SELF-ESTEEM AND SELF-CARE BEHAVIORS IN PREGNANT WOMEN WITH PREGNANCY-INDUCED HYPERTENSION

ATCHRAPORN KITJAIDURE

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF NURSING SCIENCE
(MATERNAL AND CHILD NURSING)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2000

ISBN 974–665–026-2

Thesis
entitled

SELF-ESTEEM AND SELF-CARE BEHAVIORS IN PREGNANT WOMEN WITH PREGNANCY-INDUCED HYPERTENSION

Atchraporn Kitjaidure
.....
Miss Atchraporn Kitjaidure
Candidate

Nittaya Sinsuksai
.....
Asst. Prof. Nittaya Sinsuksai, Ph.D.
Major- advisor

Supranee Athaseri
.....
Assoc. Prof. Supranee Athaseri, M.Ed.
Co-advisor

Yupin Chandaragga
.....
Asst. Prof. Yupin Chandaragga, M.Ed.
Co-advisor

Prakairat Sukumalchart
.....
Asst.Prof. Prakairat Sukumalchart, M.S.
Acting Dean
Faculty of Graduate Studies

Kobkul Phancharoenworakul
.....
Assoc. Prof. Kobkul Phancharoenworakul, Ph.D.
Chairman
Master of Nursing Science
Faculty of Nursing

Thesis
entitled

SELF-ESTEEM AND SELF-CARE BEHAVIORS IN PREGNANT WOMEN WITH PREGNANCY-INDUCED HYPERTENSION

was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Nursing Science (Maternal and Child Nursing)
On
October 26, 2000

Atchraporn Kitjaidure
Miss Atchraporn Kitjaidure
Candidate

Nittaya Sinsuksai
Asst. Prof. Nittaya Sinsuksai, Ph.D.
Chairman

D. Boriboonhirunsarn
Asst. Prof. Dittakarn Boriboonhirunsarn, M.P.H.
Member

Supranee Athaseri
Assoc. Prof. Supranee Athaseri, M.Ed.
Member

F. Tilokskulchai
Assoc. Prof. Fongcum Tilokskulchai, Ph.D.
Member

Yupin Chandaragga
Asst. Prof. Yupin Chandaragga, M.Ed.
Member

Prakairat Sukumalchart
Asst.Prof. Prakairat Sukumalchart, M.S.
Acting Dean
Faculty of Graduate Studies
Mahidol University

Kobkul Phancharoenworakul
Assoc. Prof. Kobkul Phancharoenworakul, Ph.D.
Dean
Faculty of Nursing
Mahidol University

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to a number of persons who helped me with this thesis. First of all, my gratitude is expressed to Assistant Professor Doctor Nittaya Sinsuksai, major-advisor, for her guidance, valuable advice, kindly support and polished my English writing. The success of this thesis has been attributed to extensive support and assistance from Associate Professor Supranee Athaseri, Assistant Professor Yupin Chandaragga, co-advisor, who have kindly given her time and invaluable suggestion in developing this thesis as well as encourage and hearten the researcher from the start to finish. I also express my most appreciation to Associate Professor Doctor Fongcum Tilokskulchai and Assistant Professor Dittakarn Boriboonhirunsarn, the thesis committee, for their constructive comments and valuable recommendations for this study.

I would like to thank for the experts who gave helpful suggestions as to the validation of instruments. Special thanks to Siriraj Hospital, Rajavithi Hospital, Pramongkutkloa Hospital and Chulalongkorn Hospital for their excellent cooperation and assistant in the data collection for this study. I am deeply indepted to the pregnant women with pregnancy-induced hypertension who willingly participated in my study.

I am very grateful to Rajavithi Hospital for allowing me time to study. I am particularly appreciative of my father, my mother, my brother, and my sister for encouragement and all support to this study.

Finally, special thanks are to my friends for their support throughout this study.

Atchraporn Kitjaidure

4137050 NSMC/M: MAJOR: MATERNAL AND CHILD NURSING; M.N.S.
(MATERNAL AND CHILD NURSING)
KEY WORDS : SELF-ESTEEM / SELF-CARE BEHAVIORS / PREGNANT WOMEN WITH PREGNANCY-INDUCED HYPERTENSION

ATCHRAPORN KITJAIDURE: SELF-ESTEEM AND SELF-CARE BEHAVIORS IN PREGNANT WOMEN WITH PREGNANCY-INDUCED HYPERTENSION. THESIS ADVISORS: NITTAYA SINSUKSAI, Ph.D., SUPRANEE ATHASERI, M.Ed., YUPIN CHANDARAGGA, M.Ed., 80P. ISBN974-665-026-2

Appropriate self-care behaviors in pregnant women with pregnancy-induced hypertension can promote the health of mothers and their fetuses. This study was a descriptive research aimed to explore the self-esteem and the self-care behaviors of pregnant women with pregnancy-induced hypertension, and to predict self-care behaviors by age, education, family income, parity, duration of being diagnosed and self-esteem. The subjects were 180 pregnant women with pregnancy-induced hypertension who attended the high risk clinic or were admitted at Siriraj Hospital, Rajavithi Hospital, Pramongkutkloa Hospital, and Chulalongkorn Hospital. Purposive sampling of the subjects was used in this study. Data were collected using three self-administered questionnaires: demographic data, self-esteem and self-care behaviors. Data were analyzed by using Pearson's product moment correlation and multiple regression.

The results of the study showed that pregnant women with pregnancy-induced hypertension were at a rather good level of self-care behaviors and at a rather high level of self-esteem. Self-esteem, parity, and duration of being diagnosed explained 18.8 % of variance of self-care behaviors.

The results suggested that nurses should screen pregnant women with pregnancy-induced hypertension by three significant factors: self-esteem, parity, and duration of being diagnosed. Then, nurses should give special attention to this group of women, particularly the women who have low self-esteem, high parity, and short duration of being diagnosed in order to increase their self-esteem. It should also be emphasize that they have the capacity to take care of themselves.

4137050 NSMC / M: สาขาวิชา: การพยาบาลแม่และเด็ก; พย.ม. (การพยาบาลแม่และเด็ก)

อัจฉราพร คิดใจเดียว: ความรู้สึกมีคุณค่าในตนเองและพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ (SELF-ESTEEM AND SELF-CARE BEHAVIORS IN PREGNANT WOMEN WITH PREGNANCY-INDUCED HYPERTENSION) คณะกรรมการควบคุมวิทยานิพนธ์: นิตยา สินสุกใส, Ph.D., สุปราณี อัทธเสรี, ค.ม., ยุพิน จันทรัคคะ, ค.ม., 80 หน้า. ISBN974-665-026-2

การมีพฤติกรรมการดูแลตนเองที่ถูกต้องเหมาะสม จะช่วยให้หญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์และทารกในครรภ์มีสุขภาพแข็งแรงสมบูรณ์ และความรู้สึกมีคุณค่าในตนเองเป็นปัจจัยหนึ่งที่มีความสำคัญต่อพฤติกรรมการดูแลตนเอง การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาความรู้สึกมีคุณค่าในตนเอง และพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ และศึกษาอำนาจการทำนายพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ โดยมีความรู้สึกมีคุณค่าในตนเอง อายุ ระดับการศึกษา รายได้ของครอบครัว จำนวนครั้งของการคลอด และระยะเวลาที่ได้รับการวินิจฉัยเป็นตัวทำนาย เลือกกลุ่มตัวอย่างแบบเจาะจงจากหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ ที่มารับบริการที่คลินิคหญิงตั้งครรภ์ที่มีภาวะเสี่ยง ตึกผู้ป่วยนอก หรือมารับการรักษาที่ตึกสูติกรรม แผนกผู้ป่วยใน โรงพยาบาลศิริราช โรงพยาบาลราชวิถี โรงพยาบาลพระมงกุฎเกล้า และโรงพยาบาลจุฬาลงกรณ์ จำนวน 180 ราย โดยใช้แบบสอบถามข้อมูลส่วนบุคคล แบบสอบถามความรู้สึกมีคุณค่าในตนเอง และแบบสอบถามพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ วิเคราะห์ข้อมูลโดยการคำนวณค่าร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ค่าสัมประสิทธิ์สหสัมพันธ์พหุและวิเคราะห์การถดถอยพหุแบบขั้นตอน

ผลการวิจัยพบว่า หญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์มีพฤติกรรมการดูแลตนเองอยู่ในระดับค่อนข้างดี และมีความรู้สึกมีคุณค่าในตนเองอยู่ในระดับค่อนข้างสูง และพบว่าความรู้สึกมีคุณค่าในตนเอง จำนวนครั้งของการคลอด และระยะเวลาที่ได้รับการวินิจฉัย สามารถร่วมทำนายพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ได้ร้อยละ 18.8

จากผลการวิจัยครั้งนี้ผู้วิจัยมีข้อเสนอแนะว่าพยาบาลควรประเมินความรู้สึกมีคุณค่าในตนเอง ของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ โดยเฉพาะในหญิงตั้งครรภ์ที่มีจำนวนครั้งของการคลอดมาก และระยะเวลาที่ได้รับการวินิจฉัยสั้นหรือเพิ่งรู้ว่าเป็นโรค เพื่อส่งเสริมให้หญิงตั้งครรภ์รู้สึกว่าตนเองมีคุณค่าและมีความสามารถที่จะดูแลตนเองได้

CONTENTS

CONTENTS (Continue)

LIST OF TABLES

LIST OF FIGURE

CHAPTER I

INTRODUCTION

Background and Significance of the Study

Pregnancy-induced hypertension (PIH) is a significant obstetrical problem in many parts of the world. It occurs in 5% to 10% of all pregnancies (Burke & Poole, 1996:110; Cashion, 1999: 644; O'Brien, 1998: 351). Hypertensive complications are the third leading cause of maternal death, along with hemorrhage and infection in the United States, England and Wales, and in many parts of the world (Cunningham, et al., 1997: 693; Leicht & Harvey, 1999:159; O'Brien, 1998:351; Roberts, 1994:70-71), including Thailand (The Department of Public Health Statistics, 1996). Pregnancy-induced hypertension accounts for 15% of all maternal deaths (ACOG, 1996 cited by Cashion, 1999: 644; Burke & Poole, 1996: 111). Pregnant women die from abruption of the placenta, disseminated intravascular coagulation, cerebral hemorrhage, and acute renal or heart failure (Roberts, 1994: 71). The fetus in a hypertensive pregnancy is at risk for growth retardation, preterm birth, and perinatal mortality (Roberts, 1994: 71). The main causes of neonatal death are placental insufficiency and abruption placenta (Burke & Poole, 1996: 111; Cashion, 1999: 644). The incidence of pregnancy-induced hypertension in Thailand accounts for 4.21% of the deliveries at Ramathibody Hospital, 3.3% at Siriraj Hospital, and 3.02% at Maharaj Nakorn Chaing Mai Hospital (Supattra Sirishotiyakul & Teera Tongsong, 1998: 266).

To date, the actual cause of pregnancy-induced hypertension remains unknown and proven methods to prevent the illness are nonexistent. However, the seriousness of the disease can be prevented by early detection and early prenatal care (Cashion, 1999: 649; Sherwen, et al., 1995: 920). Self-care behaviors of pregnant women include their conduct complying accurately and appropriately with a therapeutic regime such as having enough rest, eating nutritious food, having fresh clean air, observing for unusual symptoms and having regular antenatal care (Kanogwan Tangvutikorn, 1986: A). If pregnant women have good self-care, this will bring good health which can control the seriousness of the disease. Without such good self-care, it will worsen the disease and can swiftly become a critical condition, in which the women may have seizures, cerebral hemorrhage or eventually die.

