promotion of knowledge and understanding including

3.1.1 giving health education;

3.1.2 giving advice and discussing health problems;

3.1.3 establishing service units to give knowledge and answer questions, or giving health services for all women who are entering menopausal age. The unit may include mature women clinic so the menopausal women can come for service when they have problems.

3.2 Preparation for mental readiness to enter into menopausal age and promotion of self worth including:

3.2.1 stimulate and motivate menopausal women to accept natural changes by giving them correct knowledge and information;

3.2.2 providing knowledge to husband, children or members of the family concerning changes that take place in menopausal women, Advising husband and children of ways to take care of, giving encouragement to assisting in some activities of, accepting changed behaviors of and giving importance to menopausal women;

3.2.3 encouraging the women to take part in social activities, do volunteer work, or do social work, so that they may have the opportunity to meet women of the same age. They will see and learn differences in one another's problems and ways to solve the problems;

3.2.4 encourage the women to spend their free time fruitfully and adopt hobbies such as planting, dress making, playing music, drawing, doing craft works, and developing their hobbies into the work that is more worthy in their own opinion. These activities will help menopausal women to be happy in their free time, so that they may pay less attention to changes within themselves. The activities also promote the feeling of self worth;

3.2.5 encourage the women to care for themselves concerning health, body cleanliness, food, regular secretion, regular exercise, joining in social functions and having appropriate recreational activities in order to always maintain physical and mental health.

3.3 assistance to the women to modify their sexual activities to suit their age and the changes that occurred including

3.3.1 educate the menopausal women and their husbands about changes that occurred naturally when their ages increase;

3.3.2 advise them to do pelvic floor muscle exercise by contracting the vagina, which will help in the problems of uterine prolapsed, pain during sexual intercourse and urine incontinence;

3.3.3 advise the use of lubricant.

3.4 Prevention of genital tract and urinary tract infection including

3.4.1 maintain body cleanliness;

3.4.2 wash the exterior of genital every time after urination and stooling, it should be washed from the front to the back by using clean water and padded dry by using toilet paper;

3.4.3 shower or bath by pouring water over themselves while standing because sitting or lying in water may cause bacteria to be washed from other body parts and trapped in genital or the urethra;

3.4.4 change underwear everyday or every time it gets wet because dirtiness and dampness will cause bacterial growth;

3.4.5 avoid wearing tight pants for a long period of time because this may cause the genital to be hot damp and promote bacterial growth, underwear worn should be made of cotton;

3.4.6 avoid using vaginal deodorant or douche because the chemicals may irritate vaginal tissue;

3.4.7 drink water and consume food as follow:

1) they should drink 1500 milliliter or 6-8 glasses of water per day and drink fruit juices that are sour;

2) yogurt should be drank daily, because lactobacilli in yogurt prevents urinary tract and genital tract infection;

3.4.8 urination as follows:

1) menopausal women should not try to hold urine because it will promote bacterial infection in urinary bladder;

2) they should urinate before and after sexual intercourse, and drink 1-2 glasses of water to urinate out bacteria that may have contaminated while having sexual intercourse.

3.5 Prevention of osteoporosis and other complications that may occur because of physical changes in menopausal stage including

3.5.1 providing knowledge to women in general, especially menopausal women concerning the cause of osteoporosis;

3.5.2 advice about exercise to prevent bone mass loss, especially exercises that involves gravity and putting body weight on the legs, such as running, walking, playing tennis and bicycling.

3.5.3 advice menopausal women to eat foods that contain calcium, in order to receive 1-1.5 grams more calcium daily. High calcium food is dried shrimps, sesame seed, milk, cheese, green vegetables, soybean, shrimps, crabs, and oysters, egg yoke. Food that had been soaked in diluted limewater will have more calcium than before. The nurses can also advise the women to take a 1-gram tablet of calcium daily before bedtime. Women who taking vitamin D with calcium tablets should drink more water and must be checked to find out whether their kidneys are normal because calcium tablets may cause the state of hypercalcemia.

Nurses should advise menopausal women to consume high calcium and low phosphorus food and have protein intake in suitable quantity. Phosphorus promotes brittleness in bones and there is quite high level of phosphorus in milk that makes milk unsuitable for them. They should drink non-fat milk and yogurt instead because they are

the sources of calcium and vitamin D. Menopausal women should not consume more than 44 grams of protein per 1-kilogram body weight because protein accelerates calcium releasing with urine. At the same, time the nurses should advice menopausal women to limit salt consumption to 500-1,500 grams a day because higher level of salt will also accelerate calcium releasing with urine.

3.6 Helping menopausal women to be able to take care of themselves concerning general health and lessening hardships from the set of menopausal symptoms including

3.6.1 giving advice about general health care as follow:

- 1) teach them to perform breast examination themselves and advice them to examine their breast once a month;
- 2) advise about food consumption that is nutritious, suitable for their ages and advise them to exercise regularly;
- 3) advise them to have pap smear check up and breast examination by medical specialists once a year;
- 4) advise them to reduce or stop smoking and alcohol drinking;

3.6.2 giving advice in reducing symptom of hot flashes;

3.6.3 giving advice in reducing symptom of the nervous system as follow;

- 1) for depression and irritability, the nurses have to advise menopausal women to take vitamin B6 5-25 milligrams daily, but not more than 100 milligrams per day. Food source of vitamin B6 are butter, bran, rice, animal viscera, sugar cane juice, nuts and unpolished rice;
- 2) for insomnia, the women should be given advice to drink warm milk before sleeping and should not drink tea, coffee, cocoa, or chocolate drink after evening meal.

Support and promotion for menopausal women to be able to care for themselves, so that they may have good mental and physical health and are able to live happily in the society is an important role for nurses. Quality and efficient nursing

services for menopausal women require knowledge and understanding of nursing process for menopausal women. The nurses must also be able to practice nursing with efficiency. They must have the ability to teach and motivate women to gain knowledge and understanding in caring for themselves in order to prevent and lessen problems that may occur. Nurses must have creative initiatives in arranging appropriate activities or group meetings among menopausal women, and have the ability in observing physical and mental changes in menopausal women that are different to normal changes.

The mentioned roles of nurses are not limited only to women who came to receive services in nursing units or hospitals, but can be conducted from the level of community, village, or in any group that the nurses had assessed that there are women who are entering into menopausal age. That is to provide basic knowledge of self-care, to promote good health, and to prevent symptoms or diseases that are results of entering into menopausal age and to promote and maintain good physical mental and social health, which means maintaining every normal body function to have good physical health and mental health, which is a way of living happily in the society.

From reviewing related text, it was found that menopausal women have many changing symptoms in the automatic nervous system, in the urinary tract system, genitals, and psychosocial behavior. These changes together with changes in economic and social status, and the present environment make it vital that menopausal women must change their behaviors to those suitable to their ages. Therefore, nursing practice in caring for menopausal women need to rely on knowledge and the understanding of nurses in nursing menopausal women. The nursing practice must cover monitoring health problems and health promotion services. The practice must be carried out by using nursing activity of health assessment in all 5 dimensions which are physical, emotional, intellectual, social and spiritual aspects; laboratory examination such as blood and urine checking; health promotion service such as menopausal women clinic, giving advice and health education; support and promotion of exercise and nutritional state; organization of menopausal women club; coordination with specialists and forwarding patients to be

treated by specialists. All these are done in order that the menopausal women may have the correct knowledge, attitude, and behavior on their menopause.

3. Concepts of Work Performance

Shermerhorn, et. al. (1991:104-112) defined concepts concerning individual performance factors as consisting of the factors set forth below.

1. individual attributes as follow: -

1.1 demographic characteristics, which are the factor that shows background of an individual such as sex, age, race, economic-social status, living place, family size, and other similar things. However, demographic characteristics alone are not a good indicator. There are other relating factors including competency and/or psychological characteristics;

1.2 competency characteristics, which are an important attribute to consider when selecting, people for a work position. Competency characteristics are a motivation that can stimulate work effort. They are primary motivation that influence a person's wit and can help him to win over his environment. An individual who feels that he has competency in his work can be expected to work seriously. Therefore, competency characteristics are interior stimulators, which stimulate and support an individual to work seriously. Competency characteristics can be divided into 2 types which are physical competency and mental competency sometimes is measured by educational performance to indicate trend of mental competency and work practice;

1.3 psychological characteristics show trend of future behavior of individuals and are permanently influential to behavior and psychological characteristics such as attitude, cognition, need and mannerism;

However, the importance of personal characteristics depends on the nature and need of each work, Shermerhorn stressed that personal characteristics must be suitable to the need of each job in order that required work performance may be obtained.

2. **Work effort.** Individual attributes that are suitable to the work alone are not enough for the individual to obtain high level of work performance. There is another important and vital factor that is work effort, which shows that the individual wants to work. There must be motivation to work, which is stimulation inside the individual that have direct effect to and maintains effort in working. An individual who has high level of motivation will work seriously. Therefore, motivation is an important factor that controls work effort.

3. **Organizational support.** Work of an individual needs to be supported by the organization that he works in. An individual with characteristics that are suitable for his work will receive high level of motivation, but he may not be a good worker if he does not receive enough support from his organization. This is called situation constraint, such as not enough working time, budget, tools, utility, materials, unclear work information, unsuitable level of work performance expectation, lack of working steps etc. These all affect work of an individual.

Using the concepts above, work of an individual can be summarized to mean personal characteristics with learning and using of work knowledge, together with organizational support. Working can be considered a quality behavior of humans that can be changed according to situation. Shermerhorn's concept of 3 factors that influence work of an individual, that are demographic characteristics, which are factors inside an individual such as individual attributes, competency characteristics, psychological characteristics; work effort such as motivation; and exterior factors such as receiving organizational support and working environment have many variables that are influential to the work of an individual. The researcher uses the concept of Shermerhorn, et. al. as a framework in studying to find out which factors are influential to nursing practice of caring for menopausal women as conducted by registered nurses of the BMA Health Department.

3.1 Factor of Individual Attributes

3.1.1 Age and length of governmental service are factors that affect working ability because an individual who has appropriate age, educational qualification, and experience is able to use his maturity and experience to solve problems in his work, to adapt to working environment, and to understand existing problems better. This helps the individual to have job satisfaction and to continue to work happily. As an individual ages, he will have several work experience, look at the work with a broader angle that covers more details, causing him to be mature. Maslach (1986:60) said that an older person had experience with many type of individuals, had higher level of emotional maturity, was more careful knew life, looked at life in a wider scope in more details, and can adapt himself according to the real situation better than those who are younger. It was found that length of governmental service was a factor that acted together with age, that is those who are aged also have more length of governmental service. Flippo (1966:183-184) said that an individual who had worked for a long time in a governmental organization would be more respected for his working status when he was promoted to another work position. This agrees with a study done by Dyer (1972:294:304) to find factors that were related to the work of 200 nurses in the state of Utah, it was found that age factor was related to working practice of professional nurses. Denduongchai,R. (1997:ii) also found that age was related to working practice of teachers who were responsible for food sanitary work in schools. This disagrees with the work of Panitkit, J. (1998:118) who found that age did not relate to measles immunization work done by officials of health unit in Nakornsawan Province.

The study of the age and length of governmental service revealed that they are and are not related to the performance of work of an individual. For this study, the age and length of governmental service were selected as factors because the age and length of governmental service are qualitative factors which affect an individual's adjustment to the environment of the work unit and in better understanding the problem.

3.1.2 Educational qualification. Education is a factor that helps an individual to be efficient and can adapt to win over his environment. A highly educated individual has the intellect that contributes to being able to consider things reasonably and understand his environment more accurately than a badly educated individual. Education helps the work to be conducted smoothly (Tritilanun, P. 1991:43). The study by Ounkomon, P. (1989:75) found that educational qualifications of head of Sanitary and Disease Prevention Departments in community hospitals of northeastern provinces were related to their management roles and duties. This disagrees with a study by Denduongchai, R. (1997: ii) which found that educational qualifications were not related to the work of teachers who are responsible for food sanitary work in schools. Denduongchai's study, however, agrees with the study by Panitkit, J. (1998:118) that found that educational qualification is not related to measles immunization work of officials from health units in Nakornsawan Province.

From such studies, we became aware that educational qualifications are not related to work performance. Therefore, no clear conclusion can be drawn. The researcher is of the opinion that educational qualifications of RNs should be one variable that should be studied to determine whether or not they relate to nursing performance in health promotion and prevention for menopausal women by RNs in BMA Health Department.

3.1.3 Work experience in community means having previously encountered behaviors or situations (Na Nakorn, P. 1982:29). In this particular, study work experience means the number of years that RNs have been working in communities. The study by Dyer (1972:43-48) found that experience related to nursing performance. Result of the study showed that work experience and work practice were related because nursing work was a highly responsible job that involved human lives. Therefore, the work must be continuously efficient. This depends on several supporting factors such as attributes of the sample group, working condition, support from work unit, and attitude towards the work.

It is natural for people to be active when they just started working since they will try to gain knowledge to develop their work. Therefore, the quality of work is usually high initially, but after a long period of time they will find the work boring and repetitive and hence work efficiency will decline. Work efficiency may improve if they are assigned to the work that has good work characteristics since they will have good attitude towards the work, and receive support from the work unit. Nursing practice of caring for menopausal women are nursing that must be efficient, therefore, work experience of nurses is a factor that affects nursing practice to care for menopausal women. Research conducted by Radawiriyakul, W. (1984:iii) showed that experience related to professional nurse's practice of caring for the aged.

The aforementioned reasons cause the researcher to believe that work experience is one variable, which relates to the work performance of RNs and has studied so in this research.

3.1.4 Training on menopausal women. Training is an important step in personnel management to maintain the progress of manpower in the organization and to develop work efficiency. Training is the process that helps others gaining skills and knowledge. The process is set up under certain conditions and is not exactly lessons that are taught in general educational institutions (Good, 1973:613). Sunti Wong, T.(1982:164) gave the meaning that training is the process that is set up systematically to find ways to change behavior and attitude of employees so that they may be able to improve their work performance, which would then lead to increased productivity and realized organizational goals.

After consideration of the meaning of training according to definitions given by intellects of various branches, it may be summarized that training means methods to increase knowledge, skills and attitude of the workers in order to change the behavior of individuals to those that are consist with organizational goals and to increase working efficiency of workers.



Training was selected as a factor for this research because a person will gain knowledge, ability, and learn to work from training. The researcher is of the opinion that training could relate to work performance and therefore include training in this study.

3.1.5 Knowledge about menopausal women, Knowledge has been defined as facts, rules, and details that humans received and accumulated (Good, 1973:325). Yunipun, J. (1984:31) commented about knowledge that it meant information which were knowledge of principals and visions involved, including experiences and which were the primary factors that make people think, consider and make decision to solve problems and have creative initiations in working. Boontong, T. (1980:145) said that nursing practice could have good quality only when the worker had knowledge in what they were practicing that he had been properly educated in advance.