Self-care is the practice of activities that individuals initiate and perform on their own behalf to maintain their quality of life, health, and well being. If self-care is effectively performed, it can helps to maintain structural integrity, human functioning, and human development (Orem, 1995: 103-104). The purpose of self-care is to meet self-care requisites. There are three types of self-care requisites: universal, developmental, and health deviation.

Pregnant women with pregnancy-induced hypertension have to perform all three types of self-care requisites. First, universal self-care requisites include maintenance of sufficient intake of air, water, and food, provision of care associated with eliminative process and excrements, maintenance of a balance between activity and rest, maintenance of a balance between solitude and social interaction, prevention of hazards from accidents, chemicals, and transportation. Second, developmental self-care requisites are composed of pregnancy validation, fetal embodiment, fetal distinction, role transition, and

stress management. Third, health deviation self-care requisites comprise of seeking knowledge about pregnancy-induced hypertension, effectively carrying out medical prescription, preventing specific types of pathology, and learning how to live with pregnancy-induced hypertension.

It has been said that the occurrence of eclampsia is due to pregnant women's own neglect (Porapakkham, 1979: 29). A study of Piengpen Chanchana (1989) found that if the pregnant women with pregnancy-induced hypertension in a non-severe group had good self-care they would have good health during pregnancy. Therefore, self-care behavior can help to reduce severe hypertension in pregnant women. Consequently, it will bring good health to both the mothers and the babies throughout their pregnancy course.

Self-care are actions of mature people who have developed the capabilities to take care of themselves in their environmental situation (Orem, 1995: 103). Orem (1995: 215) stated that self-care agency, a complex, acquired human characteristics, is the power of an individual to engage in the operations essential for self-care. The three structures of self-care agency are composed of foundational capabilities and dispositions, power components enabling for self-care operations, and capabilities for self-care operations.

Human foundational capabilities and dispositions for self-care agency are composed of knowing and doing capabilities, sensation, perception, and self-esteem. Rosenberg (1965) defines self-esteem as having self-respect and self-worth. Pregnant women with pregnancy-induced hypertension with high self-esteem are more confident, more independent, and more engaging in healthy behaviors. On the

contrary, pregnant women with pregnancy-induced hypertension with low self-esteem are likely to feel powerless and more depend on others' decisions.

Pregnant women with pregnancy-induced hypertension have physio-psycho-social changes from their pregnancy and hypertension. It causes pregnant women to feel that they are weak and discomfort, especially when they concerned with their babies' health. They may feel guilty and blame themselves that they are unable to have a normal pregnancy as others. Glanqeaud (1994: 289-293) said that complications during pregnancy may influence pregnant women to have low self-esteem. Norris and Kunes-Counell (1985: 747) found that people who had health problems would have lower self-esteem than healthy people at a statistically significant level. Yaowalak Mahasittiwat (1986: 103) reported that physio-phycho-social changes negatively correlated to self-esteem, and self-esteem was positively correlated to self-care behaviors at a significant level. Muhlenkamp and Sayles (1986), Wanrawee Aukanit (1991), Saowapa Vichitvatee (1991), Sopit Suwanvela (1994) and Kamonpun Homnan (1996) found that self-esteem was positively correlated to self-care behaviors at a significant level. Self-esteem in pregnant women with pregnancy-induced hypertension is important to the good self-care behaviors in order to decrease the seriousness of the disease and to prevent complications that affects the health status of the mothers and their fetuses.

However, self-care behaviors are associated with other factors such as the basic conditioning factors. These basic conditioning factors are composed of various components, for example, age, gender, developmental state, health state, sociocultural orientation and pattern of living (Orem, 1995). For this study, the researcher was interested in examining selected factors that may influence self-care behaviors of

pregnant women with pregnancy-induced hypertension such as age, education, family income, parity, duration of being diagnosed, and self-esteem.

Age Age is an index of personal maturation, psychic and intellectual functioning, and effects of the self-care agency. Self-care tends to be low in childhood, reaches it maximum in adulthood, and declines with advancing age (Orem, 1995: 104). Aungkana Nualyong (1992) reported that there was a significant and positive correlation between age and self-care behaviors in pregnant women with pregnancy-induced hypertension.

Education Education is very important for the development of knowledge and attitude toward self-care. Education can facilitate the individual's ability to understand and learn about the disease and its treatment and to choose the self-care activities (Orem, 1995). Pender (1996) said that people with a high educational level were able to understand more about their health state and treatment. They were more able to use available resources to support their needs, in contrast, people with a low educational level was unlikely to do that. That is congruent with Jutatip's study (Jutatip Suesat, 1994) which found that there was a significant and positive correlation between educational level and therapeutic compliance behaviors in pregnant women with pregnancy-induced hypertension.

Family income Income is a very important factor for the individual potential in self-care. People with a higher income have a better chance to seek better care, facilities, and health services more than the lower income people (Pender, 1982: 161-162). Aungkana Nualyong (1992) found that there was a significant and positive correlation between family income and self-care behaviors in pregnant women with pregnancy-induced hypertension.

Parity A women who has experience of being pregnant will have better control over her temper and other situations than those who have never been pregnant. Especially, if the first pregnancy had any unusual conditions the women will take extra care of her health. Fearing of reoccurrence, they may modify their behaviors. The study of Unjit Boonsom (1997) showed that experienced women have better self-care behaviors than those who are pregnant for the first time. However, the study of Orathai Tumgunma (1997) showed the contrast. She found that there was no difference in health promoting behaviors of high-risk pregnant women in different levels of parity.

Duration of being diagnosed A long period of being diagnosed is a factor that can influence the women to experience and learn about self-care(Orem, 1995). Therefore, the pregnant women who have longer period of pregnancy-induced hypertension should self-care themselves better than those with shorter period of illness. However, the duration of illness can have a positive or negative effects on diabetes mellitus patients (Glasgow, et al., 1987).

In summary, pregnant women with pregnancy-induced hypertension have changes in maternal-fetal conditions and that affects the health status of the mothers and the babies. Appropriate self-care behaviors could alleviate the severity of complications, prevent the consequences of the complications, and enhance the health of both the mothers and their babies. Thus, the researcher was interested in studying factors that may affect the self-care behaviors in pregnant women with pregnancy-induced hypertension, such as self-esteem, age, education, family income, parity, and duration of being diagnosed. This study can be a guideline for nurses to provide knowledge and information, as well as counseling pregnant women with pregnancy-induced hypertension in order to improve their self-

esteem and self-care behaviors by considering their age, education, family income, parity, and duration of being diagnosed.

Research questions

1. What are levels of self-care behaviors and self-esteem in the pregnant women with pregnancy-induced hypertension?

2. How can selected factors including self-esteem, age, education, family income, parity, and duration of being diagnosed explain the variability of self-care behaviors in pregnant women with pregnancy-induced hypertension?

Purposes of the Study

1. To examine self-esteem and self-care behaviors of pregnant women with pregnancy-induced hypertension.

2. To predict self-care behaviors in the pregnant women with pregnancy-induced hypertension by: self-esteem, age, education, family income, parity, and duration of being diagnosed

Conceptual Framework

Pregnancy-induced hypertension is one of the important complications of pregnancy that affects the health status of mothers and babies. Appropriate self-care behaviors of mothers could reduce the severity of the condition. Orem's self-care theory (Orem, 1995) was used as a conceptual framework in this study. The purpose of self-care is to meet self-care requisites. This includes 3 subscales: 1) Universal self-care requisites are common to all human beings during all stages of life cycle.

Universal self-care requisites for pregnant women include drinking sufficient water, staying in the place with clean air, eating nutritious food, having normal elimination and excrement, taking care of personal hygiene, balancing between activity and rest, and balancing between solitude and social interaction. 2) Developmental self-care requisites are associated with human developmental processes, conditions and events occurring during various stages of life and events that can adversely affect development. Developmental self-care requisites for pregnant women comprise of acceptance of the pregnancy, incorporating the fetus into the body, viewing the fetus as an individual with a personality, introducing the husband to participate in the events related to the fetus, preparing for maternal role transition, and knowing how to manage their stress. 3) Health-deviation self-care requisites are associated with genetic and constitutional defects, human structural and functional deviations, with their effects, and with medical diagnostics and treatment measures. For pregnant women with pregnancy-induced hypertension, health-deviation self-care include searching for health services, asking a doctor about appropriate self-care practices and following plan of treatment, observing unusual signs and symptoms, preventing more complication, and adjusting self-care practices to be suitable for their health condition.

There are many factors influencing self-care behaviors in pregnant women with pregnancy-induced hypertension, such as foundational capabilities and dispositions, power components enabling for self-care operations, and capabilities for self-care operations. Orem (1995: 219-220) said that self-esteem is one of the foundational capabilities and dispositions. It will affect peoples' willingness to look at themselves. Rosenberg (1965) defined self-esteem as a positive or negative attitude towards oneself based on evaluation of self-characteristics, including feelings of self-

satisfaction and self-acceptance. Branden (1983) stated that people with high self-esteem are basically satisfied with themselves, recognizes their problems, and take care of themselves well that leads to appropriated self-care behaviors. Conversely, low self-esteem causes people to be more dependent on other's decisions which leads to inappropriate self-care behaviors, and results in health problems (Cope, 1992). Therefore, pregnant women with pregnancy-induced hypertension with a high level of self-esteem is likely to feel in control and engage in appropriate self-care behaviors.

In addition, other basic conditioning factors such as age, education, family income, parity and duration of being diagnosed appear to be important factors that have an impact on self-care behaviors.

The conceptual framework is shown in the form of the relationship among variables in Figure 1:

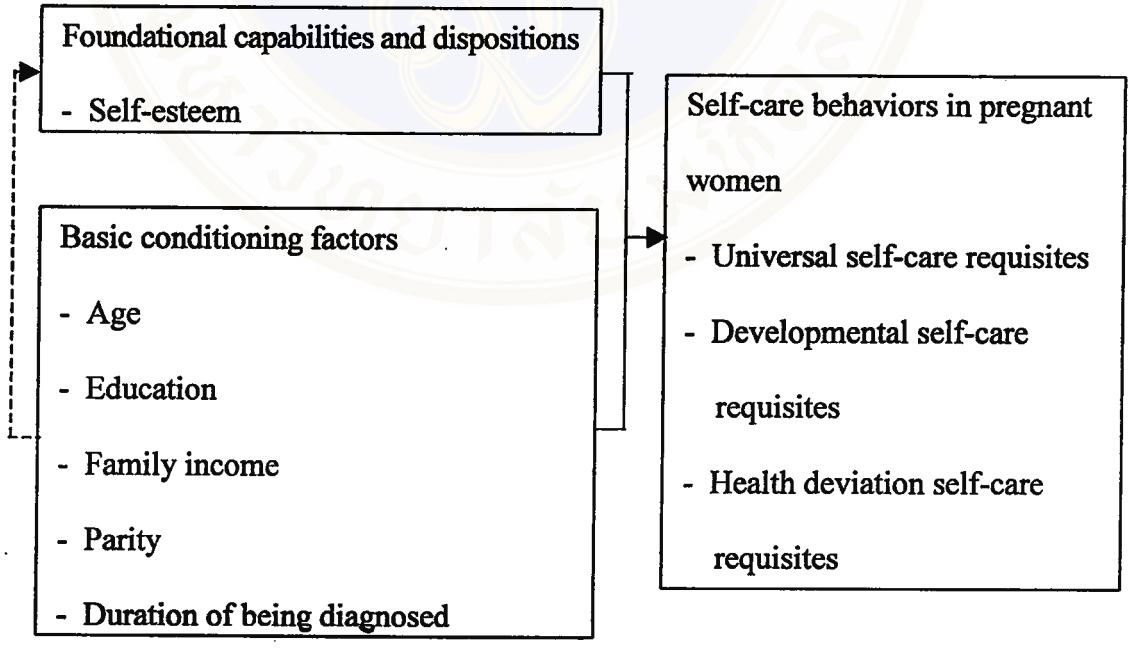

Figure 1. Conceptual Framework: derived from Orem's (1995) self-care theory

Hypotheses

Self-esteem, and the basic conditioning factors such as age, education, family income, parity, and duration of being diagnosed can predict self-care behaviors in pregnant women with pregnancy-induced hypertension.

Scope of the Study

This research studied self-esteem and self-care behaviors of pregnant women with pregnancy-induced hypertension who were attended the high risk clinic of antenatal care unit or were admitted at Siriraj Hospital, Rajavithi Hospital, Pramongkutkloa Hospital, and Chulalongkorn Hospital.

Definition of Terms

1. Self-care behavior means the deliberate action with a purpose that pregnant women with pregnancy-induced hypertension perform in their daily living to maintain good health. These actions are directed toward meeting three types of self-care requisites: universal self-care requisites, developmental self-care requisites, and health deviation self-care requisites. Self-care behaviors can reduce the severity of the condition, prevent specific types of complications, and in turn, result in good health. The assessment is made by using the self-care behavior inventory for pregnant women with pregnancy-induced hypertension, which was developed from Pawinee Pokasinjumroon (1995) by permission in accordance with Orem's self-care theory (Orem, 1995). The inventory comprise of three subscales as follows:

1.1 Universal self-care requisites means the behaviors or the performances of the pregnant women including drinking sufficient water, staying in the place with

clean air, eating nutritious food, having normal elimination and excrement, taking care of personal hygiene, balancing between activity and rest, and balancing between solitude and social interaction.

1.2 Developmental self-care requisites means the behaviors or the performances of the pregnant women in accordance with the changes during pregnancy period. These behaviors include acceptance of the pregnancy, incorporating the fetus into the body, viewing the fetus as an individual with a personality, introducing the husband to participate in the events related to the fetus such as feeling or observing fetal movements, preparing for maternal role transition, and knowing how to manage their stress.

1.3 Health-deviation self-care requisites means the behaviors or the performances of the pregnant women in accordance with their health status. These behaviors include searching for health services, asking a doctor about appropriate self-care practices and following plan of treatment, observing unusual signs and symptoms, preventing more complication, and adjusting self-care practices to be suitable for their health condition.

2. Self-esteem means the positive or negative attitudes towards self, based on evaluation of self-characteristics, including feelings of self-satisfaction, self-acceptance, and believing in one's capability, significance, and worth. In this study self- esteem was measured by the Rosenberg Self-Esteem Scale (1989).

3. Pregnancy-induced hypertension means the hypertensive disorder of pregnancy including

3.1 Gestational hypertension: hypertension without proteinuria or pathological edema.

3.2 Preeclampia: hypertension with proteinuria and/or pathological edema that is divided into two types.

a. Mild preeclampia: diastolic blood pressure < 100 mmHg (Cunningham, et. al., 1997: 695), or systolic blood pressure ≥ 140 mmHg or a rising of systolic blood pressure ≥ 30 mmHg, or diastolic blood pressure ≥ 90 or a rising of diastolic blood pressure ≥ 15 mmHg (Sherwen, et al., 1995: 919).

b. Severe preeclampia: diastolic blood pressure 110 mmHg or higher (Cunningham, et. al., 1997: 695), or blood pressure rises to ≥ 160/110(Sherwen, et al., 1995: 919). Other signs such as headache, visual disturbances, epigastric pain, hyperreflexia, pulmonary edema or cyanosis may be present.

4. Age, means a full year of pregnant women with pregnancy-induced hypertension that was counted since the birth date to the date of study.

5. Education, means the highest education attained by pregnant women according to the rules of the Ministry of Education and The Bureau of University affair. Education were determined by the number of years that the subjects were in school.

6. Family income, means an average collective income in baht per month of the pregnant women and her spouse or only one person if another had no job.

7. Parity, means the number of the delivery that the women did after 28 weeks gestational age in the previous pregnancy.

8. Duration of being diagnosed, means the length of time in weeks since the pregnant women had known the diagnosis of pregnancy-induced hypertension to the day of data collection.

Expected Outcomes and Benefits

1. This study can be a guideline for nurses to assess and give knowledge and information to pregnant women with pregnancy-induced hypertension in order to improve their self-esteem and self-care behaviors.

2. This study can be a guideline for research concerning self-care behaviors in pregnant women with pregnancy-induced hypertension on other issues.

CHAPTER II

LITERATURE REVIEW

This study aims to study self-esteem and self-care behaviors in pregnant women with pregnancy-induced hypertension. The researcher has used an outline to review the related literatures as follows:

- Self-care behaviors in pregnant women with pregnancy-induced hypertension.
- Influencing factors on self-care behaviors in pregnant women with pregnancy-induced hypertension.

Self-care behaviors in pregnant women with pregnancy-induced hypertension

Pregnancy-induced hypertension

Pregnancy-induced hypertension (PIH) is a significant cause of maternal and fetal/neonatal morbidity and mortality. It accounts for 15% of all maternal death. Pregnant women die from abruption of the placenta, disseminated intravascular coagulation, cerebral hemorrhage, and acute renal or heart failure (Roberts, 1994: 71). The fetus in a hypertensive pregnancy is at risk for growth retardation, preterm birth, and perinatal mortality (Roberts, 1994: 71).

Pregnancy-induced hypertension is characterized by hypertension, generalized edema, and proteinuria occurring after the 20th week of pregnancy (usually in the last trimester or early puerperium). Any two of the three signs are diagnostic (Benson & Pernall, 1994: 356). The working group of the National High Blood Pressure

Education Program classified pregnancy-induced hypertension into 3 categories: (Cunningham, et. al., 1997: 694)

1. Gestational hypertension means hypertension without proteinuria or pathological edema. The development of hypertension occurrs during pregnancy or within the first 24 hours postpartum, in previously normotensive women. The blood pressure returns to normotensive levels within 10 days following parturition (Knuppel & Drukker, 1993: 469).

2. Preeclampsia means hypertension with pathologic edema, and/or proteinuria. Preeclampsia is usually categorized as mild or severe in terms of management (Sherwen, et. al., 1995: 919).

2.1 Mild preeclampsia means the systolic blood pressure ≥ 140 mmHg or 30 mmHg increase after 20 weeks, or diastolic blood pressure ≥ 90 mmHg or 15 mmHg increase after 20 weeks. Mild preeclampsia usually has a sign of edema in lower extremities, amount of proteinuria is trace or 1-2 plus examined by uristix or 0.3 gram in urine collected for 24 hours or has no proteinuria. Sometimes headache or visual disturbances has shown.

2.2 Severe preeclampsia means the systolic blood pressure ≥ 160 mmHg, diastolic blood pressure ≥ 110 mmHg after 20 weeks. Edema usually show in the hands, face, and lower extremities. Proteinuria is medium or high or 3-4 plus or ≥ 5 grams in urine collected for 24 hours. Other signs such as oliguria (urine ≤ 400 ml / 24 hours), headache, visual disturbances, epigastric pain, hyperreflexia, pulmonary edema or cyanosis may be present.

3. Eclampsia means the occurrence of one or more convulsions that it is not attributable to other cerebral conditions such as epilepsy or cerebral hemorrhage, in a

patient with preeclampsia. Eclampsia may occur during the antepartum, intrapartum, or early postpartum period (first 48 hours).

The cause of pregnancy-induced hypertension remains unknown. Several major concepts that contributes to the current theories regarding the etiology of pregnancy-induced hypertension are increased vasoconstrictor tone, abnormal prostaglandin action, and endothelial cell activation (Cashion, 1999: 646). Cunningham, et. al. (1997) stated that pregnancy-induced hypertension is more likely to develop in women who 1) are exposed to chorionic villi for the first time; 2) are exposed to a superabundance of chorionic villi, as with twins or hydatidiform mole; 3) has preexisting vascular disease; or 4) are genetically predisposed to hypertension developing during pregnancy.

Although pregnancy-induced hypertension is one of the important causes of perinatal mortality and severe morbidity, the progression to the severe form should be preventable. (Knuppel & Drukker, 1993: 478). Good prenatal supervision followed by appropriate treatment and appropriate self-care behaviors will ameliorate the severity of this disorder. Many pregnant women are satisfy with the outcomes.

Self-care are the actions of mature and maturing people who have developed the capabilities to take care of themselves in their environmental situation. (Orem, 1995: 103). According to Pender (1996: 97), self-care is a universal requirement for sustaining and enchancing life and health, an ongoing activity for individuals and groups, and an area of competence to be developed. Steiger and Lipson (1985: 12) defined self-care as "activities initiated or performed by an individual, family or community to achieve, maintain or promote maximum health. Orem (1995) stated that self-care's purpose is "the action that has pattern and sequence and, when

performed effectively, contributes in specific ways to human structural integrity, human functioning, and human development."

Pregnant women with pregnancy-induced hypertension have physio-psycho-social changes from their pregnancy and the complication of hypertension. Thus, they should perform self-care behaviors in an appropriate way, both physically and mentally to prevent any unusual conditions that might occur.

Self-care behaviors in pregnant women with pregnancy-induced hypertension: Orem's self-care model

Orem (1995: 104) defined self-care as "the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health and well-being. The purpose of self-care is to meet self-care requisites. Orem (1995: 108) has divided the self-care requisites into 3 categories: universal self-care requisites, developmental self-care requisites and health deviation self-care requisites. Thus, pregnant women with pregnancy-induced hypertension should concern self-care behaviors in their pregnancy as follows:

1. **Universal self-care requisites** are common to all human beings during all stages of the life cycle. They are adjusted to age, developmental stage, environment, and other factors. They are needed for life processes, maintenance of the integrity of human structure and functioning, and general well-being in pregnant women with pregnancy-induced hypertension as well as for all people. They comprise of:

1.1 **The maintenance of a sufficient intake of air, water, and food.**

1.1.1 Pregnant women with pregnancy-induced hypertension should stay in the place with clean air, avoid crowded, polluted and poor ventilated areas.

1.1.2 Pregnant women with pregnancy-induced hypertension may have less plasma volume than do the normal pregnant women that leads to hemoconcentration. Adequate fluid intake can helps to maintain optimum fluid volume and aids in renal perfusion and filtration (Cashion, 1999: 653).

1.1.3 All pregnant women should have nutritional counseling, particularly those at risk for preeclampsia. They should be emphasized on the importance of obtaining an adequate intake of calories (2,500 kcal./day), protein (60 g./day), calcium (1,200 mg./day), magnesium (320 mg./day), and zinc (15 mg./day), as well as other vitamins and minerals (Newman & Fullerton, 1990: 289).

1.2 **The provision of care associated with elimination processes and excrements.**

Pregnant women with pregnancy-induced hypertension should ensure these processes are completed everyday or as usually. They should eat a large amount of fruits and vegetables, drink a lot of water and have appropriate exercise. These will prevent constipation in pregnancy. Constipation leads to an increase of pressure in the abdominal cavity which can cause hemorrhoids (Cunningham, et. al., 1997: 245).

During pregnancy, the sweat glands may have to work harder. Therefore, pregnant women should take a bath at least twice a day but should not soak in the bathtub or the canal because it could bring infection into the body through the vagina. It is better to take a shower.