The relationship between knowledge and action is that knowledge helps the action to succeed or reach the goals. Knowledge and understanding that occur from learning will partly help in the development of steps of action taking because having corrected and appropriate knowledge will make a person know what actions to take, and be able to actually take the actions. Therefore, knowledge and action are closely related and are interdependent. Strengthening knowledge will always strengthen behavioral action. Concerning job knowledge, Mitchell and Larson (1987:156) said that knowledge was an interior factor that influences actions of an individual. Therefore, knowledgeable people must be selected to do the work and to be trained so that they have the knowledge of the work that they have to do.

It may be summarized that health promotion and prevention for menopausal women are facts or details about caring for menopausal women and caring that RNs knew, saw and accumulated including visions and experiences in making decisions to solve problems of menopausal women so that their nursing practice may have high quality. Knowledge about menopausal women is one variable that is related to nursing performance in health promotion and prevention for menopausal women.

3.2. Job Satisfaction

People are important factors in working. Therefore, success or failure of the work depends on managing this type of resources (Whywanon, P, 1987:1). For people to know how to work successfully, they have to try hard and must have the ability to bring themselves to the point of success. This also depends on motivation and satisfaction (Bas & Barrett, 1981:83). McCormick & Ilgen (1980:305-306) said that motivation and work satisfaction were one and the same thing that cannot be separated. The difference was that motivation focused on behavior but work satisfaction focused on the feeling towards the work. Because work satisfaction stems from the positive or negative feeling towards the work, individuals will do the work that they like and avoid the work that they do not like. Therefore, work satisfaction involves working behaviors, which are the results of motivation. Several academics and knowledgeable people defined the meaning of satisfaction set forth below.

Applewhite (1965:8) defined satisfaction as something personal and was an individual's feeling towards the work. Satisfaction has wide meaning including feeling satisfied with physical environment of the work such as feeling happy to work with co-workers whom the individuals can get along with, having positive attitude towards the work, and feeling satisfied with the income.

Good (1973:320) gave the meaning for work satisfaction as the state or level of satisfaction that resulted from the attention and attitude towards the work.

Strauss & Sayles (1960,119:121) said that work satisfaction means feeling satisfied with the work and willingness to do the work to obtain organizational goals. Individuals would feel satisfied with their work when the work paid them both materially and mentally and when the work can satisfy their basic needs.

Morse (1955:27) gave psychological meaning on work satisfaction as everything that can reduce stress in the worker. If there were a lot of stress there would be work dissatisfaction. This stress was result of human needs. When the need was too

great, there would be demanding behavior. When the demand was satisfied the stress would decrease or disappear and work satisfaction would occur instead.

From concepts and definitions given to work satisfaction by these people, it may be summarized that work satisfaction means positive feeling or attitude that an individual has towards his work as a result of several factors that involve with the work. These factors can appropriately satisfy the need of the individual, both physically and mentally.

There are various theories of motivation and satisfaction. But a theory that is popular and widely accepted is couple factors theory or Herzberg's two-factor theory. Herzberg (1959) studied factors that influence work satisfaction, which are called hygiene factors consisting of two factors theory and motivation factors. The two types of factors control work satisfaction and dissatisfaction. However, an organization cannot make worker satisfied with their work by giving individuals hygiene factors alone. Individuals who are dissatisfied with their work cannot work well. Hence, work satisfaction and dissatisfaction are motivations that affect working.

Therefore, in studying factors that relate to nursing performance in health promotion and prevention for menopausal women by RNs of BMA Health Department, there is an important need to consider satisfaction. Because the works of health centers are hard work that need strong teamwork, the management must motivate workers in the work unit to be satisfied with their work. The works also involve close relationship with citizens, causing the workers to have to be very tolerant. Therefore, work satisfaction is a factor that helps professional nurses to work well and efficient. The quality of nursing practice depends on the individual nurse and how much she is willing and putting effort into the works. Putting effort into the works depends on how satisfied she is with working factors because nurses who are satisfied with their work will have creative initiatives, motivated, active, and willing to work, therefore, resulting in successful and quality works (Somprasong, J. 1975:41;Green, 1972:31). This corresponds with Vroom's (1964:99) comment that work satisfaction was linearly related to working of individuals

who had work satisfaction and received appropriate reinforcement or motivation. The motivation would stimulate efficient working.

3.3. Organizational Support

In this study, the organizational support consists of work unit policies, resources and support from superiors.

3.3.1 Work unit policies is defined as principles that are set up to be used as working guideline on guiding tools which enable the work to accomplish the goals. Policies tells workers what work they have to do, where, and how. Policies are taken as guideline before decision-making (Wongsarnsri, P. 1991:80). Kasemsin, S. (1974:203-211) defined policy as the primary decision that set practical guidelines by setting method, process and work method. The order may be written or given verbally, that is it may be a circulating memo or a verbal order in a meeting.

In this study, work unit policies means the policy to support menopausal women such as setting clear policy concerning the work scope, work method and process. Policy is explained both in writing and verbally, enabling those who conduct nursing practice to care for menopausal women to work according to work purposes and goals.

3.3.2 Resources, originally, resources are generally considered to consist of man, money, material, and management, or 4 M's. William T, Greenwood (as referred to in Wongsilp, N. 1993:19) said that factors or resources in management ought to consist of seven things which are man, money material, authority, time, will and facilities. Dajthai, T. (1985:12-5) referred to input as the proportion prepared in advance to be used in work process. In public health management system, input means managing resources such as public health personnel, public health budget and suitable method of management.

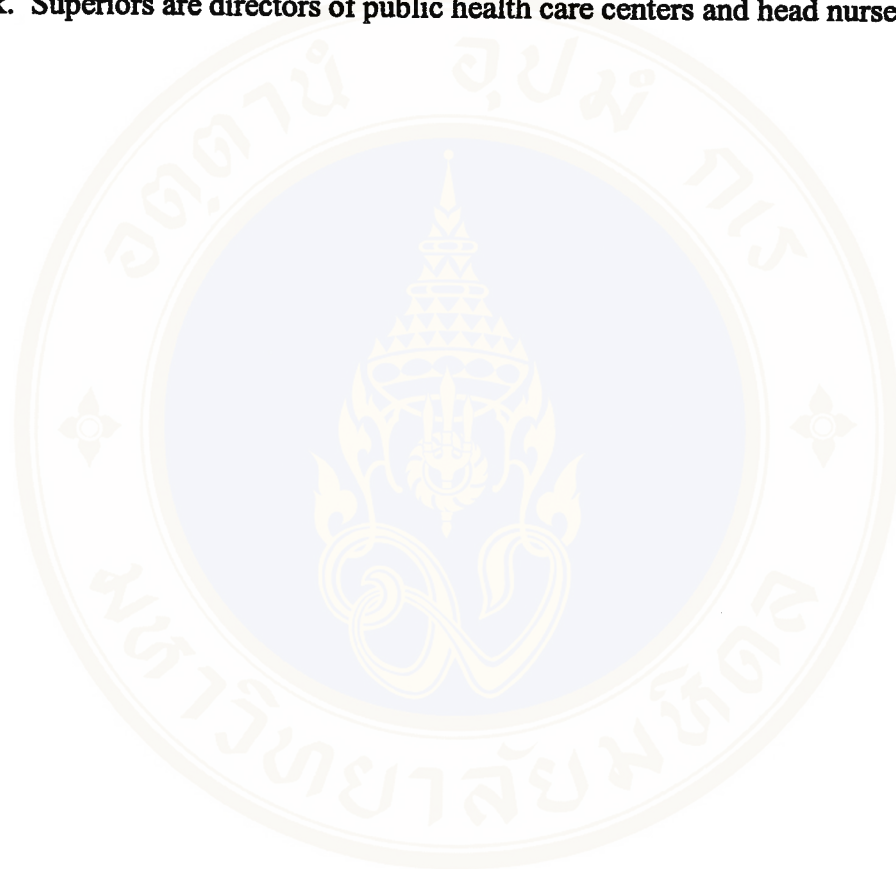
From the studies of texts concerned, it may be summarized that receiving support of resources means receiving resources management to assist nursing performance for menopausal women so that it is done efficiently. In this study, resources in nursing performance for menopausal women are:

- 1) support of budget, materials, equipment and management resource;
- 2) setting clear policy;
- 3) academic support, such as educational visit, texts and working manuals.

3.3.3 Support from superior

A superior is a representative of organization and is the center of manpower in the organization. Therefore, a superior is the finish line of the work process, especially for those under his command and for performance of the organization. He is the person who helps strengthening and maximizing quantity and quality of the work. He is the one who teaches and gives advice to those under his command. He is the one who coordinates work in the organization so that the work is efficient. He is the one who orders and controls (Kasemsin, S. 1974:203-211). The study by Chanwiwit, N. (1999:ii) found that receiving support from superiors related to the quality of home visits done by professional nurses of BMA Health Department. The study by Numsrutong, D. (1997:ii) found that receiving support from superior was positively related to nursing practice to prepare patients for health care in their own home. Therefore, if management is fully interested in and supports work of subordinates, those under him will have good work moral, and are eager to work successfully. Hence, support from superiors is a factor that is important to nursing practice to successfully care for menopausal women.

In this study, support from superiors means receiving advice and assistance in solving problems that exists in nursing practice to care for menopausal women, having the superiors join in discussions and give importance to the nursing practice to care for menopausal women, and helping in the provision of facilities for the work. Superiors are directors of public health care centers and head nurses.



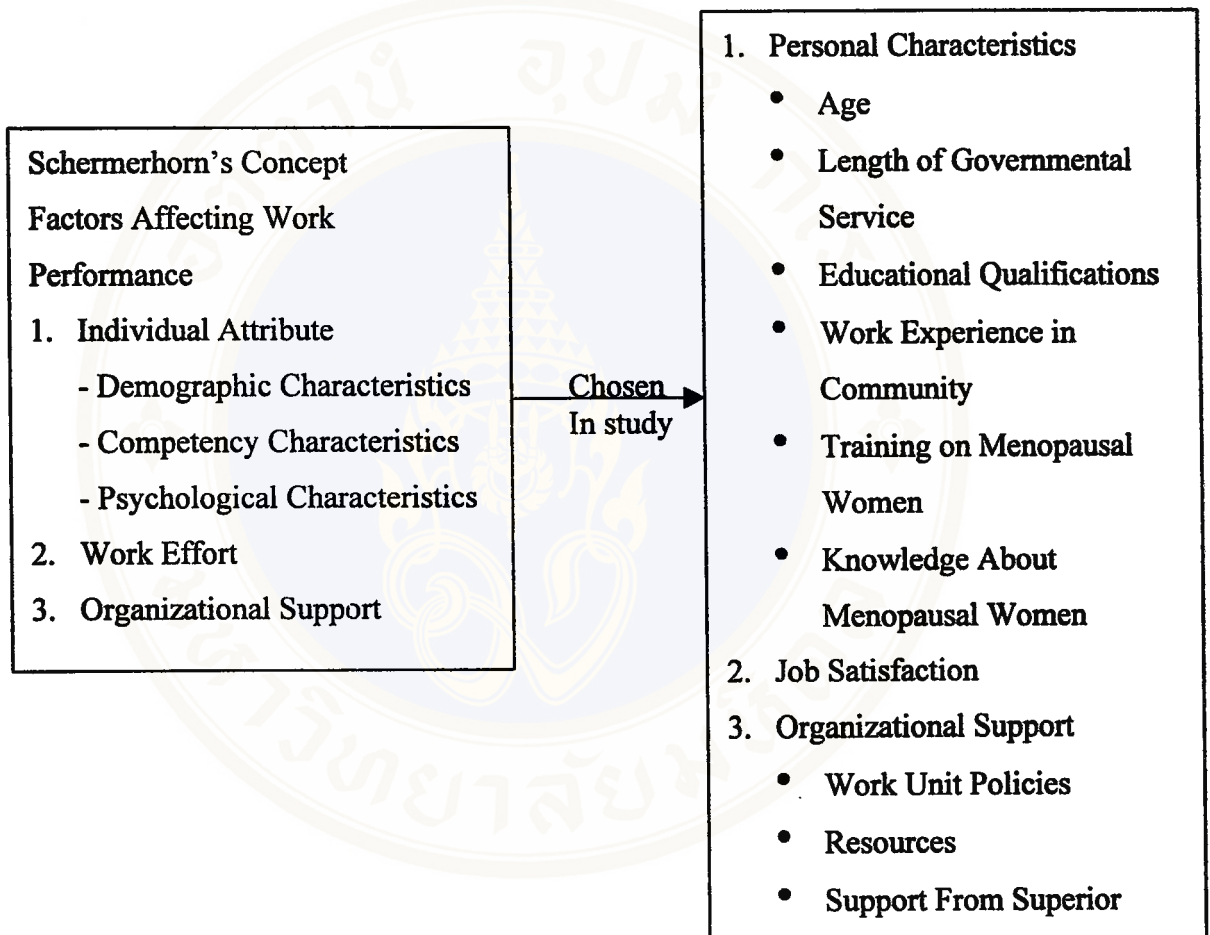


Figure 1. Conclusion of Factors Affecting Working Performance

4. Relevant research

4.1 Research About Menopausal Women

Chompootwep, S. et. al. (1993:63-71) conducted a study and found those women's average age at menopause was 49.5 ± 3.6 years. The prevalence of climacteric symptoms consisted of dizziness (45.5%), irritation (41.1%), headache (36.3%), palpitation (34.2%), insomnia (34.2%), hot flash (22.3%), night sweat (17.5%), depression (8.2%), decrease libido (59.4%), overweight (22.9%).

Moopayak, K. et. al. (1993) conducted a study of health situation and health behavior of middle age women (between the ages of about 40 and 59) in slum district of Bangkok. The sample consisted of 212 middle age women. Moopayak, K. et. al. reported that 42.5% of the samples have disease had once been in a state of fracture bone, 81.0 – 94.0% had incorrect health behavior and 26.9% had insufficient exercise.

Health Department (1995) was a study of health behavior of peri and post menopausal Thai women (between the age of about 40 and 59). Data from muang and village districts in Thailand except Bangkok and its outskirts was conducted and found that Thai women's average age of menopause was 47.7 ± 4.5 years, 78.2% believed menopause is natural, 50% had moderate knowledge in menopause, and had incorrect health behavior such as 63.0% had never check up, 54.6% had never drank milk, and 59.0% had never exercised. The prevalence of climacteric symptoms consisting of 55.9% decrease libido, 26.1% back pain 35.0% body and joint pain, 22.5% overweight, 15.8% hot flashes and 9.0% night sweat respectively.

Sindhunava, P. (1997) investigated the quality of life of the menopausal women in Bangkok. The sample was comprised of 400 menopausal women who were residing in Khlongsan and Jomthong district of Bangkok. Data collected and interviewing by

responding to the questionnaire, which was based on Zhan's conceptual framework of quality of life. Statistical analysis was performed using percentage, mean, standard deviation, t-test and one-way analysis of variance. Findings indicated that the overall scores of quality of life and the scores of life satisfaction, self-concept, health and functioning were in high level while the scores of socio-economic status in quality of life showed the moderate level. The quality of life of the menopausal women with difference severity of menopausal symptoms, educational level, family incomes and occupation showed difference with statistical significance ($P < .001, .01, .001$ and $.05$ respectively).

Panthong, A. (1997) studied the factors affecting health promotion behaviors in menopausal women the population sample consisted of 200 menopausal women who attended at the Menopausal Clinics at Siriraj, Rajvithi, King Vajiravudh and Jareonkrungpracharak Hospitals. Data was collected by using personal interview guide, menopausal symptoms evaluation form, prioritization health questionnaire and health-promoting behaviors interview guide. This study demonstrated that overall health-promoting behaviors of menopausal women were at rather good level. In the mode of general self-care competency and environmental control mode, health-promoting behaviors of menopausal women were at good level, whereas other modes were at rather good level. The result of the stepwise multiple regression analysis showed that 19.76 percent of the variance of health-promoting behaviors was accounted for by two significant predictors, i.e., importance of health and menopausal symptoms.

Cross and Lovett, (1994) studied the women's collective meaning of menopause. Women's conceptualizations of the menopause experience are examined based on questionnaires collected from a convenience sample of 101 women in the San Bernardino County, CA. The analysis focuses on 7 dimensions of health: physical, mental, emotional, social, vocational or occupational, spiritual, & life cycle. Approximately 50% of all content mentions were related to the social dimension, 18 % were related to the emotional dimension. Menopausal status had no significant impact on responses. Of

respondents, 9 % perceived menopause as a negative experience, while 57 % perceived it as a positive experience. That who mentioned the emotional aspects of menopause, 57 % were negative, with greatest negativity found in feelings of depression, feeling old, moodiness, and emotional instability. The inadequacy of the clinical stereotype of the typical menopausal women was discussed.

4.2 Research About Job Performance

Ounkomol, P. (1989) studied factors affecting the role performance in administration, service and academy of chiefs of sanitation and disease control section in community hospitals. Individual characteristics, experiences, work load and job satisfaction (motivators) were chosen as independent variables for correlation analysis. There were 211 chiefs of sanitation and disease control section in community hospital in northeastern Thailand included in the study by using mail questionnaire. One hundred seventy four questionnaires were completed. It was found that the majority of chiefs of sanitation and disease control section (71.84 %) performed their roles within moderate level. Only 14.94 % of them perceived that they perform at high level while another 13.22 % stated that they perform at low level. The role performance in administration was significantly related to age, sex, economic, tenure, number of villages, number of staff, overall job satisfaction and some job satisfaction factors, especially working condition, achievement/ recognition and advancement. The role performance in service was significantly related to age, level of education, economic, tenure and some job satisfaction factors, especially income and benefit and achievement/ recognition. The role performance in academy was significantly related to age, birthplace, economic, tenure, duration of working as chief of sanitation and disease control section, number of villages, overall job satisfaction and some job satisfaction factors, especially working condition and achievement/ recognition. However, the overall aspect of role performance was significantly related to age, birthplace, economic, number of persons to support, tenure,

number of hospital beds, number of staff, overall job satisfaction and some job satisfaction factors, especially working condition and achievement/ recognition.

Koonsri, D. (1994) determined relationships of personal factors, working conditions, hygiene and motivator factors and the performance of health center personnel on tuberculosis case-finding in Roi-Et province and identified factors influencing their job performance on tuberculosis case-finding activities. Self-administered questionnaires were sent to 192 health center personnel with 89.5 % respondent rate. The results showed that job performance in case-finding activity fell in low level. There were relationships of position factors, financial support and the performance on tuberculosis case finding. Hygiene and motivator factors showed no association with case-finding activity while budget and motivation for achievement were found to be factors that could be used to predict the variation of case-finding activity at 9.29 % of variance.

Radawiriyakul, W. (1994) studied the level of nursing practice for the elderly of professional nurses and the relationship between predisposing, enabling, reinforcing factors and nursing practice for the elderly of professional nurses. The sample was 396 professional nurses, selected by stratified two-stage sampling, who worked in General-Medical, General-Surgical Gynae and EENT departments of 11 provincial hospitals in the northeastern Thailand. The study revealed that a majority of professional nurses (94.4%) had nursing practice for the elderly at the low level. Regarding to the relationship between predisposing factors and the nursing practice for the elderly of professional nurses, the study showed that knowledge about the elderly, attitude toward the elderly and training for the elderly had statistical significant relationship with the nursing practice for the elderly. With respect to enabling factors found that the organization support had a statistical significant relationship with the nursing practice for the elderly. With respect to reinforcing factors found that personnel behavior related the nursing practice for the elderly. The personnel behavior related the nursing practice for

the elderly, attitude toward the elderly and the organizational support for the nursing practice could predict the variance of nursing practice for the elderly at 59.41 %.

Nimsrithong, D. (1997) studied the assessment of the level of nursing practices on preparing home health care for the patients (PHHP) by nurses. The sample consisted of 223 general and technical nurses who were working in the surgical, medical, pediatric, orthopedic, EENT and private wards of the provincial hospitals in region 1 of the Ministry of Public Health. The results of the study showed that 69.1 % of the nurses were in the moderate level for nursing practices of preparing home health care for the patients. Nurses' attitude toward home health care, role perception of the nurses, hospital policies, management practices of the nursing department, being trained for home health care, social support from head nurses and co-workers and receiving information about preparing patients for home health care were statistically correlated with the nursing practices in the positive direction. About 43% of the variance of the nursing practices could be significantly predicted by the nurses' attitude for home health care, the role perception of nurses, the social support by head nurses and co-workers and hospital policies.

Panitchakit, J. (1997) investigated factors related to measles immunization performed by health personnel. Questionnaires were sent to 174 health center personnel working in health centers in Nakornsawan province. One hundred and sixty-five completed questionnaires (94.8 %) were returned. The results of the analysis indicated that the health personnel performed their activities at a relatively satisfactory level. Knowledge and holistic motivation of the health personnel, working conditions, incentives, and progressiveness were all factors that had a significant positive correlation ($p < 0.05$) with measles prevention. Insufficient materials and geographical conditions (i.e., distance from health center to village) were negatively correlated to measles prevention ($p < 0.05$ respectively).

Boonruksa, K. (1997) studied the level of nursing quality assurance of chiefs of health promotion in community hospitals in northeastern part of Thailand. The relationship between predisposing, enabling and reinforcing factors of the nursing quality assurance in the community was also investigated. The predisposing, enabling and reinforcing factors were classified as predictors. The sample consisted of 175 chiefs of health promotion who were working in community hospitals. The results of the study showed that 75.2 % of the chiefs of health promotion had low level of nursing quality assurance in the community. It was also found that the role perception of the chiefs of health promotion, resources and supervision support, training for nursing quality assurance, and support by chief of the department and co-workers were statistically correlated with nursing quality assurance in the positive direction. About 39.88 % of the variance of nursing quality assurance could be significantly predicted by the chiefs of health promotions' attitude toward nursing quality assurance, the role perception of the chief, resources and the social support of co-workers.

Chanwiwit, N. (1999) studied the level of effectiveness of home visit activities by RNs in one Bangkok Metropolitan Area. Predisposing, enabling and reinforcing factors of effectiveness were related to home visit activities. The predisposing, enabling and reinforcing factors were classified as predictors. The sample consisted of 174 RNs who were working in the community. The results of the study showed that 28.8 % of the home visit activities had a very good level effectiveness (75%), 24.1 % had a good level of effectiveness (between 50-74%), 24.1% had a fairly good level of effectiveness (between 25-49%) and 23.0% had a fair level effectiveness (1-24%). It was also found that the attitude of RNs, the role in the perception of home visit nurses, departmental policies, resources, training for public health nursing, and support of the chief of the department and co-workers were statistically correlated with the effectiveness of the home visit activities. The results were significantly different at the 0.05 significance level. About 20.05% of the variation in effectiveness of the home visits activities could be

significantly predicted by the roles of home visits nurses, the attitude of home visit and support of the chief of the department.

Dyer, et.al. (1997) studies factors that affected to nursing performance. The sample consisted of 200 RNs who were working in 4 hospitals in Utah. The study found that management person was statistically correlated with nursing performance. The variation in effectiveness of the nursing performance could be significantly predicted by that nurse is personnel characteristics (age, experience), G.P.A score and job satisfaction.

No research on nursing performance for menopausal women was conducted in past studies. The researcher was to study the nursing performance of RNs of the Health Department, Bangkok Metropolitan Administration in health promotion and prevention for menopausal women and the factors relating to the nursing performance in health promotion and prevention for menopausal women. In this study, the important factor in performance were personnel characteristics as follows: age, length of governmental service, educational qualifications, knowledge about menopausal women, work experience in community, training on menopausal women, job satisfaction, and organizational support. The study will be a guide to improve and develop nursing performance of RNs in the Health Department, Bangkok Metropolitan Administration in health promotion and prevention for menopausal women.

Independent Variables

Dependent Variable

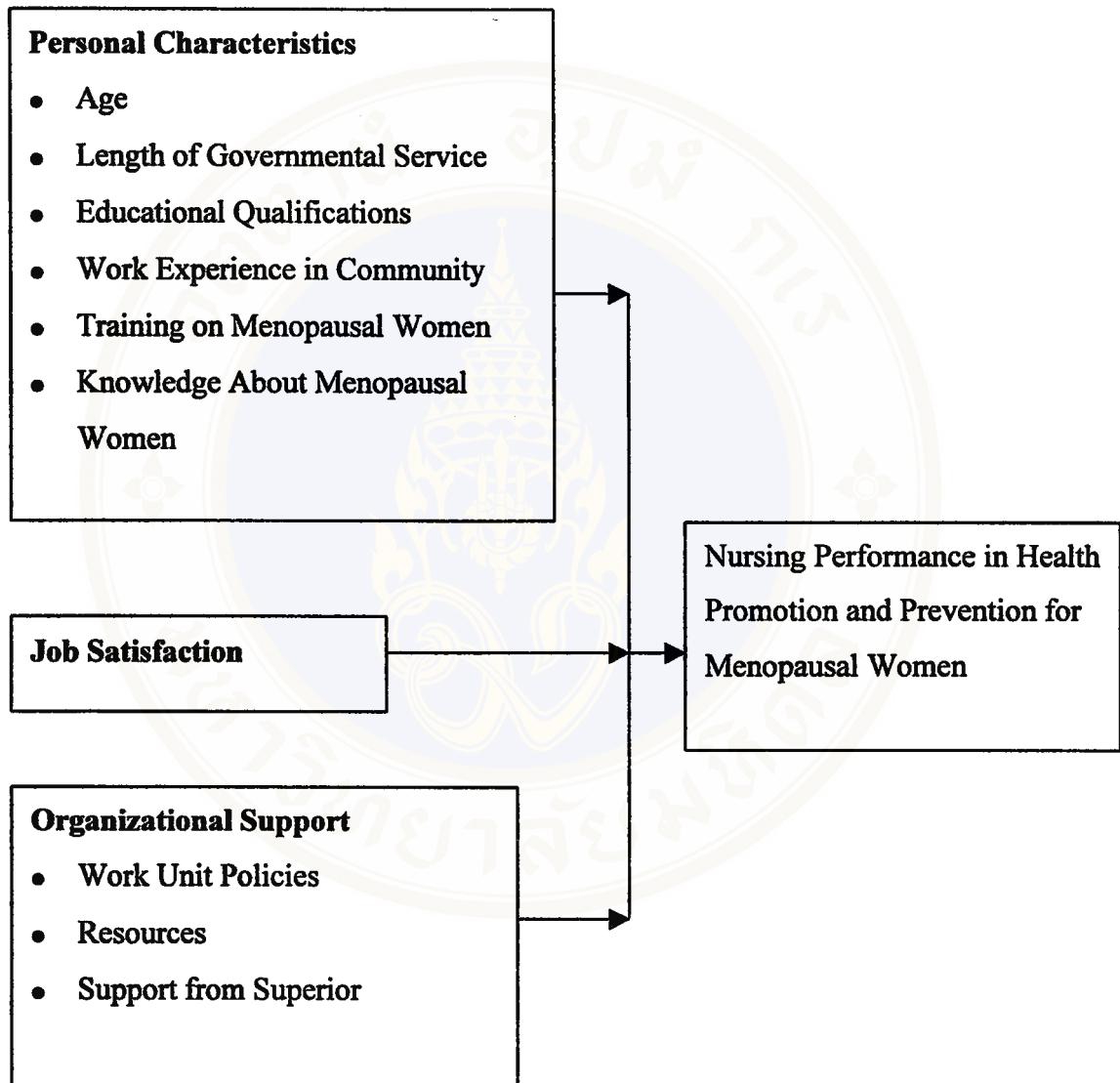


Figure 2 Conceptual Framework

CHAPTER III

MATERIALS AND METHODS

This chapter describes the methodology of this study, including study design, population and sample, procedures involved in data collection, instrumentation and procedure of data analysis.

1. Research Design

This research is a descriptive study that aims to study factors related to nursing performance of RNs of the Health Department, BMA in health promotion and prevention for menopausal women.

2. Population and Sample

2.1 Population

The population of this study total 255 RNs who are currently working as family nurse at 60 health centers in Bangkok Metropolitan Administration.

2.2 Sample and Sampling Technique

The sample group for this study is the above mentioned RNs. Therefore, the sample size for this study was calculated by using Cochran's technique (Cochran, 1977: 76-78).

$$n = \frac{n_0}{1 + \frac{n_0}{N}}, \quad n_0 = \frac{Z^2 \alpha / 2 CV^2}{r^2}$$

N = Target population (255)

n = Estimated sample size

$Z_{\alpha/2}$ = Standard score, set at $\alpha = 0.05$, $Z_{\alpha/2} = 1.96$

CV = Coefficient of variation, set at 1

r = Relative errors, set at 0.05

$$n_0 = \frac{(1.96)^2 (1)^2}{(0.05)^2} = 1536.64$$

$$n = \frac{1536.64}{1 + \frac{1536.64}{255}} = 213.7$$

The result of sample calculation was 214 RNs.