Examination of the teeth should be included in the prenatal general physical examination. Pregnant women should brushed their teeth at least twice a day.

1.3 **The maintenance of a balance between activity and rest.**

Gentle exercises (e.g., range of motion, stretching, Kegel, pelvic tilts) are

important in maintaining muscle tone, blood flow, bowel function, and a sense of well-being (Cashion, 1999: 653). Exercise can enhance feeling of well-being and a quicker return to fitness after delivery. The best exercise for pregnant women is walking for 15-30 minutes per day (Suwachai Intaraprasert, 1987: 63).

Pregnant women with pregnancy-induced hypertension should avoid traveling when the pregnancy close to term (Novak & Broom, 1995: 129).

Adequate rest is beneficial in decreasing blood pressure and promoting diuresis. The pregnant women should sleep well a night for 8 hours and take a short sleep during the day for 30-60 minutes. Bed rest in the lateral recumbent position is standard therapy for preeclampsia and maximizes uteroplacental blood flow during pregnancy (Cashion, 1999: 653).

1.4 **The maintenance of a balance between solitude and social interaction.**

Pregnant women with pregnancy-induced hypertension should have time for solitude and interaction with other people. Solitude and social interaction can increase feeling of security and fulfillment. Moreover, it provides time to plan for the future, while promoting both individual autonomy and group membership. In addition, it can increase the motivation to ask for help from others and to search for information about pregnancy-induced hypertension.

1.5 **The prevention of hazards to human life, functioning, and well-being.**

Pregnant women with pregnancy-induced hypertension should be aware of types of hazards that are likely to occur such as accidents. They should be careful when they are walking on stairway or wet areas in order to prevent slippery, avoiding to contact person with contagious disease or infection.

1.6 The promotion of human functioning and development.

The pregnant women with pregnancy-induced hypertension should act to maintain and promote the integrity of structure and functioning of their lives. They should develop and maintain a realistic self-concept, and take action to foster specific human developments. They should identify and attend to deviations from their structural and functional norms.

2. **Developmental self-care requisites** are associated with human developmental processes, conditions, and events occurring during various stages of the life cycle. Some events may adversely or positively affect people's development. Pregnancy is viewed as a developmental event that pregnant women have to experience and do their developmental tasks in order to get to other stage and satisfy with it. Developmental tasks of pregnant women are composed of four tasks: pregnancy validation, fetal embodiment, fetal distinction, and role transition (Clark, et. al., 1979: 269-273).

Task 1 Pregnancy validation; The responses of pregnant women can be surprise at the possibility of being pregnant or ambivalence and rejection may also be their first response. This is followed by a conflict of wanting and not wanting. Unpleasant symptoms of pregnancy (e.g. somnolence, nausea, vomiting, fatigue, and lack of appetite) will bring about decreasing activity. The pregnant women may reassess the signs and symptoms of pregnancy repeatedly, then seeks prenatal care that is a validating tool.

Task 2 Fetal embodiment; after passing the first task, pregnant women can begin to accept the pregnancy. The anxiety of being pregnant should reduce in this period. They will depend on their husbands to make decisions. Thereafter, they

tend to increase their food intake in the interest of the fetus and avoid activity that may be harmful to pregnancy such as sexual activity and long travelling.

Task 3 Fetal distinction; pregnant women will conceptualize the fetus as an individual with a personality. They try to interest their husbands in participating in some events such as feeling fetal movements, attending classes, reading books, purchasing infant supplies, and naming the baby.

Task 4 Role transition; pregnant women prepare for childbirth. This can increase anxiety, which is caused by the approaching labor, fear of pain, and concerning about the arrival of the baby. They can dream about the baby's birth. These dreams can reflect reality in order to prepare for the coming of the event.

3. **Health-deviation self-care requisites** are associated with genetic and constitutional defects, human structural and functional deviations with their effects, and medical diagnosis and treatment measures. Thus, pregnant women with pregnancy-induced hypertension need to self-care themselves with these tasks in order to maintain their quality of life and optimal health.

3.1 Searching for health care services. Pregnant women have to learn how to take care of themselves effectively in accordance with the treatment plan. They can search for information about pregnancy-induced hypertension from many kinds of media such as brochures, radio, TV programs, doctors or health care providers. Derived information can help the pregnant women to know how to care for themselves correctly.

3.2 Observing for abnormal signs and symptom of worsen condition. Pregnant women with pregnancy-induced hypertension have to know about signs and symptoms of abnormal or worsen condition. They have to notice for any changes such as

edema, headache,reducing of fetal movement. Edema has been described as the earliest sign of developing preeclampsia, especially on the face and hands and, if at bed rest, over the sacrum. Other symptoms include severe or persistent headache, epigastric or upper right quadrant pain, visual disturbances, decreasing urine output, severe nausea and vomiting, bleeding gums, and disorientation (Knuppel & Drukker, 1993: 479). In addition, the women should assess the baby's activity daily. If the baby decreases activity to three or fewer movements per hour, this may indicate fetal distress (Cashion, 1999: 653). If any of these signs and symptoms persist, they should contact their physician.

3.3 Effectively carrying out plan of treatment in order to prevent specific types of pathology. Pregnant women should take medicine regularly as prescribed, take more time to rest, lie on their sides, tell the physician about abnormal signs and symptom, ask any question about self-care of their health. Moreover, if the condition of pregnancy-induced hypertension is worsen, the women have to see the doctor before their appointment.

3.4 Being aware of and attending to or regulating the discomforting or deleterious effects of medical care measures performed or prescribed by the physician, including effects on developmental tasks of pregnancy. Thus, pregnant women with pregnancy-induced hypertension should know the side effects of the hypertensive drugs and know how to take care of them.

3.5 Modifying the self-concept and self-image in accepting oneself as being in a particular state of pregnancy-induced hypertension and in need of specific forms of health care.

3.6 Learning to live with the effect of pregnancy-induced hypertension and its treatment measures in a life-style to promote the developmental tasks of pregnancy.

In summary, appropriate self-care behaviors of pregnant women with pregnancy-induced hypertension in the aspect of universal, developmental and health-deviation could prevent serious complications during pregnancy. In addition, this can enhance the health of the mothers and fetus throughout the pregnancy.

Influencing factors on self-care behaviors in pregnant women with pregnancy-induced hypertension

Appropriate self-care behaviors of pregnant women with pregnancy-induced hypertension could be affected by many factors. Orem (1995: 215) stated that self-care agency, a complex acquired human characteristic, is the power of an individual to engage in the operations essential for self-care. The three structures of self-care agency composed of: foundational capabilities and dispositions, power components enabling for self-care operations, and capabilities for self-care operations.

Foundational capabilities and disposition are essential for engaging in self-care. These capabilities include physical, mental, motivational, emotional, and orientation capabilities. Self-esteem is also described as one of the foundational capabilities and dispositions. Rosenberg (1989) defines self-esteem as having self-respect and self-worth. Coopersmith (1967) defined self-esteem as an individual's self-evaluation that expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes in his or her capability. A person with a high self-esteem is basically satisfied with himself/herself, recognizes his/her problems, and still tries to

overcome them. The illness requires coping with problems of limited activity or body disfigurement. All too often, such problems are accompanied by lowered self-esteem causing the person to feel powerless and more dependent on others' decisions. Self-esteem leads to continuing self-care and feelings of worthiness in accepting encouragement and direct care from nurses and physicians.

Self-esteem of pregnant women with pregnancy-induced hypertension

Pregnant women with pregnancy-induced hypertension have physio-psycho-social changes from pregnancy and hypertension. It causes pregnant women to feel that they are weak and have discomfort from the pathology, physical exam, and medical treatments. They also concern about harming their babies. This can cause pregnant women to blame themselves because they could not have a normal pregnancy as others. Kemp and Page (1987: 195) found that high-risk pregnant women have lower self-esteem than normal pregnant women. Norris and Kunes-Connell's (1985: 74) found that people with health problems have lower self-esteem than healthy people. People with low self-esteem report more health problems than those with high self-esteem (Cope, 1992: 619). People with low self-esteem ignored their self-care treatment. Therefore, pregnant women with pregnancy-induced hypertension with high self-esteem have more self-confidence, more independence, and are more effective in seeking knowledge about pregnancy-induced hypertension than those with low self-esteem.

Self-esteem is the value attributed to self (Pender, 1996: 243). Muhlenkamp and Sayles (1986: 334-338) found that self-esteem was a positive indicator of health practices among adults living in a south-western metropolitan area. Sopit Suwanvela (1994) and

Suteerat Kealpralom (1995) found a positive relationship between self-esteem and self-care behaviors of postpartum adolescents and patients with diabetes mellitus.

According to Orem (1995: 203-204), the factors internal or external to individuals that affect their abilities to engage in self-care or affect the kind and amount of self-care required are basic conditioning factors. The selected factors to include in this study were age, education, family income, parity, and duration of being diagnosed.

Age Age is an indicator of maturity and experiences that makes people respond differently to the situation. In addition, it has been found that age has a relationship with the level of development and experience that also affects the way people show their endurance, see and understand a problem, give the reason and decide how to behave. The person who is high in both age and maturity can assess the alternatives and decide to take care of himself/herself (Orem, 1995). In addition, he or she can be responsible for taking care of himself/herself continuously with better understanding of the disease and its treatment than those who are low in both age and maturity. Lowenstein and Rinehart (1981: 254) found that pregnant women who were older had preventive behavior better than the young. This study was congruent with the study of Aungkana Nualyong (1992) who found a positive relationship between age and self-care behaviors in pregnant women with pregnancy-induced hypertension. Similarly, Supawadi Wayuhuerd (1993) found a positive relationship between age and self-care behaviors in pregnant adolescent. However, these studies are incongruent with the study of Sirivit Limtoprasert (1991) which found that age had no relationship with the self-care behaviors of pregnant women.

Education Education is an element that influences self-care behaviors of an individual. Generally, people who are highly educated are knowledgeable and have better health care and hygiene behavior than those who are less educated. Highly educated people will seek the benefits on everything that can facilitate their self-care (Pender, 1982: 161-162). People with higher education can understand what needs to be learned and the situations that can occur. This complies with the study of Juthatip Suesat (1994) who found that education has a positive relationship with the therapeutic compliance behavior in pregnant women with pregnancy-induced hypertension. However, Sumitta Swangtook (1996) found that self-care behaviors are not different between the different educational levels.

Family income Family income has an impact on lifestyle. It can help people to meet the basic needs which makes life smoother (Orem, 1995: 203). Pender (1996: 161-162) has further stated that a person with a firm financial background will be able to seek benefits for health care, get good food and high quality services, and also find the right products and equipment for self-care while a person with less income will have limits in finding things to improve health. A study of Somchit Pathumanon (1989) stated that the financial base of pregnant women has a positive relationship with self-care and hygiene of mothers and children. It complies with Aungkana Nualyong (1992) who found that family income have a positive relationship with self-care behaviors in pregnant women with pregnancy-induced hypertension. Nevertheless, Pawinee Pokasinjumroon (1995) found no relationship between family income and self-care behaviors in Thai Muslim pregnant women with pregnancy-induced hypertension.

Parity A women who has experience of being pregnant will have better control over her temper and other situations than those who have never been pregnant. Especially, if the first pregnancy had any unusual conditions the women will take extra care of her health. Fearing of reoccurrence, they may modify their behaviors. The study of Unjit Boonsom (1997) showed that experienced women have better self-care behaviors than those who are pregnant for the first time. However, the study of Orathai Tumgunma (1997) showed the contrast. She found that there was no difference in health promoting behaviors of high-risk pregnant women in different levels of parity.

Duration of being diagnosed This will help the person to learn how to cope with problems or difficulties and to undertake self-care activities (Orem, 1995). The self-care of a person comes from the combination of experience, knowledge, and interaction with other people, communication and social culture. If a person gets sick, he or she has to search for health services in order to save his/her life and to maintain health status. The duration of being diagnosed is an experience of the person particular to his or her disease. It affects the opinion in response to the illness and the learning of self-care according to the doctor's recommendations. Nuankanit Limpanavas (1988) found that the duration of illness had a statistically significant and positive relationship with self-care in head and neck cancer patients. But this is contrary to the studies of Jirapa Hongtrakul (1989) and Chawalee Kositapiwat (1991) which studied patients with hypertension and glaucoma. They found that there was no relationship between the duration of illness and self-care behaviors.

From reviewing the literature, it was found that pregnant women with pregnancy-induced hypertension have to confront their health problems physically, mentally, and socially which means they need much more self-care. Pregnant women

have to develop and maintain their self-care deficit, which is an important force that brings self-esteem in one's own ability to perform self-care activities correctly and continuously. In addition, other basic conditioning factors, which are age, education, family income, parity, and duration of being diagnosed, were found to related with self-esteem and self-care behaviors as mentioned previously. Presently, there are no studies on self-esteem among pregnant women with pregnancy-induced hypertension. For this reason, the researcher was interested in studying self-esteem and self-care behaviors in pregnant women with pregnancy-induced hypertension and the results will be used as a guideline in planning nursing care. Nurses should encourage self-esteem of pregnant women to have correct and continuous self-care behaviors.

CHAPTER III

METHODOLOGY

Research Design

A descriptive research design was used to study self-esteem and self-care behaviors in pregnant women with pregnancy-induced hypertension. This chapter describes population and protection of human subject, and sampling, setting, instrumentation, data collection, data analysis.

Population and Sampling

The accessible population was pregnant women attending high-risk clinic at Siriraj Hospital, Rajavithi Hospital, Pramongkutkloa Hospital, and Chulalongkorn Hospital or pregnant women who were admitted due to one of the following conditions: pregnancy-induced hypertension, gestational hypertension, mild preeclampsia, or severe preeclampsia.

The sample was selected by purposive sampling. The criteria for eligibility for the sample were as follows:

1. Gestational age was more than 20 weeks
2. Had no other major complications such as heart disease, diabetes mellitus (excepted the gestational DM), chronic hypertension

3. Diagnosed by an obstetrician as having one of these conditions: pregnancy-induced hypertension, gestational hypertension, mild preeclampsia, or severe preeclampsia for at least 1 week

The sample size was calculated by Kerlinger and Padhazer's formular (Tawatchai Varapongsathorn, 1989: 60)

$n \geq 30\,k$

n = number of samples for 1 variable

k = number of independent variables

$n \geq 30 \times 6 = 180$

Setting

Pregnant women with pregnancy-induced hypertension were recruited from high-risk clinic of antenatal care unit or from the hospital unit where they were admitted at Siriraj Hospital, Rajavithi Hospital, Pramongkutkloa Hospital, and Chulalongkorn Hospital. Each setting had the characteristics as follows:

1.Siriraj Hospital

The high-risk clinic of antenatal care, Out Patient Department was opened on Monday from 13.00-15.00 pm. Pregnant women with complications were provided with the information related to self-care during pregnancy.

Obstetric Ward: Juthathuch 8 North, admit pregnant women and postpartum mothers with medical or obstetrical complications such as diabetes mellitus, thyroid, SLE, anemia, and pregnancy-induced hypertension.

2.Rajavithi Hospital

The antenatal clinic was opened on Monday–Friday from 9.00-12.00 pm. The pregnant women were provided with antenatal care and knowledge about pregnancy.

Labor room, admit pregnant women who came to deliver and pregnant women with complications to observe and to administer proper management if needed.

3.Pramongkutkloa Hospital

The high-risk clinic of antenatal care, Out Patient Department was opened on Thursday from 13.00-15.00 pm. Pregnant women with complications were provided with the information related to self-care during pregnancy.

Obstetric Ward: 4th and 6th floors, admit normal and pregnant women with complications and postpartum mothers with their babies

4.Chulalongkorn Hospital

The antenatal clinic was opened on Monday–Friday from 9.00-12.00 pm. Pregnant women were provided with the information related to self-care during pregnancy.

Obstetric Ward: Nawamintarachinee 5, 6, admit pregnant women and postpartum mothers with medical or obstetrical complications such as diabetes mellitus, thyroid, SLE, anemia, and pregnancy-induced hypertension.

Instrumentation

The instruments are comprised of 3 questionnaires:

1. Demographic data questionnaires include age, education, occupation, marital status, gestational age, diagnosis, history of PIH, etc.

2. Self-esteem questionnaire The self-esteem questionnaire used Rosenberg Self-esteem Scale (1989) that is a 10-item (5 items had a positive score and 5 items had a negative score), four-point scale designed to measure self-esteem as a general favorable or unfavorable global self-attitude.

Scoring the answer

	For positive item	For negative item
Strongly agree	= 4	= 1
Mostly agree	= 3	= 2
Slightly agree	= 2	= 3
Disagree	= 1	= 4

Level of self-esteem

Mean score 1.00 - 1.75 = low self-esteem

Mean score 1.76 - 2.51 = rather low self-esteem

Mean score 2.52 - 3.27 = rather high self-esteem

Mean score 3.28 - 4.00 = high self-esteem

3. Self-care behaviors questionnaire This questionnaire developed from Pawinee Pokasinjumroon (1995) was based on Orem's theory (Orem, 1995) which were consisted of 38 items divided in three subscales;

Universal self-care (items 1-18)

Developmental self-care (items 19-30)

Health deviation self-care (items 31-38)

The self-care behavior questionnaires was 4-rating scale:

Regularly = the behavior have been done regularly.

Frequently = the behavior have been done many times but not regularly.

Sometimes = the behavior have been done occasionally.

Never = the behavior have never been done .

Scoring the answer

	For positive item	For negative item
Regularly	= 4	= 1
Frequently	= 3	= 2
Sometimes	= 2	= 3
Never	= 1	= 4

Level of self- care behavior

Mean score 1.00 - 1.75 = poor self- care behavior.

Mean score 1.76 - 2.51 = rather poor self- care behavior.

Mean score 2.52 - 3.27 = rather good self-care behavior.

Mean score 3.28 - 4.00 = good self- care behavior.

Validity

The self-care behavior questionnaire and self-esteem questionnaires were submitted to five experts for evaluating appropriateness of the language, clarity and content validity. The five experts were:

- 1 Obstetrician
- 2 Instructor of Obstetric and Gynecologic nursing
- 1 Instructor of Mental health and Psychiatric nursing
- 1 Clinical nurse specialist in Obstetric nursing

Reliability

The questionnaires were employed with pregnant women with pregnancy-induced hypertension for 30 persons who had similar characteristic to the sample in the study. Cronbach's alpha coefficients were computed. The results were:

- Self-care behaviors scale = .8521
- Self-esteem scale = .6564

However, for the sample in this study Cronbach's alpha for Self-care behaviors scale was 0.8607, and 0.8001 for Self-esteem scale.

Data Collection

1. The researcher asked for the introductory letters from the Faculty of Graduate Study, Mahidol University to submit to the director of Siriraj Hospital , Rajavithi Hospital, Pramongkutkloa Hospital, and Chulalongkorn Hospital to ask for the permission to collect data related to research involving humans. The schedule were the following:

- Siriraj Hospital Mon. 8.00-12.00 (WARD)
  13.00-15.00 (ANC)
- Rajavithi Hospital Tues., Wed., Fri. 8.00-12.00 (ANC)
  13.00-15.00 (WARD)
- Pramongkutkloa Hospital Thur. 8.00-12.00 (WARD)
  13.00-15.00 (ANC)
- Chulalongkorn Hospital Tues., Wed., Fri. 8.00-12.00 (ANC)
  13.00-15.00 (WARD)

2. After receiving the permission, the researcher explained the research objectives to the nursing director and the head nurses of the high-risk clinics and Obstetric wards for their cooperation.

3. The researcher selected the sample by purposive sampling technique according to the criteria.

4. The researcher introduced herself, explained the purpose of the study, the number and characteristics of the instrument, the protection of human subjects, and the time it would take to the potential participants.

5. After the patient agreed to participate in the study, the researcher asked the participants to answer three self-administered questionnaires after explaining them thoroughly, starting with the demographic data, followed by the self-esteem questionnaires, and the self-care behavior questionnaires. The participants answered them without time limitations. After completing the questionnaires, the researcher checked the answers for completeness. During answering the questionnaires, the participants could ask any question that they did not understand.

Protection of Human Subjects

The study was conducted after the final permission form the faculty of Graduate Studies, Mahidol University. Potential participants were informed about the purpose of the study and their right to refuse to participate or to withdraw from the study at any time. Their names were not attached to the data. The number was used on the questionnaire instead of their names. The only known inconvenience was the time (20-30 minutes) they spent during completion of the questionnaires. All data were presented as a group or representative numbers.

Data Analysis

The data were analyzed by SPSS / FW program.

Descriptive statistics including frequency and measures of central tendency were used to describe the demographic characteristics of the sample and the major variables of the study. The relationships among the variables were tested using correlation coefficient. Simple and multiple correlation and regression were used to analyze the data. A simple way to calculate multiple correlation is to do multiple regression analysis, although the researcher does not aim at prediction. Multiple regression can be used to assess the relative importance of each independent variable (Glantz & Slinker, 1990 cited by Sinsuksai, 1998:82) If the independent variables are not highly correlated with each other, the standardized regression coefficients (beta weight) can be informative.In other words, independent variables with higher standardized regression coefficients are more important than those with lower (absolute) values (Tabachnick & Fidell,1996 cited by Sinsuksai, 1998:83)

CHAPTER IV

RESULTS

This study is a descriptive research to study self-esteem and self-care behaviors in pregnant women with pregnancy-induced hypertension. Subjects were 180 pregnant women with pregnancy-induced hypertension who attended the high-risk clinic or had been admitted due to pregnancy-induced hypertension at Siriraj Hospital, Rajavithi Hospital, Phramongkutkloa Hospital, and Chulalongkorn Hospital. The results were presented in four parts.

1. Demographic characteristics of the subjects. (Table 1-2)
2. Self-esteem and self-care behaviors scores. (Table 3-5)
3. Correlations among predictor variables (age, education, family income, parity, duration of being diagnosed and self-esteem) and self-care behaviors. (Table 6)
4. Multiple correlation between predictor variables and self-care behaviors. (Table 7-8)

1. Demographic characteristics of the subjects

Table 1 Number and percentage of the subjects categorized by age, education, occupation, family income, and marital status (N=180)

Characteristics	Number	Percentage
Age (years)		
Lower than 20	17	9.4
20-24	36	20.0
25-29	46	25.6
30-34	42	23.3
35 or more	39	21.7
Min=14 Max=46 $\bar{X}$=28.61 SD=6.89		
Education		
Primary school (6 years)	86	47.8
Junior high school (9 years)	40	22.2
Senior high school (12 years)	35	19.4
Vocational level or diploma (14 years)	7	3.9
Bachelor degree or higher (16 years or more)	12	6.7
Min=primary school(3 years) Max=master degree $\bar{X}$=8.46 SD=3.54		
Occupation		
Laborer	94	52.2
Government officer	7	3.9
Commerce / Small business	20	11.1
Housewife / Unemployed	59	32.8
Family income (baht)		
Less than 5,000	49	27.2
5,000-10,000	76	42.2
10,001-15,000	27	15.0
15,001-20,000	18	10.0
More than 20,000	10	5.6
Min=500 Max=60,000 $\bar{X}$=10,612 SD = 8,613.91		
Marital status		
Married	171	95.0
Widowed, Divorced, Separated	9	5.0

Table 1 showed that 48.9% of the sample was between 25 and 34 years old. The youngest was 14 years old and the oldest was 46 years old. An average age was 28.61 years. About 47.8% of the respondents reported having a primary school. The lowest educational level was 3 years in primary school and the highest level was master degree.