The sample was taken by simple random sampling technique (Vourapongsathorn, T.1995: 247). The sampling units were health centers of BMA which were clustered into 6 coordinating centers (totaling 60 health centers and 255 RNs). The ratios of RNs per health center are 255: 60 = 4.25 person per health center. Therefore, 214 RNs samples were in 51 health centers. The health centers were selected sample random sampling technique by proportion to representative 6 coordinating centers and using the total numbers of RNs of the selected health center as the sample of this study. The diagram of sampling are as follows (Figure 3):

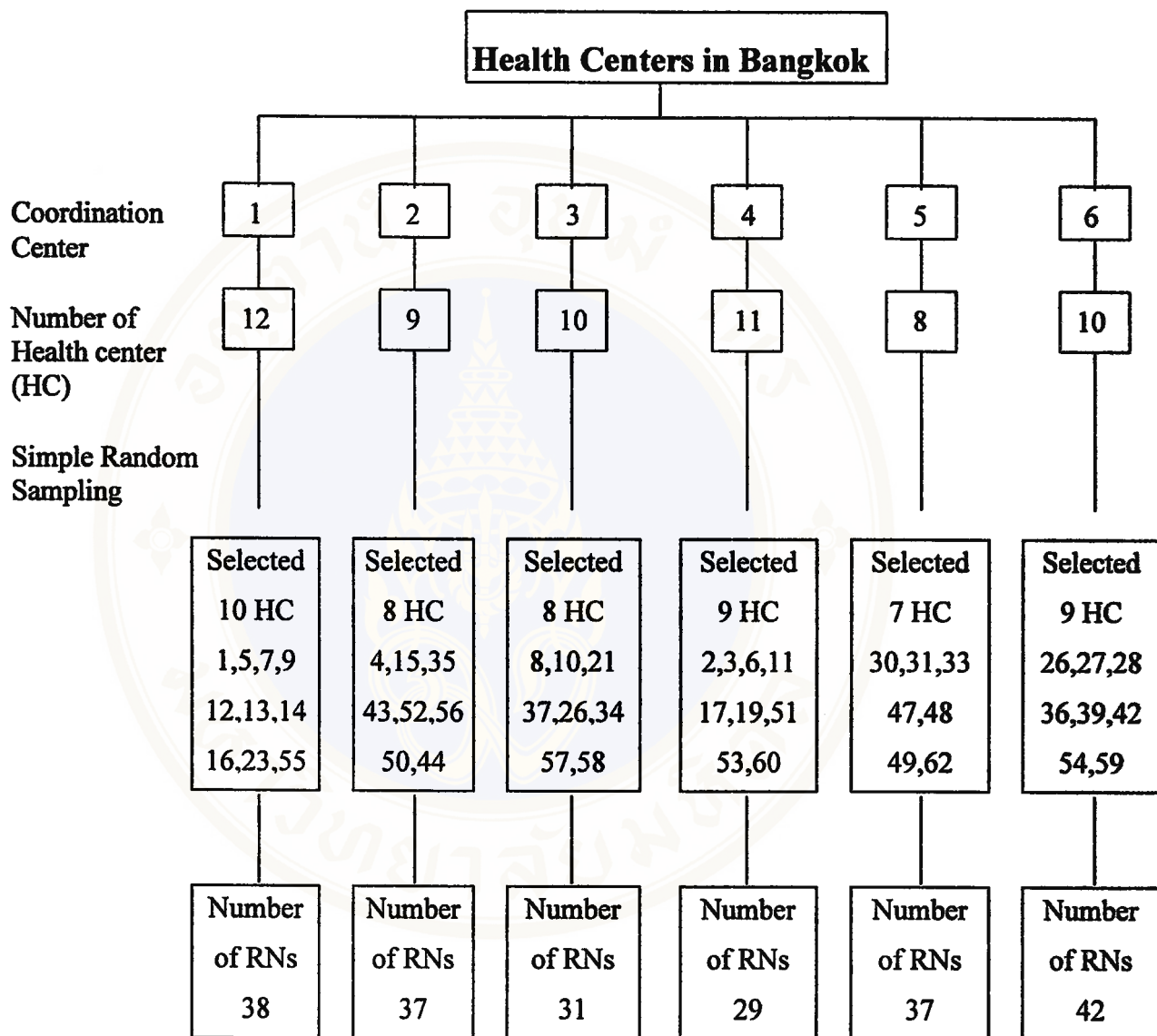


Figure 3 : Steps of Sampling

3. Research Instrument

The instrument for data collection was self-report, which consisted of five parts as follows:

Part 1: Questionnaire on Personal Data

Including in the questionnaires was the information on age, length of governmental service, work experience in community, education, marital status, professional position and training on menopausal women. This part was consisted 11 questions.

Part 2: Knowledge About Menopausal Women

This part comprised of 20 items, based on concepts of changing body and mind of menopausal women (items 1-10, 12,13), activities for suitable health care (items 11,20), and nurse practice for menopausal women (items 14-19). The questions are in a true – false response format. One point was given for each correct response, and no point was given for incorrect response.

Interpretation of scores

The obtained scores of knowledge about menopausal women from the questionnaires in this study were further categorized into 3 levels as follows:

low	means	scores of 0-10 (less than 50%)
medium	means	scores of 11-15 (51-75%)
high	means	scores of 16-20 (76% upward)

Part 3 : Job Satisfaction

The job satisfaction questionnaire consist of 14 items, with anticipated responses of 5-scale rating, which are comprising strongly disagree, disagree, not sure, agree and strongly agree.

The meanings of the responses are as follows:

strongly disagree	means the relevant statement does not conform at all to the respondent's feeling and views;
disagree	means the relevant statement somewhat does not conform to the respondent's feeling and views;
not sure	means the relevant statement slightly conforms to the respondent's feeling and views;
agree	means the relevant statement considerably conforms to the respondent's feeling and views;
strongly agree	means the relevant statement fully conforms to the respondent's feeling and views.

The statements in the questionnaires had both positive and negative meanings. The positive statements were listed in 9 items (items 3,4,5,6,7,10,11, 12,14). The other 5 items (items1,2,8,9,13) were negative statements. The score criteria was as follow:

	Positive	Negative
strongly disagree	1	5
disagree	2	4
not sure	3	3
agree	4	2
strongly agree	5	1

Interpretation of scores

The obtained scores for job satisfaction in this study were further divided into 5 different levels according to the following total scoring criteria (Best, 1977:174);

Range of Score	Total Score	Level of Job Satisfaction
1.0 - 1.7	14 - 24	very low
1.8 - 2.5	25 - 35	low
2.6 - 3.3	36 - 46	medium
3.4 - 4.1	47 - 57	high
4.2 - 5.0	58 - 70	very high

Part 4: Organizational Support

The requirement of organizational support in nursing practice in health promotion and prevention for menopausal women was measured by the questionnaire consisting of 21 items which were classified into 3 dimensions as follow:

work unit policies	(items 1 - 6);
resources	(items 7 - 12);
support from superior	(items 13 - 21);

Each item had 5-scale rating ranging from receiving very high support to receiving very low support.

The meaning of scales are as follows:

- 1 point means the respondent viewed she has received very low relevant support;
- 2 points means the respondent viewed she has received low relevant support;
- 3 points means the respondent viewed she has received medium relevant support;
- 4 points means the respondent viewed she has received high relevant support;
- 5 points means the respondent viewed she has received very high relevant support.

Interpretation of Scores

The obtained scores for organizational support were categorized into 5 different levels. The following total scores criteria was used in the interpretation (Best, 1977: 174):

range of scores of 1.0 - 1.7 means very low organizational support

range of scores of 1.8 - 2.5 means low organizational support

range of scores of 2.6 - 3.3 means medium organizational support

range of scores of 3.4 - 4.1 means high organizational support

range of scores of 4.2 - 5.0 means very high organizational support

Ranges of total scores of the 21 items were divided into 3 dimensions as follows (Table 1):

Table I : Interpretation of Scores Categorized by Specific Aspects.

Dimensions	Total Score	Level of Support (Score)				
		Very Low	Low	Medium	High	Very High
1. Work Unit Policies	6 - 30	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30
2. Resources	6 - 30	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30
3. Support from Superior	9 - 45	9 - 15	16 - 22	23 - 30	31 - 37	38 - 45
Total	21 - 105	21 - 36	37 - 53	54 - 70	71 - 87	88 - 105

Part 5 : Nursing Performance in Health Promotion and Prevention for Menopausal Women

The researcher modified the nursing performance in health promotion and prevention for menopausal women from of Spellbring's concept, (1991:805-814).The questionnaire comprised of 58 items and was divided into 6 dimensions (1 point was given for have performed and no point was given for have not performed) as follows :

Nursing Practice	Total Items	Member of Items	Total Scores
1. Assessment	28	1 - 8	0 -28
2. Advocacy	3	9 - 11	0 - 3
3. Counsultancy	2	12, 13	0 - 2
4. Health Education	8	14 - 20, 38	0 - 8
5. Promotion of Self Care	9	21 - 29	0 - 9
6. Case Management	8	30 - 37	0 - 8
Total	58	1 - 38	0 - 58

The obtained scores for nursing performance in health promotion and prevention for menopausal women questionnaires in this study were further categorized into 3 levels as follow:

- total scores of less than 50 % (0-29) means low practice.
- total score of between 51 - 75% (30-48) means medium practice
- total score of more than 76 % (44-58) means high practice

4. Validity of Instruments

For content validity of the instruments, the researcher submitted to the following 5 experts :

- one lecturer expert in community health;
- one lecturer expert in Obstetric – Gynecology nursing;
- one lecturer expert in family health;
- one lecturer expert in evaluation and measurement; and
- director of health promotion department.

Recommendations from the experts were then collected and used to revise and improve the research instruments accordingly.

5. Reliability of Instruments

The instruments were then tested by 30 RNs who had the same characteristics as the sample. Thereafter, the reliability of the instruments was calculated by Cronbach's coefficient for internal consistency. The obtained results of calculated reliability of the instruments were as follows:

1. knowledge about menopausal women	= 0.66
2. job satisfaction	= 0.7
3. organizational support	= 0.78
4. nursing performance in health promotion and prevention for menopausal women	= 0.96

6. Data Collection

Data collection procedure was performed in the following sequence:

1. an introductory letter requesting cooperation on relevant data collection was prepared by the Faculty of Graduate Studies, Mahidol University and delivered to the Director-General of Department of Health, Bangkok Metropolitan Administration.

2. after the request was approved through official channels, the researcher introduced herself to the senior nurses at coordinating centers and requested cooperation;

3. steps of data collection were as follows:

- 115 questionnaires were sent from senior nurses;

- where no response on the questionnaires was received, the researcher would first encouraged the head nurses or assistant head nurses by telephone. From such encouragement, 66 completed questionnaires were returned to the researcher. A total of 181 questionnaires were received by the researcher.

Subsequently, the researcher met with RNs to inform about them the purpose of the study and each question has been clarified to ensure their understandings. Twelve questionnaires were then returned to the researcher. A total of 193 questionnaires (90.1%) were received by the researcher. Data collection was conducted from 1 February to 1 March 2000.

7. Data Analysis

There were 186 questionnaires completed. A computer software package SPSS/Windows (Statistic Package for the Social Science / Windows) was used in the analysis of obtained data in this study, with a significant level of 0.05 according to the following steps:

1. personal characteristics data of sample group was described by using percentage distribution, arithmetic mean, and standard deviations;
2. knowledge about menopausal women, job satisfaction, organizational support, nursing performance in health promotion and prevention for menopausal women were described by using frequency distribution, percentage, mean and standard deviations;
3. Pearson's product moment correlation analysis was performed to examine the relationship between nursing performance in health promotion and prevention for menopausal women and age, length of governmental service, work experience in community, knowledge about menopausal women, job satisfaction, and organizational support. Chi-square test was performed to examine the relationship between nursing performance in health promotion and prevention for menopausal women and educational qualifications, training on menopausal women;
4. used a stepwise multiple regression was used to select the best variable, which can explain nursing performance in health promotion and prevention for menopausal women.

CHAPTER IV

RESULT

The results of the study were divided into five parts. The first part was the distribution of characteristics of RNs. The second part was the distribution of knowledge about menopausal women, job satisfaction, organization support of RNs. The third part was the distribution of nursing performance in health promotion and prevention for menopausal women of RNs. The fourth part was the relationship between personal characteristics, knowledge about menopausal women, job satisfaction and organizational support and nursing performance in health promotion and prevention for menopausal women. The fifth part presented the variables which being explainable nursing performance in health promotion and prevention for menopausal women.

PART 1: Personal Characteristics of Sample**Table 2. Number and Percentage of RNs as Categorized by Personal Characteristics**

Personal Characteristics	Number	Percentage
Total	193	100
Age (year)		
21 - 29	2	1.0
30 - 39	104	53.9
40 - 49	71	36.8
50 - 59	16	8.3
$X=40.9$, $S.D.=6.2$, $Range=27-59$		
Length of Governmental Service		
1 - 5	2	1.0
6 - 10	22	11.5
11 - 15	61	31.6
16 - 20	57	29.5
≥21	51	26.4
$X=16.9$, $S.D.=5.5$, $Range=5-32$		
Professional Classifications		
Level 4	1	0.5
Level 5	39	20.2
Level 6	112	58.1
Level 7	41	21.2
Marital Status		
Single	18	9.3
Married	164	85.0
Widow/Divorced/Separated	11	5.7
Educational Qualifications		
Diploma	5	2.6
Bachelor Degree	176	91.2
Master Degree	12	6.2
Experience in Ward		
Obstetric-Gynecology	32	16.6
Others	161	83.4

Table 2. Number and Percentage of RNs as Categorized by Personal Characteristics (con't)

Personal Characteristics	Number	Percentage
Work Experience in Community (years)		
1 - 5	61	31.6
6 - 10	57	29.5
11 - 15	32	16.6
16 - 20	26	13.5
≥21	17	8.8
$\bar{X}=9.9$, S.D.=6.8, Range=1-32		
Training About Menopausal Women		
Never	180	93.3
Ever	13	6.7

Table 2 showed the characteristics of the samples. About half of the samples (53.9%) were 30 to 39 years of age, with a mean of 40.9 years (S.D.=6.2). One - third of them (31.6%) has work in governmental service for 11 to 15. Nearly 60% (58.1%) of the sample were in level 6 of their professional position. Most of the respondents were currently married (85.0%). Most of them (91.2%) received bachelor degree. Only 16.6% had experience in Obstetric- Gynecology ward. Work experience ranged from 1 to 5 years (31.6%, with mean of 9.9 years S.D.= 6.8). Most of the samples did not attend any training about menopausal women (93.3%).

Part 2. Knowledge About Menopausal Women, Job Satisfaction and Organization Support of RNs.

Table 3. Number and Percentage of RNs Categorized by Knowledge About Menopausal Women (N=190)

Knowledge About Menopausal Women	Number	Percentage
Low level	34	17.9
Medium level	115	60.5
High level	41	21.6
Total	190	100.0

Table 3 showed that most of the samples (60.5%) had medium level of knowledge about menopausal women, 20.6% of the samples had high level of knowledge about menopausal women and 17.9% of the samples had low level of knowledge about menopausal women.