The largest group (52.2%) of the sample was labor. The second largest group (32.8%) was housewife/unemployed. About 42.2% of them had family income 5,001-10,000 bahts per month. The lowest family income was 500 bahts. The highest family income was 60,000 bahts. An average family income was 10,612 bahts. The majority of the subjects were married (95%).

Table 2 Number and percentage of the subjects categorized by parity, gestational age, diagnosis, duration of being diagnosed, receiving information of PIH, hospitalization due to PIH, history of PIH. (N=180)

Characteristics	Number	Percentage
Parity		
None	104	57.8
1	52	28.9
2	19	10.6
3	3	1.7
5	1	0.6
6	1	0.6
Gestational age (weeks)		
25-28 weeks	12	6.7
29-32 weeks	23	12.7
33-36 weeks	46	25.6
37-41 weeks	99	55.0
Diagnosis		
Gestational hypertension	12	6.7
Mild-preeclampsia	126	70.0
Severe- preeclampsia	42	23.3
Duration of being diagnosed (weeks)		
1-4 weeks	142	78.9
5-8 weeks	18	10.0
9-12 weeks	11	6.1
13-16 weeks	9	5.0
Receiving information of PIH		
Yes	94	52.2
No	86	47.8
Hospitalization due to PIH		
Yes	12	6.7
No	168	93.3
History of PIH (N = 76)		
Yes	19	25.0
No	57	75.0

Table 2 showed that the majority (57.8%) of the sample had no previous delivery. Fifty-five percent was between 37-41 weeks gestational age. Seventy percent of the sample had mild preeclampsia. Of all subjects, 78.9% had duration of being diagnosed between 1-4 weeks and 52.2% received information of pregnancy-induced hypertension. Most of subjects (93.3%) had never been hospitalized due to pregnancy-induced hypertension and 75.0% of the multiparity had no history of pregnancy-induced hypertension .

2. Self-esteem and self-care behaviors scores

Table 3 Number and percentage of the subjects categorized by levels of self-esteem (N=180)

Levels of self-esteem	Number	Percentage
- High	86	47.8
- Rather high	88	48.9
- Rather low	6	3.3
- Low	0	0.0

Table 3 showed that almost pregnant women with pregnancy-induced hypertension (96.7%) had high or rather high self-esteem. Was only 3.3% of the subjects at a rather low self-esteem.

Table 4 Percentage of self-esteem in each item. (N=180)

Self-esteem	Strongly agree	Mostly agree	Slightly agree	Disagree
1..I am a failure*	1.7	8.9	21.7	67.8
2..feel useless*...	3.9	10.6	22.8	62.8
3..to be proud of*...	3.3	12.2	35.6	48.9
4..no good at all*...	2.8	14.4	36.1	46.7
5..more respect for myself*...	5.6	19.4	26.1	48.9
6..able to do things...	28.3	56.7	12.2	2.8
7..a person of worth...	27.2	55.6	13.9	3.3
8..satisfied with myself.	25.6	55.6	13.9	5.0
9..positive attitude toward myself...	24.4	52.2	18.3	5.0
10..a number of good qualities..	16.7	60.6	19.4	3.3

*negative items

Table 4 showed that more than sixty percent disagree with the first two negative items "All in all, I am inclined to feel that I am a failure" and "I certainly feel useless at time." Almost 50% disagree with three negative items "I feel I do not have much to be proud of", "At times I think I am no good at all", and "I wish I could have more respect for myself." However approximately 10-25% mostly agree or strongly agree that they are tend to failure, feel useless, not proud of themselves, no good at all, and wish have more respect for themselves.

Approximately 80% mostly agree or strongly agree with five positive items. However approximately 20% slightly agree or disagree that they are able to do things as well as other people, a person of worth, satisfied with themselves, have a positive attitude toward themselves, and have a number of good qualities.

Table 5 Percentage, means, standard deviations and the levels of self-care behaviors in each subscale and overall. (N=180)

Self-care behaviors	Percentage				X	SD	Levels of self-care behaviors
	good	rather good	rather poor	poor			
The overall self-care behavior	**44.4**	**53.9**	**1.7**	**0.0**	**3.21**	**0.34**	**rather good**
-Universal self-care requisites	52.8	45.5	1.7	0.0	3.25	0.33	rather good
-Developmental self-care requisites	47.8	45.5	6.1	0.6	3.23	0.45	rather good
-Health deviation self-care requisites	37.8	49.4	12.8	0.0	3.15	0.47	rather good

Table 5 showed that a mean of total score of self-care behaviors was at a rather good level. For each subscale, greater than 80% of subjects was at good and rather good levels. Universal self-care behaviors were done the most, followed by developmental self-care behaviors, and health-deviation self-care behaviors respectively.

Table 6 Percentage, means, standard deviations and the levels of self-care behaviors in each subscale and each item

Content	Perform regularly	Perform frequently	Perform sometime	Never perform	$\bar{X}$	SD	Levels of self-care behaviors
Universal self-care					**3.25**	**0.33**	**rather good**
- Smoke cigarette, drink alcohol*..	0.6	0.0	6.1	93.3	3.92	0.33	good
- Take a bath	87.8	11.1	1.1	0.0	3.87	0.37	good
- Clean external genitalia	87.2	11.1	1.7	0.0	3.86	0.40	good
- Wear suitable brassieres	76.1	15.0	7.8	1.1	3.66	0.67	good
- Stay in a good ventilated place...	62.2	20.0	17.8	0.0	3.44	0.78	good
- Talk with your friend, ...	56.1	25.6	17.2	1.1	3.37	0.80	good
- Take times to relax....	57.2	22.8	17.2	2.8	3.34	0.86	good
- Drink 8 glasses of water	52.2	23.9	22.2	1.7	3.27	0.86	rather good
- Eat 5 groups of nutrients	47.2	23.3	28.3	1.1	3.17	0.88	rather good
- Sit instead of stand for work...	41.7	33.9	23.3	1.1	3.16	0.82	rather good
- Sleep 8 hours at night	43.3	26.1	29.5	1.1	3.12	0.87	rather good
- Avoid hard work	32.2	45.0	18.3	4.4	3.05	0.83	rather good
- Drink milk	41.1	22.8	33.3	2.8	3.02	0.93	rather good
- Avoid closing to the carrier	27.8	47.8	16.1	8.3	2.95	0.88	rather good
- Avoid traveling	27.2	46.1	20.6	6.1	2.94	0.85	rather good
- Retain urine*....	6.1	12.2	63.9	17.8	2.93	0.74	rather good
- Seek knowledge about pregnancy	29.4	32.2	36.1	2.2	2.89	0.86	rather good
- Exercise by walking	31.1	17.2	39.4	12.2	2.67	1.05	rather good
Developmental self-care					**3.23**	**0.45**	**rather good**
- Wear suitable clothes	77.8	18.9	2.8	0.6	3.74	0.53	good
- Observe the growth of the child...	54.4	36.7	7.2	1.7	3.44	0.70	good
- Touch your abdomen	57.8	22.8	17.8	1.7	3.37	0.83	good
- Imagine about your baby	47.8	38.8	10.6	3.3	3.31	0.79	good
- Persuade husband to touch the baby..	52.8	23.3	15.0	8.9	3.203	1.00	rather good
- Visit ANC	79.4	13.3	5.6	1.7	.17	0.65	rather good
- Seek knowledge about taking care of the baby....	43.3	30.0	22.2	4.4	3.12	0.91	rather good
- Talk about taking care of baby...	45.6	25.6	23.3	5.6	3.11	0.95	rather good
- Ask about self-care during delivery....	42.2	31.7	20.6	5.6	3.11	0.92	rather good

Table 6 Percentage, means, standard deviations and the levels of self-care behaviors in each subscale and each item (continue)

Content	Perform regularly	Perform frequently	Perform sometime	Never perform	$\bar{X}$	SD	Levels of self-care behaviors
- Consult about stress	33.9	35.6	25.6	5.0	2.98	0.89	rather good
- Solve problems	30.6	39.4	27.8	2.2	2.98	0.82	rather good
- Ask husband for help	30.6	26.1	36.1	7.2	2.80	0.96	rather good
Health deviation self-care					**3.15**	**0.47**	**rather good**
- Lie on your side	80.6	13.3	5.6	0.6	3.74	0.58	good
- Take medicine	67.8	19.4	10.6	2.2	3.53	0.77	good
- Observe edema ...	59.4	27.2	9.4	3.9	3.42	0.82	good
- Observe for unusual signs	51.7	30.6	13.9	3.9	3.30	0.85	good
- Tell doctor about unusual signs....	54.4	25.0	16.1	4.4	3.29	0.90	good
- Rest ½ - 1 hour during daytime...	48.9	15.0	28.3	7.8	3.05	1.04	rather good
- Ask about cause of PIH	23.3	27.8	27.8	21.1	2.53	1.07	rather good
- Ask about self-care of themselves	19.4	23.9	31.7	25.0	2.38	1.06	rather poor

*negative item

Table 6 showed that a mean of total score of universal self-care behaviors was at a rather good level. For each item, most of self-care behaviors was at a rather good level. However, some items of self-care behaviors were at a good level, for example, "smoke cigarette or drink alcohol, take a bath and brush teeth at least twice a day, clean external genitalia after urinating and defecating, wear suitable brassieres, stay at a good ventilation place, talk with your friends, and relax by watching TV." But some items, more than 20% of subjects sometime or never drink 8 glasses of water per day, eat 5 groups of nutrients, sit instead of stand for work, avoid hard work, avoid closing to the carrier, avoid traveling for a long time. Approximately 30-50% of subjects sometime or never sleep at least 8 hours at night, drink fresh milk or soybean milk 1 glass of each serving, seeking knowledge about pregnancy, exercise by walking in the morning or evening.

A mean of total scores of developmental self-care behaviors was at a rather good level. For each item, most of self-care behaviors was at a rather good level except some items that were at a good level such as "wear suitable clothes, observe size of abdomen for the growth of fetus, touch your abdomen and talk with your baby when there is quickening, and imagine about your baby." However, more than 20% of subjects sometimes or never persuade husband to touch the baby when they felt quickening ; seek knowledge about taking care of the baby by reading magazine, watching TV programs or talking with other pregnant women; talk about taking care of baby; ask about self-care during delivery from their mother or others pregnant women. Approximately 30-40% of subjects sometime or never consulted about stress with their spouse, relatives, friends and health care team; solve the problems by seeking the source and to solve or correct the problems; ask husband for help.

A mean of total scores of health-deviation self-care behaviors was at a rather good level. For each item, most of self-care behaviors was at a good level except some items that were at a rather good level such as "rest ½ - 1 hour during daytime, ask a doctor about cause, sign, symptom, and complication of pregnancy-induced hypertension. However, approximately 30-50% of subjects sometime or never perform these two items. Self-care behavior that was at a rather poor level was "ask about appropriate self-care for pregnancy-induced hypertension." The subjects more than 50% sometime or never perform this item.