Table 4. Percentage of RNs Categorized by Correct Knowledge, Mean and Standard Deviation of Knowledge About Menopausal Woman in Each Questions Item

Question	%of Correct Knowledge	Mean	S.D.
Knowledge Concerning Physical and Mental Change			
- Hot flashes around the neck and face, and heavy sweating are common symptoms that are found in women entering menopausal age.	93.8	.94	.24
- Menopausal age means the age that a woman stop having period which is usually when they are 45-53 years old.	88.1	.88	.32
- Symptoms and intensity of having insufficient hormone are found more in fat than in thin menopausal women.	68.2	.32	.47
- One cause of cardiovascular disease in menopausal women is reduced flexibility of blood vessels due to insufficient estrogen hormone.	64.6	.65	.48
- All symptoms in menopausal women are caused by lowering level of estrogen hormone.	60.6	.39	.49
- Vaginas of menopausal women are highly acidic and therefore they can inflame easily.	59.2	.59	.49
- Irritation and stress found in menopausal women resulted from lowering level of estrogen hormone.	45.6	.54	.50
- Menopausal women should be checked for abnormality in blood and urine every month.	44.3	.86	.50
- Food that menopausal women ought to consume daily is fresh milk.	25.4	.75	.44
- Insufficient intake of vitamin D is the main cause of osteoporosis in menopausal women	22.9	.77	.42



Table 4. Percent of RNs Categorized by Correct Knowledge, Mean and Standard Deviation of Knowledge About Menopausal Woman in Each Questions Item (con't)

Question	%of Correct Knowledge	Mean	S.D.
- Urine incontinent in menopausal women occurs because of uretral sphincter dysfunction.	22.4	.22	.42
Knowledge Concerning Caring for Menopausal Women			
- Exercising by running and fast walking will help strengthening the bones in menopausal women.	54.7	.45	.50
- Eating unpolished rice and soybeans will help menopausal women to have intake of natural estrogen.	36.3	.36	.48
Knowledge Concerning Nursing Practice			
- Vaginal burning in menopausal women is the result of vaginal lubrication dryness and endometrium	90.1	.90	.30
- Kegal's exercising helps symptoms of urine incontinence and uterine prolapse.	82.9	.83	.37
- The period that menopausal women should be advised to examine their own breasts is 7-10 days after their period ended.	74.5	.74	.44
- Menopausal women should be advised to exercise until their pulse rates reach 120 beats/minute.	27.6	.28	.45
- Depression, hot flashes and insomnia in menopausal women are temporary symptoms that will eventually end without curing.	24.6	.75	.43
- The menopausal women should be advised to have pap smear checkup at least once in 2 years.	20.8	.21	.41

From Table 4, when each question of knowledge concerning menopausal women were considered, scores of knowledge concerning menopausal women from each question indicate as set forth below.

With respect to knowledge concerning physical and mental changes, the question with the highest score was having hot flashes around the neck and face, and heavy sweating are common symptoms found in women entering menopausal age, whereby 93.8% of the samples answered correctly. The question with the lowest score was difficulty in urinating or urine incontinent in menopausal women is caused by ureteral sphincter dysfunction, whereby 22.4% of the samples answered correctly.

With respect to knowledge concerning caring for menopausal women, the question with the highest score was Kegel's exercising helps reduce urine incontinent and uterine prolapsed, whereby 82.9% of the samples answered correctly. The question with the lowest score was insufficient intake of vitamin D is the main cause of osteoporosis in menopausal Thai women, whereby 22.9% of the samples answered correctly.

With respect to knowledge concerning nursing practice, the question with the highest score was the period that menopausal women should be advised to examine their own breasts is 7-10 days after their period, whereby 74.5% of the samples answered correctly. The question with the lowest score was menopausal women should be advised to have pap smear checkup at least once every 2 years, whereby 20.8% of the samples answered correctly, and menopausal women should be advised to exercise until their pulse rate reaches 120 beats/minute, whereby 27.6% of the samples answered correctly.

Table 5. Number and Percentage of RNs Categorized by Job Satisfaction (N=192).

Job Satisfaction	Number	Percentage
Very low level	0	0
Low level	2	1.1
Medium level	29	15.1
High level	140	72.9
Very high level	21	10.9
Total	192	100.0

From Table 5, it is found that most of the samples (72.9%) had a high level of job satisfaction, while only 1.1% of the samples expressed a low level of job satisfaction.

Table 6. Number and Percentage of RNs Categorized by Organizational Support

Organizational Support	Number	Percentage
Organizational Support (n=191)		
Very low level	30	15.7
Low level	65	34.0
Medium level	66	34.6
High level	20	10.5
Very high level	10	5.2
Work Unit Policies (n=193)		
Very low level	58	30.1
Low level	67	34.7
Medium level	44	22.8
High level	18	9.3
Very high level	6	3.1
Resources (n=193)		
Very low level	52	26.9
Low level	83	43.0
Medium level	42	21.8
High level	11	5.7
Very high level	5	2.6
Support From Superior (n=181)		
Very low level	26	14.4
Low level	40	22.1
Medium level	56	30.9
High level	41	22.7
Very high level	18	9.9

Table 6. reveals that with respect to organizational support 34.6% of the samples were in medium level and 34.0% was in low level . For work unit policies, most of the samples (64.8%) were in the low to very low level. With respect to the resources, 43.0% of subjects was in low level. While, 30.9% of the samples was in the medium level and 22.7% of the samples were in high level for support from superior.

Table 7 Mean, Standard Deviation, Maximum and Minimum Scores of Selective Factors

Selective factors	Mean	S.D.	min	max	level
Knowledge about menopausal Woman	13.1	2.8	5	20	medium
Job satisfaction	51.2	5.2	33	67	high
Organizational support	54.5	17.9	22	104	medium
- Work unit policies	13.8	5.5	6	20	low
- Resources	13.7	4.5	6	28	low
- Support from superior	27.1	10.1	10	50	medium

From Table 7, it is found that the average score for knowledge about menopausal women was in a medium level, the average score for job satisfaction was in a high level. The average score for organizational support was in a medium level. When considering specific aspects, Table 7 reveals that the organizational support on work unit policies and resources were in a low level. Additionally, the support from superior was in a medium level.

Part 3. Nursing Performance in Health Promotion and Prevention for Menopausal Woman

Table 8. Number and Percentage of RNs Categorized by Nursing Performance in Health Promotion and Prevention for Menopausal Woman (N=186)

Nursing Performance	Number	Percentage
Low level	90	48.4
Medium level	61	32.8
High level	35	18.8
Total	186	100.0

From Table 8, nearly half (48.4%) of the samples had low level nursing performance in health promotion and prevention for menopausal woman, while 32.8% and 18.8% had medium level nursing performance and high level nursing performance respectively.

Table 9 Mean and Standard Deviation Scores of Nursing Performance

Nursing Performance	Range	Average			Interpretation
	of Scores	Mean	S.D.	by Item	
Assessment (8 items)	(0-28)	14.0	9.41	0.51	medium
Advocacy(3 items)	(0-3)	0.59	0.99	0.20	low
Consultancy(2 items)	(0-2)	0.94	0.77	0.47	low
Health education(8 items)	(0-8)	3.54	2.38	0.44	low
Promotion of self-care(9 items)	(0-9)	4.04	2.50	0.45	low
Case management(8 items)	(0-8)	3.49	3.08	0.44	low
Overall	(0-58)	26.6	0.46	16.6	low

From Table 9, it is found that the overall nursing performance in health promotion and prevention for menopausal women is in low level and when considering specific aspects, it reveals that the samples had a medium level of nursing performance on assessment. For other types nursing performance (advocacy, consultancy, health education, and case management) the samples had low level nursing performance.

Table 10 Mean and Standards Deviation Nursing Performance of RNs in Health Promotion and Prevention for Menopausal Women Categorized by Specific Aspects

Item	% of Nursing Performance	Mean	S.D.
Assessment			
- Menopausal women's physical examination as follows:			
- blood pressure checking.....	76.2	.76	.43
- body weight	67.2	.67	.42
- body height	52.8	.53	.50
- urinary examination.....	46.6	.47	.50
- sight	30.6	.31	.46
- hearing	28.5	.28	.45
- Interview on estrogen insufficiency symptoms:			
- insomnia.....	61.7	.62	.49
- anxiety.....	61.1	.61	.49
- headache.....	61.1	.61	.49
- hot flash.....	60.1	.60	.49
- mood swing.....	59.6	.60	.49
- numbness	54.9	.55	.50
- heavy sweat.....	49.7	.50	.50
- muscle pain.....	46.1	.46	.50
- frequency of urination.....	45.6	.46	.50
- vaginal dryness.....	34.2	.34	.48
- uterine pain	33.2	.33	.47
- dyspareunia.....	27.5	.27	.45
- libido.....	24.9	.25	.43
- Interview on past history diseases and treatment:			
- coronary heart disease	68.9	.69	.47
- diabetic mellitus	68.4	.68	.46
- hypertension	52.8	.53	.50
- osteoporosis	36.3	.64	.48

Table10. Mean and Standards Deviation Nursing Performance of RNs in Health Promotion and Prevention for Menopausal Woman Categorized by Specific Aspects (con't)

Item	% of Nursing Performance	Mean	S.D.
- Assess living condition and economic status of menopausal women	56.0	.56	.50
- Inquire about mental refuge for menopausal women such as religious beliefs and faith	49.2	.49	.50
- Assess health values and belief of the menopausal women	48.7	.49	.50
- Inquire about the ability to remember and to solve problem	38.3	.39	.49
- Search for the person who can influence menopausal women in order to support changes to correct behaviors	36.1	.36	.48
Advocacy			
- Hold exhibitions in the community on the topic of menopausal women	18.3	.18	.39
- Search for problems of menopausal women in the community	18.3	.18	.39
- Participate in solving problems for menopausal women in the community	22.4	.22	.42

Table 10. Mean and Standards Deviation Nursing Performance of RNs in Health Promotion and Prevention for Menopausal Women Categorized by Specific Aspects (con't)

Item	% of Nursing Performance	Mean	S.D.
Consultancy			
- Giving advice to menopausal women who have problems	65.1	.32	.33
- Participate in finding methods to solve problems for menopausal women with the menopausal women	28.6	.29	.45
Health Education			
- Teach menopausal women to examine their own breasts once a month	72.4	.72	.45
- Teach menopausal women to exercise using appropriate methods	65.1	.65	.48
- Introduce suitable food to menopausal women in the community	64.6	.65	.48
- Teach menopausal women to consistently notice their own symptoms such as weight or hot flashes	63.0	.68	.48
- Teach menopausal women to record results of every physical checkup	34.9	.35	.48
- Train volunteers to have knowledge concerning menopausal women	22.9	.23	.42
- Arrange meetings for menopausal women in the community	17.7	.18	.38
- Participate in demonstration of food that should be consumed daily by menopausal women to citizens who come for services at supporting clinics	14.7	.15	.35

Table 10. Mean and Standards Deviation Nursing Performance of RNs in Health Promotion and Prevention for Menopausal Women Categorized by Specific Aspects (con't)

Item	% of Nursing Performance	Mean	S.D.
Promotion of Self-care			
- Make appointments for menopausal women to come for pap smear checkup at public health service centers every year	72.9	.73	.45
- Advising menopausal women to come for physical checkup every year	72.9	.73	.45
- Give advice of self-care especially to menopausal women who have chronic diseases	66.7	.67	.47
- Introduce methods of relaxing to menopausal women	65.1	.65	.48
- Distribute documents concerning self-care to menopausal women	52.1	.52	.50
- Hold exhibitions concerning knowledge about menopausal women in public health service centers	25.0	.25	.43
- Arrange for regular programs to teach hygiene concerning health promotion for menopausal women	19.4	.19	.40
- Set up breast examining project by RNs for menopausal women in the community	19.3	.19	.40
- Coordinate with district, community, developing organizations to find income supplementing activities for menopausal women in the community	11.5	.11	.32

Table 10. Mean and Standards Deviation Nursing Performance of RNs in Health Promotion and Prevention for Menopausal Woman Categorized by Specific Aspects (con't)

Item	% of Nursing performance	Mean	S.D.
Case Management			
- Find health problems in menopausal women who have chronic diseases	58.9	.59	.49
- Record nursing information and result evaluation in health file	52.1	.52	.50
- Evaluate nursing performance for menopausal women who have health problems	51.6	.52	.50
- Practice nursing according to the plans for menopausal women who have health problems	49.5	.49	.50
- Coordinate with related work units to forward menopausal women who need to see specialists	40.1	.40	.49
- Plan to solve problems for each menopausal woman	38.5	.39	.49
- Gathering information concerning problems of each menopausal woman	31.3	.31	.46
- Planing with members of health team such as doctors and social workers to solve problems for menopausal women	26.6	.27	.44

From Table 10, when scores of each question of nursing performance in health promotion and disease prevention for menopausal women was considered, it was found that

- For assessment, the nursing performance that was practiced the most was physical checkup by measuring blood pressure (76.2%). The nursing performance that was practiced sparingly was asking the women about their libido (24.9%).

- For advocacy, the nursing performance that was practiced the most was participating in solving problems for menopausal women in the community (22.4%). The nursing performance that was practiced sparingly was holding exhibitions concerning menopausal women and participating in solving problems for menopausal women in the community (18.3%).

- For consultancy, the nursing performance that was practiced the most were giving advice to menopausal women who have problems (65.1%). The nursing performance that was practice sparingly was setting up methods for problem solving with menopausal women (28.6%).

- For health education, the nursing performance that was practiced the most were teaching menopausal women to examine their own breasts once a month (72.4%). The nursing performance that was practiced sparingly was holding demonstration of food that should be consumed daily by menopausal women for citizens who came for service at health promotion clinics (14.7%).

- For promotion of self-care, the nursing performance that was practiced the most were making appointments for menopausal women to come for pap smear checkup at public health service centers once a year, and advising menopausal women to come for physical checkup every year (72.9%). The nursing performance that was practiced sparingly was coordinating with district community developing organizations in order to find income supplementing activities for menopausal women in the community (11.5%).

- For case management, the that was practiced the most was finding problems in menopausal women who have chronic diseases (58.9%). The nursing performance that was practiced sparingly was planning with members of health team such as doctors and social workers to solve problems for menopausal women (26.6%).

Part 4: Relationship Between Selected Factor and Nursing Performance in Health Promotion and Prevention for Menopausal Woman.

4.1 The results of relationships between educational qualifications, training about menopausal women and nursing performance in health promotion and prevention for menopausal woman as analyzed by using chi-square, is presented in Table 11

Table11. Relationship Between Educational Qualifications and Nursing Performance in Health Promotion and Prevention for Menopausal Women

Educational Qualifications	Nursing Performance Level			Total (n=186)
	low N%	medium N%	high N%	
Diploma and bachelor degree	85(48.6)	58(33.1)	32(18.3)	175(100)
Master degree	5(45.5)	3(27.3)	3(27.3)	11(100)

$$\chi^2=0.574 \quad df=2 \quad P\text{-value} = 0.751$$

From Table 11, there is no relationship between educational qualifications and nursing performance of RNs in health promotion and prevention for menopausal women (at statistical significance of 0.5 $\chi^2=0.574$, P-value = 0.751).

Table 12 Relationship Between Additional Training and Nursing Performance in Health Promotion and Prevention for Menopausal Woman

Training on Menopausal Women	Nursing Performance Level			Total (n=193)
	low N%	medium N%	high N%	
Never	85(49.1)	57(32.9)	31(17.9)	173(100)
Ever	5(38.4)	4(30.8)	4(30.8)	13(100)

$$\chi^2=1.363 \quad df=2 \quad P\text{-value} = 0.506$$

From Table 12, there is no statistical relationship between training about menopausal women and nursing performance in health promotion and prevention for menopausal women ($\chi^2=1.363$, P-value = 0.506).

4.2 The relationships between age, length of governmental service, work experience in community, knowledge about menopausal women, job satisfaction, organizational support and nursing performance in health promotion and prevention for menopausal women were analyzed by using Pearson's correlation and is presented in Table 13.

Table 13. Pearson's Correlation Coefficients of Selective Factors with Nursing Performance in Health Promotion and Prevention for Menopausal Women

Selective Factors	Pearson's Correlation Coefficients	P-value
Personal Characteristics		
• Age	-0.071	0.338
• Length of governmental service	-0.061	0.410
• Work experience in community	- 0.069	0.352
• Knowledge about menopausal women	0.002	0.976
Job Satisfaction	0.131	0.075
Organizational Support	0.349	<0.001
• Work unit policies	0.287	<0.001
• Resources	0.267	<0.001
• Support from superior	0.347	<0.001

Table 13 shows that personal characteristics including age, length of government service and work experience in community; knowledge about menopausal women; and job satisfaction had no statistically significant relationship with nursing performance in health promotion and prevention for menopausal women (0.5 level of statistical significance). Only organizational support was positively related to nursing performance in health promotion and prevention for menopausal women (at 0.5 level of statistical significance).

Part 5: Result of the Analysis of Multiple Regression in Order to Consider Factors Which Can Explain the Variance of Nursing Performance in Health Promotion and Prevention for Menopausal Women

Table14. Regression Coefficients of the Best Selective Factors to Explain Nursing Performance in Health Promotion and Prevention for Menopausal Women by Stepwise Multiple Regression Analysis.

Variables	b	Beta	SE(b)	t	p-value
Organizational support	0.312	0.347	0.063	4.985	<0.001

Constant = 9.801 $R^2 = 0.121$ $R^2_{adj} = 0.116$ $F = 24.854$ P-value = <0.001

From Table 14, it is obvious that organizational support is the best variable which can explain the variance of nursing performance in health promotion and prevention for menopausal women (at 12.1% $R^2 = 0.121$) and at a statistically significant level of 0.001 ($F = 24.85$, P-value <0.001). When considering the coefficient of regression as 0.312, it means that if they gain 1 more score of organizational support, this will lead to more nursing performance in health promotion and prevention for menopausal women (0.312 score).

Table 15 Regression Coefficients of the Variable in Organizational Support to Explained Nursing Performance in Health Promotion and Prevention for Menopausal Women by Stepwise Multiple Regression Analysis

Variables	b	Beta	SE(b)	t	p-value
Support from superior	0.561	0.347	0.112	5.024	<0.001

Constant = 11.484 $R^2 = 0.121$ $R^2_{\text{adj}} = 0.116$ $F = 25.244$ P-value = <0.001

From Table 15, it is obvious that the best variable was support from superior which can explain the variance in ability of nursing performance in health promotion and prevention for menopausal woman (at 12.1%, $R^2 = 0.121$) and at statistical significant level of 0.001 ($F = 25.244$, P-value <0.001). When considering the coefficient of regression as 0.561, it means that if they gain 1 more score of support from superior, this will lead to more the nursing performance in health promotion and prevention for menopausal women (0.561 score).

Conclusion for Research Hypothesis Presented in Table 16**Table 16. Result of Research Hypotheses**

Research Hypothesis	Statistic Used	P-value	Result of Hypotheses
1. Age is positively relationship to nursing performance in health promotion and prevention for menopausal women.	Correlation	0.338	Reject hypothesis
2. Length of governmental service is positively relationship to nursing performance in health promotion and prevention for menopausal women.	Correlation	0.410	Reject hypothesis
3. Educational qualifications is related to nursing performance in health promotion and prevention for menopausal women.	Chi-square	0.751	Reject hypothesis
4. Work experience in community is positively relationship to nursing performance in health promotion and prevention for menopausal women.	Correlation	0.352	Reject hypothesis
5. Training on menopausal women is related to nursing performance in health promotion and prevention for menopausal women.	Chi-square	0.506	Reject hypothesis
6. Knowledge about menopausal women is positively related to nursing performance in health promotion and prevention for menopausal women.	Correlation	0.410	Reject hypothesis

Table 16 The Result of Research Hypotheses (con't)

Research hypothesis	Statistic Used	P-value	Result of Hypotheses
7. Job satisfaction is positively relationship to nursing performance in health promotion and prevention for menopausal women.	Correlation	0.131	Reject hypothesis
8. Organizational support is positively related to nursing performance in health promotion and prevention for menopausal women.	Correlation	<0.001	Reject hypothesis
9. Personal characteristics, Job satisfaction, and organizational support can be used to explain the variance in nursing performance in health promotion and prevention for menopausal women.	Regression	<0.05	Organizational support can explain the variance of nursing performance in health promotion and prevention for menopausal women.

CHAPTER V

DISCUSSION

The researcher discusses the results of the study detailed in this chapter v set forth below:

Discussion of the Research Result

1. Nursing Performance in Health Promotion and Prevention for Menopausal Women.

Approximately 48% of the samples group was categorized as having a low performance level in health promotion and prevention for menopausal women, 32.8% of the sample group was categorized as having a medium performance level and 18.8% was categorized as having a high performance level (Table 8). Their average score for nursing performance in health promotion and prevention of menopausal women in a low level ($X = 26.65 \pm 16.64$ from total score of 58).

When nursing performance in health promotion and prevention of menopausal women was considered in each issue it was found that performance of assessment was medium ($\bar{X} = 0.51$), followed by consultancy, health education, promotion of self-care and case management when the performances were nearly medium ($\bar{X} = 0.47-0.44$). The exception was advocacy which had a low performance level ($\bar{X} = 0.20$). From this study, it was noticed that nursing practice and prevention with individuals were practiced more. For example, physical evaluation by blood pressure measuring was practiced by 76.2%, advising menopausal women to have annual physical checkup was practiced by 72.9%, teaching menopausal women to examine their breasts themselves was practiced by 72.4%, giving advice to menopausal women who had problems was practiced by 65.1%,

and searching for health problems in menopausal women with chronic diseases was practiced by 58.9%. But project or group activities were still not conducted or sparingly conducted. For example food demonstration was practiced by 14.7%, community exhibitions was practiced by 18.3%. Eighteen point three percent of the nurses participated in solving problems for menopausal women in communities; 19.4% arranged for teaching programs; 26.6% participated in planing with health team. When these activities were considered according to Spellbsing's concept, there were less activities carried out, according to the standard of the Public Health Ministry. The result of the research showed that even though the sample group of the RNs has many duties such as primary health care, medical mobile service as well as caring for individuals, families and communities every day, the sample group did not omit to care for menopausal women. But the nursing activities practiced by the sample group emphasized the main activity for disease prevention as directly provided by nurses. Health promotion activities especially health education in groups and communities, however, were minimal. RNs of the BMA should increase their project and group activities in order that nursing performance in health promotion and prevention for menopausal women would have more coverage. The research result agreed with Chanwiwit, N. (1999:102) who found that nearly half of RNs of the BMA Health Department performed less than target for home visiting .

From research results, objective and hypothesis can be answered as set forth below:

Hypothesis 1, personal characteristics are relationship to nursing performance in health promotion and prevention for menopausal women by RNs of the BMA Health Department as set forth below.

Hypothesis 1.1: age is positively relationship to nursing performance in health promotion and prevention for menopausal women.

Research result found that age was not related to nursing performance in health promotion and prevention for menopausal women ($r = -0.071$, $P\text{-value} = 0.3380$). Therefore, hypothesis 1.1 was not supported. This may be because most RNs were in the same range of age (30 to 39 years old, $X = 40.9 \pm 6.22$), which was in the middle age group, Shapero (1985:167) said that people can best perform their professional career when they are 35 years old. After that, their abilities would reduce consistently and they would work well again when they become 45-55 years old because there would be a psychological phenomenon called mid career crisis (Shapero, 1985:167). The research result agrees with Chanwiwit, N. (1999:102) who found that age was not related to results of home visiting activities of RNs of the BMA Health Department. The study conducted by Claywong, C. (1997:88) also found that age was not related to performance of professional nurses in hospitals which were Samitivej Hospital company.

Hypothesis 1.2: length of governmental service positively relationship to nursing performance in health promotion and prevention for menopausal women.

From the research results, it was found that the length of governmental service was not related to nursing performance in health promotion and prevention for menopausal women ($r = -0.061$, $P\text{-value} = 0.410$). Therefore, hypothesis 1.2 was not supported. In this study, 31.6% of the RNs had worked for the government for 11-15 year, and 29.5% had 16-20 length of governmental service. It can be seen that the sample group had over 10 years of service. The length of governmental service did not guarantee that nurses who had worked for longer period would always have more work experience than those who worked for not as long. Further, in each working day work experience gained is different (Wisalaporn, S. 1979:131-132). This agrees with Panitchakit, J. (1997:118) who found that number of years of governmental service did not relate to the performance of measles immunization by health officers of Nakornsawan province. This is different from the result of research conducted by Ounkomol, P. (1989:76), who found

that years of governmental service of the chiefs of sanitary and disease prevention department was positively related to their work performances.

Hypothesis 1.3: educational qualification is related to nursing performance in health promotion and prevention for menopausal women.

From the research results, it was found that educational qualification is not related to nursing performance in health promotion and prevention for menopausal women ($\chi^2 = 0.574$, P-value = 0.751) Therefore, hypothesis 1.3 was not supported. This may be because the majority of RNs in the sample group had bachelor degree (91.2%), and hence the entire sample group was not that different in educational qualifications. Therefore, educational qualifications are not related to nursing performance in health promotion and prevention for menopausal women. This agrees with the study conducted by Chanwiwit, N.(1997:103) who found that educational qualification is not related to performance of home visiting activities of RNs of the BMA Health Department.

Hypothesis 1.4: work experience in community is positively relationship to their nursing performance in health promotion and prevention for menopausal women.

From the research results it was found that work experience in community of RNs was not related to their nursing performance in health promotion and prevention for menopausal women ($r = 0.069$, P-value = 0.352). Therefore, hypothesis 1.4 was not supported. Even though the members of the sample group may have different work experience, RNs of health centers of BMA had similar duties and responsibilities. The members of the target group for nursing service were not very different. Because nursing performance in health promotion and prevention for menopausal women received attention since only 1994 onwards, RNs therefore had similar experiences on menopausal women. Therefore, there was a little of RNs that had post experience with menopausal women(16.6%). This made experience not related to nursing practice in health promotion

and prevention for menopausal women. This agrees with Chanwiwit, N. (1999:103) who had found that experience in public health nursing was not related to performance of home visiting activities by RNs of BMA Health Department.

Hypothesis 1.5: training on menopausal women is related to nursing performance in health promotion and prevention for menopausal women.

The study found that training on menopausal women was not related to nursing performance in health promotion and prevention for menopausal women ($\chi^2=1.363$, P-value = 0.506). Therefore, hypothesis 1.5 was not supported. A large number of RN never received training about menopausal women (93.3) and only 6.7% was trained about menopausal women. Therefore, there were no difference in the sample group. It was found that training was not related to nursing performance in health promotion and prevention for menopausal women. The result agrees with the research conducted by Panitchakit, J (1997:119) who found that training and further education were not related to performance of measles immunization work and disagrees with Jungsangasom, S. (1998:113) who found that training was related to working in the duty of public health administration division chiefs.

Hypothesis 1.6: knowledge about menopausal women is positively relationship to nursing performance in health promotion and prevention in menopausal women.

The study found that knowledge about menopausal women was not related to nursing performance in health promotion and prevention for menopausal women ($r = 0.002$, P-value = 0.976). Therefore, hypothesis 1.6 was not supported. This may be because the majority of RNs in the sample group (60.5%) had knowledge about menopausal women in medium level , 21.6% in high level, and 17.9% in low level

(Table 3). Their average scores for knowledge about menopausal women were in a medium level ($\bar{X}=13.1\pm 2.84$) (Table 7).

When the questionnaires testing knowledge about menopausal women were considered, it was found that most RNs had high knowledge in many questions in the section about physical changes in menopausal women (hot flashes around the neck and abnormal sweating on the face, which were both symptoms commonly found in menopausal women; vaginal burning in menopausal women because vaginal lubrication is drying and endometrium is thinning). For knowledge in the section about caring for menopausal women, most nurses answered wrongly (insufficient vitamin D is the principal cause of osteoporosis in menopausal women; the food that should be consumed daily by menopausal women is milk). For knowledge in the section about nursing activities for menopausal women, most nurses answered wrongly (advising menopausal women to exercise until their pulse rates reach 120 beats per minute; menopausal women should be advised to have pap smear checkup at least once in 2 years). Boonthong, T (1980:145) stated that quality nursing practice occurred when the practitioner had knowledge about the practiced matter. This study shows that the sample group had practiced in activities relating to the knowledge on physical changes. Blood pressure measuring was practiced by 76.2%, advising menopausal women to have annual physical checkup was practiced by 72.9%. The result agrees with the research conducted by Chantrapa, W. et al (1980:262) which found that knowledge did not influence work performance of nurses. But the result of the present study disagrees with the research conducted by Radawiriyakul, W. (1993:102) which found that knowledge about elderly people was related to nursing elderly people by nurses of provincial hospitals in Northeastern Thailand.

The research result may be summarized that personal characteristics such as age, length of governmental service, educational qualifications, experience, training and knowledge about menopausal women were not related to nursing performance in health promotion and prevention for menopausal women, which did not support hypothesis 1.

Hypothesis 2: job satisfaction is positively relationship to nursing performance in health promotion and prevention for menopausal women.