3. Correlation among predictor variables and self-care behaviors of subjects

Table 7 Matrix of correlation coefficient among the variables

Variables	1	2	3	4	5	6	7
1.Age	1.000						
2.Education	-.066	1.000					
3.Family income	.242**	.442***	1.000				
4.Parity	.518***	-.275***	-.009	1.000			
5.Duration of being diagnosed	.178**	-.076	.048	.085	1.000		
6.Self-esteem	.210**	.077	.142*	.055	.079	1.000	
7.Self-care behaviors	.026	.074	.103	-.215**	.187**	.318***	1.000

*** P < .001 ** P < .01 * P < .05

Table 7 showed that self-care behaviors had positive relationships with duration of being diagnosed (r = .187) and self-esteem (r = .318) at a statistically significant level of .01 and .001 respectively, and had a negative relationship with parity (r = -.215) at a statistically significant level of .01, but had no relationship with age, education and family income.

There were relationships among the predictor variables. For example, age was positively correlated with family income (r = .242), parity (r = .518), duration of being diagnosed (r = .178) and self-esteem (r = .210) at a statistically significant level of .01, .001, .01 and .01 respectively. Education was positively associated with family income (r = .442) but was negatively correlated with parity (r = -.275) at a statistically significant level of .001. Family income was positively correlated with self-esteem (r = .142) at a statistically significant level of .05.

4. Multiple correlation between predictor variables and self-care behaviors

Table 8 Multiple correlation coefficient between the predictors and self-care behaviors

Variables	b	SE	Beta	t
1.Age	.0104	.013	.069	.804 ns
2.Education	-.0095	.024	-.032	-.400 ns
3.Family income	.0000	.000	.046	.580 ns
4.Parity	-.3330	.096	-.290	-3.488**
5.Duration of being diagnosed	.0508	.021	.171	2.461*
6.Self-esteem	.0672	.016	.302	4.288***
Constant (a) = 7.272				
Multiple R = .441	R^2 = .195	Adj R^2 =.167	SEE = .9549	Over all F = 6.965***

*** P < .001 ** P < .01 * P < .05 ns = non significant

Table 9 Multiple correlation coefficient between predictors and self-care behaviors by stepwise multiple regression analysis

Step	Predictors	Multiple R	R^2	Adj. R^2	R^2 change	b	Beta	t
1	Self-esteem	.318	.101	.096	.101	.0707	.318	4.469***
2	Self-esteem					.0736	.331	4.777***
	Parity	.394	.155	.146	.054	-.268	-.233	-3.373**
3	Self-esteem					.0705	.317	4.647***
	Parity					-.285	-.248	-3.638***
	Duration of being diagnosed	.434	.188	.175	.033	.0544	.184	2.685**
Constant (a) =7.401	Over all F = 13.623***							

*** P < .001 ** P < .01

Table 8 and **Table 9** showed that three predictor variables. Self-esteem, parity, and duration of being diagnosed were accounted for 18.8% of variance of self-care behaviors in pregnant women with pregnancy-induced hypertension (r = .434).

CHAPTER V

DISCUSSION

This chapter was to determine self-esteem and self-care behaviors of the participants and the predictors of self-care behaviors in pregnant women with pregnancy-induced hypertension such as self-esteem, age, education, family income, parity and duration of being diagnosed. The results will be discussed according to the objective and hypotheses of the research.

Objective: To examine self-esteem and self-care behaviors in pregnant women with pregnancy-induced hypertension.

Self-esteem in pregnant women with pregnancy-induced hypertension

This study found that self-esteem of the subjects was at a rather high level. This meant that the subjects had self-respect and self-worth. However, Kemp and Page (1987) found that high-risk pregnant women have lower self-esteem than normal pregnant women. This can be explained that this group of women may proud of their mothering role that fulfill their marriage, in turn, this feeling may increase their self-esteem (Kemp & Page, 1987: 195). Moreover, pregnancy-induced hypertension usually does not bring about pain or discomfort to the women. Therefore, this kind of complication does not lower self-esteem of the pregnant women with pregnancy-induced hypertension. Furthermore, approximately 57% was primigravidity, therefore, they were excited to be mothers and proud of their maternal role. These

can increase their self-esteem. Moreover, almost of the subjects (95%) were married. Meisenhelder (1986) stated that a spouse was a significant person to encourage self-esteem of the wife.

Considering each item, it was found that more than 80% of the subjects slightly agrees, and disagrees with four negative items "All in all, I am inclined to feel that I am a failure", "I certainly feel useless at times", "I feel I do not have much to be proud of" and "At time I think I am no good at all." Approximately 80% of the subjects strongly agrees and mostly agrees with three positive items " I am able to do things as well as most other people", "I feel that I'm a person of worth, at least on an equal plane with others" and "On the whole, I am satisfied with myself." This was because 67.2% of the subjects had an occupation. They can earn their living with their family, which results in encouraging self-esteem. However, some positive items that the subjects slightly agree and disagree such as "I take a positive attitude toward myself" and "I feel that I have a number of good qualities", 23.3% and 22.7% respectively. It could be explained that 69.4% of the subjects had family income 10,000 baht/month or lower. They may not have enough money to use in the daily living, which results in feel that unsuccessful in their life. Al-Bakr (1991) found that socioeconomic status had a relationship with self-esteem. Similarly, Yaowalak Mahasittiwat (1986) found that the elderly who had high income, have higher self-esteem than the low income.

Self-care behaviors in pregnant women with pregnancy-induced hypertension

This study found that a mean of total score of self-care behaviors of the subjects was at a rather good level ($\bar{x}$ = 3.21) (Table 5). This result may be the consequences

of several factors. First, the pregnant women with pregnancy-induced hypertension may received suggestion and information from health care providers during their ANC visit. Data from this study showed that 52.2% of the subjects had received some information about pregnancy-induced hypertension (Table 2). Second, most of them, 90.6%, were more than 20 years of age. Orem (1995) stated that adults should be able to care for themselves effectively. Third, 95% of the subjects lived with spouse. They had more chance to receive love, support and encouragement to self-care themselves appropriately. The results were consistent with previous study. Supawadee Wayuhuerd (1993) found that pregnant adolescents who married had appropriate self-care behaviors. Fourth, most subjects (57.8%) were going to have first baby, therefore they may intended to do good self-care behaviors for their first child. Similarly, Kannika Kantaraksa (1984:19) found that the primigravida had better self-care behaviors and attitude than did the multigravida. Finally, the subjects were recruited from the hospitals, so they are a group of pregnant women who usually interested in taking care of their health. For this reason, this group of pregnant women normally was at a rather good level of self-care behaviors. For each subscale, the sample was at a rather good level of self-care behaviors:

For **universal self-care** subscale, means of seven items of universal self-care behaviors were at a good level, for example, no smoke cigarette or drink alcohol, take a bath and brush teeth, clean external genitalia, wear suitable brassieres, stay in a good ventilated place, talk with the friends or relatives, take times to relax. It was found that 93.3% did not smoke cigarette or drank alcohol. This can be explained that it is not Thai culture that women smoke. Moreover, Thai mothers value the maternal role, then they try to do what is best for their baby. Therefore, only 0.6% of the

women in this study smoke cigarette or drank alcohol. However, 7.8% of the women was hardly changing their brassieres. This may be happen with the women whose socioeconomic status are low. From this study, 69.4% of the women had family income less than 10,000 baht/month or lower. The women may think that brassieres are expensive and it is not necessary for them to change the size. They may want to save their money for other things. Moreover, about 17% of the women did self-care behaviors occasionally on 3 items: stay in a good ventilated place, talk with the friends or relatives, take times to relax. This group of the women may be in a low socioeconomic status. They had no alternatives for choosing the environment of their home. These women normally rented a room and moved around, so they may not be able to build social network. Therefore, they did not trust others enough to talk about personal affair.

For other 11 items of universal self-care behaviors, means of each item score were at a rather good level. However, approximately 16-29% was able to self-care themselves sometimes on 7 items. For example, drink 8 glasses of water per day, eat 5 groups of nutrients food, sit instead of stand for work, sleep 8 hours at night, avoid hard work, avoid closing to the carrier, avoid travelling for a long time. These results can be explained that some women drink less water habitually. They do not realize the importance or usefulness of drinking enough water although adequate fluid intake helps maintain optimum fluid volume and aids in renal perfusion and filtration (Cashion, 1999: 653, 660). Many women eat 5 groups of nutrients food occasionally. That was because 69.4% of the subjects had family income lower than 10,000 baht/month. This may make it difficult for them to eat 5 groups of nutrients food

regulary. Approximately 23% of the women had to stand to work all day because it is their job. They may have opportunity to sit down for 5-15 minutes.

Although adequate rest has been shown to be beneficial in decreasing blood pressure and increase renal blood flow (Cashion, 1999: 653, 660), 29.5% of subjects slept at night for 8 hours/day occasionally. Some of these women may normally go to bed late, and the others may have some housework to complete. Of all subjects, 18.3% avoid hard work occasionally and 4.4% was never avoid. As shown in demographic data that 67.2% of the women was employed, 27.2% had family income lower than 5,000 baht/month. Then they had no chance to avoid hard work.

Approximately 16% of the women avoid closing to the carrier for sometimes and 8.3% was never did. Someone gave the reason that their family members were the carriers. Someone state that they do not know who were the carriers. Approximately 20% of the subjects were able to avoid travelling for a long time occasionally. The reason states that their home town were at the country. They must visit their parents and relatives for sometimes.

Although pregnant women should drink a glass of milk for each meal, 33.3% drank it occasionally and 2.8% never did. The women gave the reason that it was their habit. They never drank milk before. However, some women drank milk or soybean milk 1 glass per day for sometimes that is not enough to receive calcium. Similarly, Usa Ritprasert (1997) found that postpartum adolescent mothers drink fresh milk and soybean lower than 50%. Moreover, milk is expensive for the persons who have low socioeconomic status.

Approximately 12% of the subjects often retained their full bladder and 6.1% did it habitually. The pregnant women may not know that retaining full bladder is a

cause of urinary tract infection. The reason for this may be their habit or lacking of clean rest room in the public during their travelling. Approximately 36% of the subjects sought knowledge about pregnancy occasionally by reading magazine, watching TV, or asking health care providers and 2.2% was never did. Many women gave the reason that they did not know what to ask. Sometimes they wanted to ask questions or need some information but they had no chance.

Of all the pregnant women, 39.4% did not often exercise and 12.2% never did. Someone believed that activities during the day were the same as exercise. Daily life of people in Bangkok make it difficult to take time and find the place to exercise because of job and housework, traffic jam, and air pollution. Also, the weight gain during the second and the third trimester of pregnancy that made them feel more tired to exercise. Smilarly, Rudee Pungbangkadee (1997) found that pregnant adolescents exercised by walking for sometimes.

For **developmental self-care** subscale, a mean of self-care behaviors score was at a rather good level. Considering for each item, means of four items were at a good level: wear suitable clothes, observe the growth of the child by size of abdomen, touch their abdomens and talk with the child when they moved, and imagine of the baby. However, 17.8% of the pregnant women touch their abdomen and talk with the child a few times, and 1.7% never did. This group of the subjects may have some problem to build attachment with their child or lack of knowledge.

A mean of each other eight items in developmental self-care subscale was at a rather good level. However, 8.9% of the women never persuade their husband to touch the baby when they move, and 15% did a few times. They gave the reason that their husband must work hard to earn their living. Then they had no time to do this.

Approximately 20% of the women sometimes seek knowledge about taking care of the baby, talk about taking care of the baby, ask about self-care during delivery and about 5% never did. These may be most of subjects (47.8%) had finished primary school. It made them did not know what to ask and lack of the skill to seek knowledge of self-care. This was congruent with Orem (1995) who said that education is very important for the developmental skill and attitude toward self-care. Approximately 25% of the women sometimes consult the other significant persons or asked for help when they had stress or tension and about 5% never did. This group of subjects did not want to disturb or burden others. Similarly, Supawadi Wayuhuerd (1993) found that pregnant adolescent reduced tension inappropriately.