The study found that job satisfaction was not related to nursing performance in health promotion and prevention for menopausal women ($r = 0.131$, $P\text{-value} = 0.075$), therefore hypothesis 2 was not supported. From the research result, it was found that the sample group had job satisfaction in high level ($\bar{X} = 51.2 \pm 5.2$)(table 7). When each question was considered it was found that RNs were of the opinion that nursing menopausal women was a necessary work in public health service, the work was not stressful and did not increase the work burden. Thing that they did not like about the work included it did not promote creativity and was not directly correspond with their knowledge and abilities and it did not receive enough cooperation from menopausal women. The present study found that 83.8% of RNs was satisfied with their work. Only 1.1% of RNs was not satisfied with their work. Therefore, job satisfaction was not related to nursing performance in health promotion and prevention for menopausal women. The result of the present study disagrees with the concepts of Shermerhorn et al (1991:104) which stated that job satisfaction was the internal force that directly resulted in hardworking individuals, and that individuals with high job satisfaction worked seriously. The result agrees with the research conducted by Ounkomol, P.(1989:80), was found that job satisfaction of the heads of sanitary and disease prevention division was not related to their servicing works.

Research result may be summarized that job satisfaction was not related to nursing performance in health promotion and prevention for menopausal women and hence hypothesis 2 was not supported.

Hypothesis 3: organizational support is positively relationship to nursing performance in health promotion and prevention for menopausal women as set forth belows.

Hypothesis 3.1: work unit policies are positively relationship to nursing performance in health promotion and prevention for menopausal women.

The research result indicated that work unit policies are positively related to nursing performance in health promotion and prevention for menopausal women with statistical significance ($r = 0.287$, $P\text{-value} > 0.001$), which supported hypothesis 3.1. The sample group which received high policy support from work unit had high nursing performance in health promotion and prevention for menopausal women but the sample group which received low policy support from work unit had low nursing performance in health promotion and prevention for menopausal women. In this study, the sample group viewed that the support from work unit policy was in low level ($\bar{X} = 13.76 \pm 5.45$). The sample group had the opinion that they had received low level support in setting clear policies for nursing menopausal women, communication about policies and guidelines for nursing performance in health promotion and prevention for menopausal women, and setting methods of working process for nursing performance in health promotion and prevention for menopausal women. The result agrees with Nimsritong, D. (1997:114) who found that work unit policies are positively related to nursing practice on preparing home health care for patients by nurses. Chanwiwit, N. (1999:104) found that supporting in the form of policies was positively related to the performance of home visit activities by RNs of BMA Health Department. In this research, it can be explained that receiving support in the form of good and clear nursing policies (for menopausal women) from the work unit will benefit nursing performance in health promotion and prevention for menopausal women.

Hypothesis 3.2: resources is positively relationship to nursing performance in health promotion and prevention for menopausal women.

From the result of this research, it was found that receiving support in the form of resources was positively related, with statistical significance, to nursing performance in health promotion and prevention for menopausal women ($r = 0.267$, $P\text{-value} = 0.001$). Hence hypothesis 3.2 was supported. It was also found that support in the form of resources which was given to the sample group was in low level ($\bar{X} = 13.73 \pm 4.53$). The sample group was the opinion that they had received a low level support in budget, papers and text books about menopausal women. Organizational support in the area of resources was seen as highly necessary for work performance of RNs because it was an external factor which assisted in creating facilities for the work performance. Further, RNs responsible for many types of work, especially field location work. If there was not sufficient vehicles for the work or not enough nursing resource support, it would be impossible to perform the work. This agrees with Boonraksa, K. (1997:123) who found that receiving support of resources was positively related to quality control of community nursing. Panitchkit, J.(1997:135) had found that materials and equipment were related to measles immunization work performance of public health centers personnel.

Hypothesis 3.3: support from superiors is positively relationship to nursing performance in health promotion and prevention for menopausal women.

The present study found that receiving support from superior was related, with statistical significance, to nursing performance in health promotion and prevention for menopausal women ($r = 0.347$, $P\text{-value} = 0.001$). Hence, hypothesis 3.3 was supported. From the research result, it was found that support from superior was in a medium level ($\bar{X} = 27.12 \pm 10.05$). This agrees with the study conducted by Boonruksa, K. (1997:125) which found that receiving support from superior was positively related to nursing in preparing patients for healthcare at nursing homes. Chanwiwit, N. (1999:103) found that support of the chief of the department was related to performance of home visit activities by RNs of BMA Health Department. Because of the leader of an

organization had an influential and important role of supporting working behaviors, which in turn induced good working atmosphere that was productive for the organization (Muangman,T.1986:1).

Results of the present research can be summarized that receiving support from the organization in the form of policies of work unit, resources, and support from superior are related to nursing performance in health promotion and prevention for menopausal women, which agrees with hypothesis 3.

Hypothesis 4: personal characteristics, job satisfaction, and receiving organizational support can together explain changes in nursing performance in health promotion and prevention for menopausal women by RNs of BMA Health Department.

The study found that the factor that can explain nursing performance in health promotion and prevention for menopausal women was receiving support from the organization ($R^2 = 0.121$, P-value = 0.001). When each type of support was considered, support from superior was the best variable which explain the variance of nursing performance , ($R^2= 0.125$, P-value = 0.05) (Table 14). This means that, for the sample group to perform better nursing in health promotion and prevention for menopausal women, they have to receive support from organization especially from the superiors. This is because \ health centers must be responsible and must coordinate with many departments. Therefore, if the superior supports this work, the RNs can efficiently perform the work. This agrees with the study conducted by Chanwiwit, N. (1999:103) who had found that support of the chief of the department could explain the variance of the home visit activities by RNs of BMA Health Department..



When Shermerhorn's concept, which was used as the concept for this research was considered, it may be summarized that the hypotheses of the research are partially supported. The supported hypothesis is organizational support, which is the important factor that can explain nursing performance in health promotion and prevention for menopausal women by RNs of the BMA Health Department.



CHAPTER VI

CONCLUSION

This chapter includes two major sections as follows:

Part 1: summary of the study; and

Part 2 : suggestion

Part 1. Summary

This study is a descriptive research conducted to study nursing performance of RNs of BMA Health Department in health promotion and prevention for menopausal women as well as selected factors consisting of personal characteristics, job satisfaction, and organizational support . The sample group consisted of 193 RNs from 51 public health service centers. Data collection started on February 1, 2000 until March 1, 2000 and was done by sending questionnaires to the sample public health service centers. Statistical methodology used in the analysis were percentage, average, standard deviation, Chi square, Pearson's product moment correlation, and stepwise multiple regression analysis. Results of the purposes and hypotheses studied are summarized as set forth below.

Research Results

1. Personal characteristics. The sample group had an average age of 40.9 years old, most (85.0%) were married, 87.5% had more than 11 years of governmental service, 58.1% was professional nurses level 6, 91.2% had bachelor's degree for their qualifications, most (83.4%) had never worked in an Obstretic-Gynecology ward, 31.6%

had 1-5 years work experience as RNs in community. Most (93.3%) never received knowledge about menopausal women.

2. Sixty point five percent of RNs of the BMA had knowledge about menopausal women in a medium level. Most of them had knowledge of physical and mental changes followed into knowledge on menopausal women caring and nursing practice for menopausal women (average score of 13.1 from a total score of 20), Seventy two point nine percent of RNs had a high level of job satisfaction (average score of 51.2 from a total score of 70); 34.6% of RNs viewed that they received organizational support in a medium level (average score of 54.5 form a total score of 105). When each type of support was considered, it was found that receiving organizational support in the form of work unit policies and resources were in a low level (34.7% and 43.0% respectively), and receiving support from superior was in a medium level (30.9%).

3. Forty eight point four percent of RNs of the BMA Health Department performed low level of work activities in heath promotion and prevention for menopausal women 32.8% had medium level performance and 18.8% had high level performance (average score of 26.65 from a total score of 58). For each type of nursing performance in health promotion and prevention for menopausal women, it was found that assessment was conducted most frequent, followed with promotion of self-care , case management, health education, consultancy and advocacy respectively.

4. Relationships between various factors and nursing performance in health promotion and prevention for menopausal women are as set forth below.

4.1 Personal characteristics. From the study, it was found that age, length of governmental service, educational qualifications, training on menopausal women, work experiences in community, and knowledge about menopausal women were not related to nursing performance in health promotion and prevention for menopausal women, which did not support hypothesis 1.

4.2 Job satisfaction was not related to nursing performance in health promotion and prevention for menopausal women, which did not support hypothesis 2.

4.3 Organizational support including, work unit policies, resources, support from superior ($r = 0.287$, $r = 0.267$, $r = 0.347$ respectively) were related to nursing performance in health promotion and prevention for menopausal women, which supported hypothesis 3.

5. The factors that can best explain nursing performance in health promotion and prevention for menopausal women is organizational support. It accounted for 12.10% of variance of nursing performance in health promotion and prevention for menopausal women. When each type of support from organization was considered, support from superior was the best variable which accounted for 12.5% of variance of nursing performance.

Part 2. Suggestions

Suggestions From the Present Research

1. From this study, it was found that nursing performance in health promotion and prevention for menopausal women by RNs of the health centers of BMA was not in a high level, especially in the areas of advocacy, health education, and case management such as holding exhibitions to supply knowledge at the communities and at public health centers, arranging for health education programs for menopausal women, and coordinating with other officials concerning menopausal women. Therefore there should be more encouragement for the RNs to perform more nursing practices in such areas.

2. More knowledge especially about menopausal women should be supplied to RNs of the BMA, because most of the RNs have only medium level of the knowledge and 93.3% of them had never received training about menopausal women. Therefore, they should be supplied with more knowledge about exercising, dieting, relaxing, and nursing that should be performed for menopausal women such as urinary system caring and depression in menopausal women.

3. There should be measures to increase the morale of RNs of the BMA Health Department because they have heavy burdens and a lot of responsibilities, and hence they may have poor attitude towards their work. The study found that RNs had a high level job satisfaction, nonetheless administrators or superiors should pay close attention and give support to their work in order to increase job satisfaction.

4. The study found that receiving organizational support is the factor which influences and is positively related to nursing performance in health promotion and prevention for menopausal women. Therefore, organizational support must be considered in order to increase the level of nursing performance in health promotion and prevention for menopausal women. The following are suggestions for making use of research results:

4.1 work unit policies. There should be clearly established policies and guidelines for nursing performance in health promotion and prevention for menopausal women;

4.2 resources. There should be sufficient support of resources such as personnel, equipment, vehicles, medical supplies and budgets to conduct the work;

4.3 superiors. There should be support in giving and establishing a clear policy of public health service centers to perform nursing in health promotion and prevention for menopausal women in communities, setting budgets, giving advice, and helping to solve problems that had arisen from working practice of RNs.

Suggestions for Future Researches

1. For future researches to be more complete, data should be collected from both service givers and service receivers so that they may be considered concurrently.

2. Nursing performance in health promotion and prevention for menopausal women should be studied in a unit that has a menopausal clinic.

3. From the research results, it was found that factors that were studied could explain only 12.10% of variance of nursing performance in health promotion and prevention for menopausal women. There were other factors that could influence 87.9% of variance of nursing performance in health promotion and prevention for menopausal women such as role acknowledgment, attitude and community characteristics.

4. If questions concerning knowledge about menopausal women were to be reuse, they have to be improved to contain more and clearer details, and include materials that correspond more with the nursing practice.

BIBLIOGRAPHY

- Applewhite, P.B. et al. (1965). Organization behavior. New Jersey:Englewood cliff, Prentice-Hall
- Bass, B.M.& Barrett, G.V. (1981). People, work and organization. (2nd eds) . The United State of America:Allyn and Bacon.
- Boonruksa, K. (1997). The relationship between selected factors and community nursing quality assurance of health promotion section at community in hospital in Northeastern part of Thailand. M.Sc. (Public Health) major in Public Health Nursing, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Best, J.W. (1977). Research in education. (3Rd). Engle Wood Cliffs, N.J.:Prentice-Hall.
- Bureau of policy and plan Bangkok Metropolitan Area . (1997). Bangkok Statistics. Bangkok :Thammasart Press. (Thai version)
- _____ . (1998). Bangkok Statistics. Bangkok :Thammasart Press. (Thai version)
- Charles, R.B.(1995). Obstetrics and Gynecology. Baltimore : A Waverly Company.
- Chanwaiwit, N. (1999). The relationship between selected factors and effectiveness of the home visit activity of public health nursing in Bangkok Metropolitan Area. M.Sc. (Public Health) major in Public Health Nursing, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Chirawatkul, S. (1997).Health status of middle-aged and menopausal transitional preparation. Health System Research Journal,5(4),337-347. (Thai version)
- Chompootaweep, S and other (1994). The menopausal age in Thai women in Bangkok. Family Health Journal,22(3),9-23. (Thai version)
- Claywong, C. (1997).Relationships between personal factors, job satisfaction, job characteristic and organization commitment with job performance of staff nurses in hospital under Samitivej company. M.N.S major in Nursing Education, Faculty of Graduate Studies, Chulalongkorn University. (Thai version).

- Cochran, W.G. (1977). Sampling Techniques, (3rd eds) New York:John Willey and son.
- Cross, S.K. and Lovett,J.E. (1994). Women's Collective Meanings of Menopause: A Content Analysis. Journal of Woman and Aging .[CD-ROM] 6,(1-2) 187-212
- Denduongchai, R. (1997). M.Sc. Factors influencing the performance of teachers who are responsible for food sanitary in school Rachaburi Proviencie. (Public Health) major in Health Administration, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Department of Health, Ministry of public health.(1998). Health Promotion in Pre and post Menopausal Women for health professional. Bangkok : The War Veterrans Organization Print. (Thai version)
- Department of Health, Ministry of public health.(1996).The study research of pre-post menopausal Thai women behavior . Bangkok : The War Veterrans Organization Print. (Thai version)
- Department of Nursing , Ministry of public health.(1997).Nursing standard in community. Bangkok : The War Veterrans Organization Print. (Thai version)
- Direkbusarakom, A. (1996). Menopause in Thai women: from nature to disease. Health System Research Journal,4(1),37- 44. (Thai version)
- Dyer, D. and other. (1972). Can job performance be predicted form biographical, personality and administrative climate inventory. Nursing research, 21 (4) ,68-72.
- Fishbien, E.G.(1992). Women at mid-life: the transition to menopause. Nursing Clinics of North America, 7(4),951-7.
- Flippo, E.B. (1966). Management: a behavioral approach. Boston: allyn and Bacon,Inc.
- Good, V. (1973). Dictionary of Education . New York:McGraw Hill Book.
- Green, N.C. (1972).The Satisfaction Performance Controversy, New Developmennt and their implication. Business Horizons.18(1):31
- Happer,D. (1991). Peri-menopause and aging. In Lichtman,R.& Papera,S. (eds). Gynecology-Well Women care. NorWalk,Appleton and Lange.

- Herzberg, F. et al. (1959). The motivation of work. New York :Wiley and son,Inc.
- Jungsangasom, S. (1998). Factors influencing role performance of chiefs of public health administration subdivision in muang municipalities. M.Sc. (Public Health) major in Health Administration, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Kronenberg, F.(1994). Hot flash in Lobo R.A.(ed),Treatment of post – menopausal women, basis and clinical aspect. New-York:Raven Press.
- Koonsri, D. (1994). Factors influencing the performance of health center personnel On tuberculosis case finding in Roi-et Proviencie. M.Sc. (Public Health) major in Public Health Nursing, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Maslach, C. (1986). Burnout:The cost of Caring. (3rded) NewJersy:Prestice Hall, Inc.
- McCormick, J.E. &Ilgen,D. (1985). Industrial and Organizational Psychology. (3rded) Englewood:Printice Hall,Inc.
- Mitchell, T.R. and Larson, J.R. (1987). People in organization. (3rd eds). Singapore: Mc.Graw-Hill.
- Morse, N.C. (1953). Satisfaction in White Collar Job. Ann Arbbor: University of Michigan press.
- Nimsrithong, D (1997). The relationship between selected factors and the nursing practice in hospital on propriety home health care for the patients by nurses in province hospital region Ministry of Public Health. M.Sc. (Public Health) major in Public Health Nursing, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Ounkomol, P (1989). Factors affecting the role performance of chief of sanitation and disease control section in community hospital in Northeastern Thailand. M.Sc. (Public Health) major in Health Administration, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Panitchakit, J(1997). Factors related to measles immunization performance of health center personnel in Nakornsawan province. M.Sc. (Public Health) major in Health Administration, Faculty of Graduate Studies, Mahidol University. (Thai version)

- Panthong, A (1997). A study of factors affecting health-promotion behavior in menopausal woman. M.N.S. (Maternal and Child health nursing), Faculty of Graduate Studies, Mahidol University. (Thai version)
- Pender, N.J.(1996). Health promotion in nursing practice. (3rd eds).U.S.A.:A Simon & Schuster company.
- Radawiriyakul,W (1994). The relationship of selected factors and the nursing practice for the ederly of professional nurse in provincial hospital under Ministry of Public Health in the Northeastern Thailand. M.Sc. (Public Health) major in Public Health Nursing, Faculty of Graduate Studies, Mahidol University. (Thai version).
- Schermerhorn, J.R. et al . (1991). Mamaging organization behavior. (4th eds) New York:John Wiley & son,Inc.
- Sindhunava, P (1997). Quality of ô life of menopausal women in Bangkok. M.N.S. (Maternal and Child health nursing), Faculty of Graduate Studies, Mahidol University.(Thai version)
- Shapero, A. (1985). Managing Professional People. NewYork: The Free.
- Spellbring, A.M. Nursing's role in health promotion. NCNA,26(4) 805-814.
- Sriarporn, P.(1994).Nursing in women health and menstruation. Chiangmai : Chiangmai University.(Thai version)
- Struass, E.J.&Sayles, P.J. (1985). Personal:The Human Problem of Manangement. Englewood:Printice Hall,Inc.
- Tritilanunt, P. (1991). Factors affecting environmental sanitation performance of health center personnel in Chachoengsoa Proviencie. M.Sc. (Public Health) major in Health Administration, Faculty of Graduate Studies, Mahidol University. (Thai version)
- Utian, W.H.& Jacobowitz,S.R. (1990). Managing Your Menopause. New York:Prentice Hall Press.
- Vroom, W.H. (1964). Work and Motivation. NewYork: John Wiley and sons.

Wongsilp, N. (1993). Administrative factors affecting the health education and public relations of the chief of health education and public relations unit in general hospitals Ministry of Public Health. M.Sc. (Public Health) major in Health Administration, Faculty of Graduate Studies, Mahidol University. (Thai version)

Wongwisate, W. October,15,1999. Interview.

World Health Organization. (1981). Research on the menopause. W.H.O. technical report series 670. Geneva: World Health Organization.

World Health Organization. (1986). Ottawa charter for health promotion. Geneva: World Health Organization.

World Health Organization. (1996). Research on the menopause. Geneva: World Health Organization.

Thai Version.

กนกพร หมู่พักษณ์และคนอื่นๆ. (2539). รายงานการวิจัยภาวะสุขภาพและพฤติกรรมสุขภาพของหญิงวัยกลางคน 40-59 ปี. กรุงเทพฯ:มปท

จันทน์ สมประสงศ์. (2518). หลักและแนวคิดของหัวหน้างานในการสร้างแรงงานสัมพันธ์ภาพที่ดี. กรุงเทพฯ:เพียรรุ่งโรจน์การพิมพ์.

จินตนา ยูนิพันธ์.(2527).การเรียนการสอนทางพยาบาลศาสตร์. กรุงเทพฯ:โรงพิมพ์จุฬาลงกรณ์มหาวิทยาลัย.

เทพนม เมืองแมน และสวิง สุวรรณ. (2529). พฤติกรรมองค์กร.กรุงเทพฯ:ไทยวัฒนาพานิช.

ทัศนาศ นุญทอง. (2523). องค์ประกอบในการประกันคุณภาพ. ในประมวลการประชุมพยาบาลแห่งชาติครั้งที่ 6. กรุงเทพฯ:ม.ป.ท.

ทัศนาศ นุญทอง. (2525). ทฤษฎีบทบาท:แนวคิดและการนำไปใช้ในวิชาชีพพยาบาล.วารสารพยาบาล. (12),95.

ทองหล่อ เดชไทย. (2528).แนวคิดเกี่ยวกับการบริหารสาธารณสุข. ในเอกสารการสอนชุดวิชาการบริหารงานสาธารณสุขทั่วไป หน่วยที่1-8 มหาวิทยาลัยสุโขทัยธรรมาธิราช. กรุงเทพฯ โรงพิมพ์ร่วมพิมพ์

ธงชัย สันติวงศ์และชัยยศ สันติวงศ์.(2525).พฤติกรรมของบุคคลในองค์กร. กรุงเทพฯ:ไทยวัฒนาพานิชย์.

ธวัชชัย วรพงศธร.(2538).หลักการวิจัยทางการแพทย์พยาบาลสาธารณสุขศาสตร์. กรุงเทพฯ:
จุฬาลงกรณ์มหาวิทยาลัย.

ธวัชชัย วรพงศธร.(2540).หลักการวิเคราะห์การถดถอย. กรุงเทพฯ:วิฑูรย์การปก

นาฎกา ฅ.บางช้าง.(2537).การศึกษาวิเคราะห์ข้าราชการสายงานพยาบาล สำนักรออนามัย. กรุงเทพฯ:
กองพยาบาลสาธารณสุข สำนักรออนามัย.

—————. (2541). มาตรฐานการพยาบาลสาธารณสุข สำนักรออนามัย กรุงเทพมหานคร.

ในเอกสารการประชุมวิชาการ เรื่อง มาตรฐานการปฏิบัติการพยาบาลสาธารณสุข
วันที่ 17 พฤศจิกายน 2541, กรุงเทพฯ:สมาคมพยาบาลสาธารณสุขไทยและภาควิชา
การพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล.

เปลื้อง ฅ. นคร. (2525). พจนะ-สารานุกรม ฉบับทันสมัย เล่มที่ 1. (พิมพ์ครั้งที่5). กรุงเทพฯ:ไทย
วัฒนาพานิช.

เพ็ญศรี วายวานนท์. (2530). การจัดการทรัพยากรคน. กรุงเทพฯ:สถาบันพัฒนาบริหารศาสตร์

พยอม วงศ์สารศรี.(2534).องค์กรและการจัดการ. กรุงเทพฯ:โรงพิมพ์คุรุสภา.

ไพศาล หวังพานิช.(2521).การวัดผลการศึกษา. กรุงเทพฯ:ไทยวัฒนาพานิช

วรรณวิไล จันทราภาและคนอื่นๆ. (2523). การศึกษาองค์ประกอบต่างๆที่มีอิทธิพลต่อการปฏิบัติ
งานของพยาบาลในประเทศไทยในประเทศไทย. สมาคมพยาบาลแห่งประเทศไทย. จัด
สำเนา

สมพงษ์ เกษมสิน. (2517). การบริหารงานบุคคล. กรุงเทพฯ:ไทยวัฒนาพานิช.

เสริมศักดิ์ วิศาลาภรณ์. (2522). พฤติกรรมผู้นำทางการศึกษา. กรุงเทพมหานคร:ไทยวัฒนาพานิช.



APPENDIX A

The List Panel of Experts

1. **Assoc. Prof. Phasuwan Sanitwong Na Ayudthaya.**
Department of public health nursing.
Faculty of public health.
Mahidol University.
2. **Assoc. Prof. Jaraungporn Suparb**
Department of Family health
Faculty of public health.
Mahidol University.
3. **Dr.Premwadee Karuhadej.**
Department of Obstretic nursing.
Kuakaroon College of nursing.
4. **Dr.Chuenjit Potisupsuk.**
Department of community health nursing.
Kuakaroon College of nursing
5. **Dr.Aurapun Meksupa, MD.**
Medicine doctor level 9 specialists in public health.
Department of health BMA.

APPENDIX B

The Research Instrument

Subject ID () () ()

The Questionnaire of

Relationship Between Selected Factors and Nursing Performance in Health Promotion and Prevention for Menopausal Women of Public Health Nurses in BMA.

Directions : Please read these statements and indicate your understanding.

This questionnaire is prepared in connection with this study. Researcher will keep your response as secret. The report will be presented in general. The responses from the study will be useful for nursing performance in health promotion and prevention for menopausal women in BMA.

The questionnaire consists of 5 section as follows.

- Part 1 Personal characteristics 11 items;**
- Part 2 Knowledge about menopausal women 20 items;**
- Part 3 Job satisfaction in nursing performance in health promotion and prevention for menopausal women:14 items;**
- Part 4 Organizational support: 21 items;**
- Part 5 Nursing performance in health promotion and prevention for menopausal women :38 Items.**

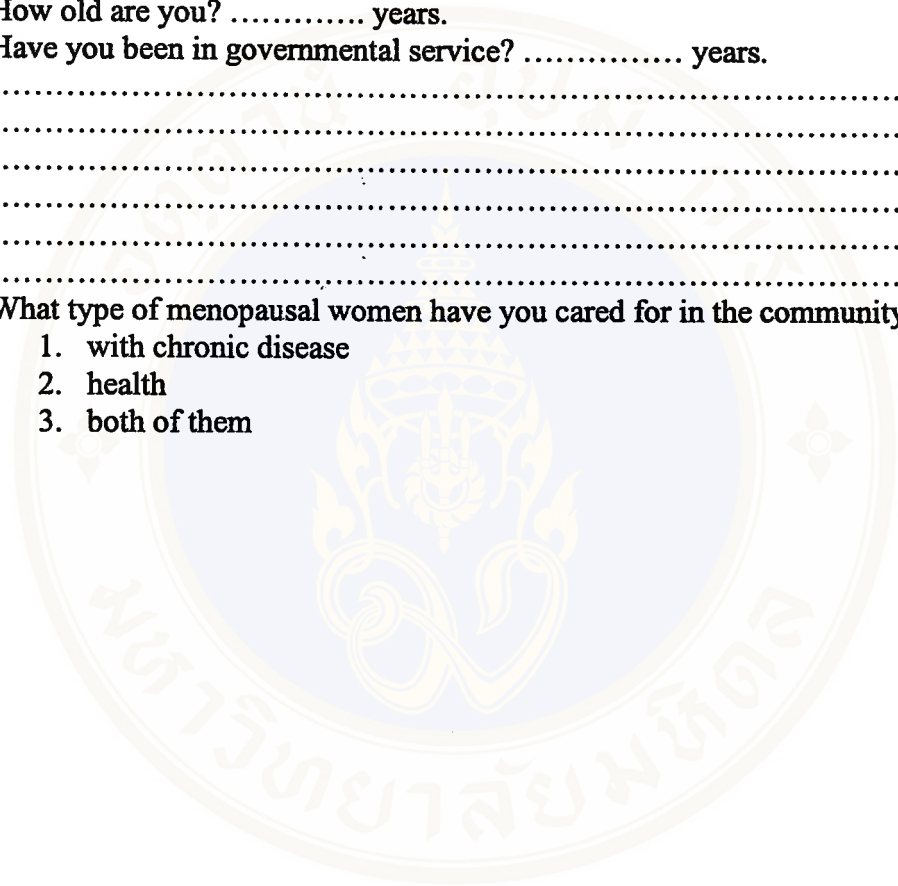
Thank you very much for your responses.

**Sunipa Prachayangprecha
Master Degree student
Department of Public Health Nursing
Faculty of Public Health.
Mahidol University**

Part 1 Personal Characteristic of Respondents.

Direction : Please mark ✓ in the best answer or fill in the blank which describes your Characteristics.

1. Where do you work ? At Health center no.....
2. How old are you? years.
3. Have you been in governmental service? years.
4.
.....
.....
.....
.....
11. What type of menopausal women have you cared for in the community?
 1. with chronic disease
 2. health
 3. both of them



Part 2 Knowledge About Menopausal Women.

Direction : These statement indicate knowledge about menopausal women. For each item, please mark ✓ in the answer which is correct.

No.	Item	correct	Not correct
1.	Menopausal age means the age that a women stop having period which is usually when they are 45 – 53 years old.		
2.	All symptoms in menopausal women are caused by level of estrogen hormone.		
3.	Hot flashes around the neck and face ; and heavy sweating are common symptoms that are found in women entering menopausal age.		
...		
20.	Menopausal women should be checked for abnormality in the blood and urine every month.		

Part 3 Job satisfaction in nursing performance in health promotion and prevention.

Direction : These statement indicate job satisfaction. For each item, please sign the answer which describes your job satisfaction.

o.	Item	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
1.	Lack of cooperation from target group					
2.	Currently, it is not necessary for public health					
3.	Challenging your ability					
...					
.....					
.....					
.....					
.....					
.....					
.....					
7.	It is the practice which can be independently performed.					

Part 4 Organizational Support

Direction : Please read these statement and mark ✓ in the blank which your receive of organizational support. The criteria follow as :-

No.	Item	Very high	High	Medium	low	Very low
1.	Policy Health centers have obvious policy for practice nursing in health promotion and prevention for menopausal women					
2.	Health centers have to be practice for menopausal women.					
3.	Health center structure was obvious and easy to work coordination.					
...					
21.	Head nurses support for our additional training about menopausal women					

BIOGRAPHY

NAME Mrs. Sunipa Prachyangpreecha

DATE OF BIRTH 17 October 1957

PLACE OF BIRTH Bangkok

INSTITUTION ATTENDED

- Diploma of Nurse, Health and Midwife
Kuakaroon Colledge of Nursing,
1974-1978
- Kuakaroon College of Nursing
Diploma in Nursing Science
Equivalent to Bachelor of Science of
nursing, 1987,1987
- Mahidol University, 1998-2000
Master of Science (Public Health)
Major in public health nursing

POSITION & OFFICE

- 1978 - Present Health center 40
Department of Health
Bangkok Metropolitan Administration
Position Professional nurse level 7