For **health-deviation self-care** subscale, a mean of self-care behaviors score was at a rather good level. Considering for each item, mean of five items were at a good level, mean of two items were at a rather good level, and mean of one item was at a rather poor level.

For health-deviation subscale, mean of five items were at a good level. These items were "lay on your sides, take medicine as prescribe, observe edema, observe unusual signs, tell doctor about unusual sign." Approximately 90% of the subjects did these self-care behaviors regularly or very often. These pregnant women may know how to take care of themselves because they received information from health care provider. As shown in data, approximately 52% of the subjects were suggested by health care team. Moreover, many persons sought information from their social networks. Thai people usually like to ask informally from the persons whom they feel comfortable to talk with. Therefore, many pregnant women may have knowledge

about pregnancy-induced hypertension from other sources such as pamphlet, poster, magazine, and their social network.

However, approximately 10-16% of the women occasionally did self-care behaviors on three items: observe edema, observe unusual signs, and tell doctor about unusual sign and about 4% never did. This group of the subjects may think that edema is normal for pregnant women and it is not dangerous. Therefore, they did not feel unusual. Consequently, they occasionally observe and told the doctor or never did.

Means of two items of health-deviation subscale were at a rather good level. These items were " rest ½ - 1 hour during daytime" and " asked about the causes, signs, symptoms and complications of pregnancy-induced hypertension". Approximately 51-64% of the subjects did these self-care behaviors regularly or very often. However, 27-28% occasionally did it and about 8-21% never did. This group of the subjects may not be able to take a rest because of their work, as shown in demographic data that about 67% were employed. Moreover, they may be in a group of labor worker who had no authority to do that. As it can be seen that 69% had family income 10,000 baht/month or lower. Furthermore, almost a half of the subjects (47.8%) had only primary school. They were lack of confidence to ask about the causes, signs, symptoms, and complications of pregnancy-induced hypertension. People who have higher education have more opportunity to seek useful or beneficial information relating to proper health activities as well as knowledge pursuance and experience for taking care of themselves (Pender, 1982:161-162). This study is consistent with Aungkana Nualyong (1992) which found that pregnant women with pregnancy-induced hypertension never asked the doctor about the causes, signs, symptoms, and complications of pregnancy-induced hypertension (41.7%), and never

asked doctor about the practice of self-care behaviors when they had pregnancy-induced hypertension (41.2%).

A mean of an item " asked about self-care of themselves" was at a rather poor level. Approximately 32% of the subjects occasionally asked about how to self-care of themselves and 25% never did. This group of the subjects may not know what to ask. They had low education and may lack of confidence. Many persons who are in low socioeconomic status usually follow the suggestion and prescription without any question. They may believe that physicians or nurses would tell them what to do.

Hypotheses: Self-esteem and the basic conditioning factors such as age, education, family income, parity, and duration of being diagnosed can predict self-care behaviors in pregnant women with pregnancy-induced hypertension.

Multiple regression analysis demonstrated that self-esteem, parity, and duration of being diagnosed explained 18.8% of the variance in self-care behaviors scores of the pregnant women with pregnancy-induced hypertension ($r = .434$, $P < .01$). Self-esteem, which had the highest zero-order correlation coefficient($r = .318$, $P < .001$), made the biggest contribution in the regression equation ($\beta = .318$, $P < .001$).

Self-esteem The results illustrated that self-esteem was significantly and positively related to self-care behaviors ($r = .318$, $P < .001$) (Table 7). Self-esteem is able to explained 10.1% of the variance in self-care behaviors score. This means that pregnant women with pregnancy-induced hypertension with higher self-esteem score should have better self-care behaviors score. On the contrary, those with lower self-esteem should have poorer self-care behaviors. It could be explained that self-esteem is an important factor that can enhance a person's motivation and self-confidence to take

care of themselves and to search for the knowledge concerning self-care practice (Supanee pannoi & Kannika Suwanakod, 1986:959-960). Orem (1995: 215) stated that self-esteem is one of the foundational capabilities and disposition, and this is essential for self-care. Coopersmith (1967) found that one with high self-esteem is generally happier, more independent, more self-confident, less anxious, and more effective in meeting environmental demand than those with low self-esteem. People with low self-esteem are likely to be alienate and feel incapable of controlling their lives. Muhlenkamp & Sayles (1986:334-338) found that self-esteem in adults have a positive relationship with health practices. This is congruent with the study of Sopit Suwanvela (1994) which found that self-esteem had a positive relationship with self-care behaviors of postpartum adolescent mothers. Similarly, Kamonpun Homnan (1996) found that self-esteem was able to predict self-care behaviors of the elderly.

Parity The results showed that parity was significantly and negatively related to self-care behaviors ($r = -.215$, $P < .01$). It was the second factor entered into a regression equation concurrently with self-esteem. Parity was able to explained 5.4% more variance in self-care behaviors scores. This meant that pregnant women with pregnancy-induced hypertension with multiparity would have poorer self-care behaviors than those who were non-parity. The results were consistent with Bash (1981: 57) who stated that multiparity may have less attention for self-care than those in the first pregnancy. However, Orathai Tumgunma (1997) found that there was no difference in health promoting behaviors of high-risk pregnant women in different parities. Moreover, Unjit Boonsom (1997) showed that experienced women have better self-care behaviors than those who are pregnant for the first time. This can be explained that 25% of the multiparity women in this study had a history of pregnancy-

induced hypertension and this complication did not bring about serious condition to the women and their fetuses and did not cause any pain or discomfort. Therefore, they may not aware of the danger of the complication and were not excited in pregnancy that led to have poorer self-care behaviors than those in the first time pregnancy. On the contrary, the women who had non-parity in this study may excited to be a mother, therefore, they pay attention on their pregnancies and fetuses. Then they had better self-care behaviors than those who were multiparity.

Duration of being diagnosed was significantly and positively associated with self-care behaviors ($r = .187$, $P < .01$). It was the third factor entered to the regression equation concurrently with self-esteem and parity. Duration of being diagnosed was accounted for additional 3.3% of the variance in self-care behaviors scores. This meant that pregnant women with pregnancy-induced hypertension with a long duration of being diagnosed would have good self-care behaviors. On the contrary, those with a short duration of being diagnosed would have poor self-care behaviors. At the time the women knew the diagnosis, they may not know how to cope with the situation. Later they may received more information from health care provider. The longer they were ill, the more time they had learn how to cope with the problem of undertaking self-care activities, to increase self-confidence to perform self-care behaviors. Similarly, Glasgow, et al. (1987: 404-405) found that the duration of illness had a relationship with the therapeutic compliance behaviors. This corresponds with the study of Tidatip Chaisri (1998) and Somsuk Singhapanjanatee (1997) which found that duration of illness could predict the health promotion behaviors of hypertension patients, and quality of life of the elderly with hypertension. Thus, duration of being diagnosed could explained the variability of self-care behaviors.

The other factors such as age, education, and family income, were not chosen into the regression equation due to the following reasons:

Age The results showed that there was no relationship between age and self-care behaviors. It referred to the difference in age that did not cause a difference in self-care behaviors. Most of the subjects (90.6%) were adults, with more than 20 years of age. They were assumed to have maturity and development in self-care to able to assess the situation, decide and choose the ways to have self-care and to take responsibility to perform self-care behaviors. More than half of the subjects, 52.2% received information about pregnancy-induced hypertension, 25% of multiparity had a history of pregnancy-induced hypertension, 6.7% had been admitted due to pregnancy-induced hypertension. Therefore, the subjects received information about pregnancy-induced hypertension and had good self-care behaviors. In addition, age had a positive relationship with family income, parity, duration of being diagnosed, and self-esteem at a statistically level ($P < .01$, .001, .01 and .01 respectively). Therefore, the variability of self-care behaviors score due to age may be accounted for by other factors that significantly related to age. Similarly, Pawinee Pokasinjumroon (1995) found that there was no relationship between age and self-care behaviors of Thai Muslim pregnant women with pregnancy-induced hypertension.

Education The results showed that there was no relationship between education and self-care behaviors. It referred to the difference in educational level that did not cause a difference in self-care behaviors. This could be because the questions in the questionnaires relating to self-care behaviors of pregnant women were not directly related to knowledge in general. The subjects received advice from the health care team on how to take care themselves properly during their pregnancy.

Moreover, they may know how to self-care themselves from various sources, therefore, they could perform good self-care behaviors regardless of their educational level. This is congruent with the study of Mayuree Nirattharadorn (1996) which found that educational level could not jointly predict the health promoting behaviors of pregnant adolescents. Nevertheless, Pawinee Pokasinjumroon (1995) found that educational level had a positive relationship with self-care behaviors of Thai Muslim pregnant women with pregnancy-induced hypertension.

Family income The study revealed that there was no relationship between family income and self-care behaviors. It referred to the difference in family income that did not cause a difference in self-care behaviors. This can be explained in that income is an important factor regarding to the basic necessities of life and also for the self-care potential of the pregnant women. Other factors might have more influence on the self-care behaviors of this group than family income, for example, the family system, support from relatives or other significant persons, or recommendations and assistance from the medical personnel. Furthermore, the health system with social security cards can reduce the cost of hospitalization. It was shown that this group of pregnant women could obtain benefits and resources that were sufficient for their daily life requirements. Unjit Boonsom (1997) found that pregnant women with different incomes had no different in health promoting behaviors. However, Supawadi Wayuhuerd (1993) found that family income had a relationship with self-care behaviors in pregnant adolescents.

The remaining 81.2% of variances of the self-care behaviors cannot be explained in this study. They could be explained by other factors that were not included in this study.

Considering Orem's self-care model, which was used as the framework for this study, it can be concluded that the result of the study partly supported the model. Three factors accounted for the variability of the self-care behaviors of the pregnant women with pregnancy-induced hypertension: self-esteem, parity and duration of being diagnosed. The remaining three factors: age, education, and family income could not account for the variability of the self-care behaviors of pregnant women with pregnancy-induced hypertension.

CHAPTER VI

CONCLUSION

This study is a descriptive research aimed to examine self-esteem and self-care behaviors in pregnant women with pregnancy-induced hypertension. Besides, it was designed to determine factors affecting the sample's self-care behaviors. These factors were self-esteem, age, education, family income, parity and duration of being diagnosed. The subjects were 180 pregnant women with pregnancy-induced hypertension who attended high risk clinic of antenatal care unit or had been admitted at Siriraj Hospital, Rajavithi Hospital, Phramongkutkloa Hospital, and Chulalongkorn Hospital. They were selected by the purposive sampling technique. Data were collected using demographic data questionnaire, self-esteem questionnaire, and self-care behaviors questionnaire. They were analyzed by SPSS for windows. The scores of self-esteem and self-care behaviors were presented by percentage means and standard deviations. Pearson product moment correlation and multiple regression analysis were used to explain the association between predictor variables and self-care behaviors.

Summary of the Study

1. It was found that the majority of subjects were between 25-29 years old, 47.8% had a primary education, 52.2% were labor worker, 69.4% had family income lower than 10,000 baht per month, 95% were married, 57.8% had non-parity, 93.3% had a

gestational age in the third trimester. Most of the subjects (70%) had mild precclampsia, 78.9% had duration of being diagnosed for 1-4 weeks, 52.2% received information about pregnancy-induced hypertension, 93.3% had not been hospitalized due to pregnancy-induced hypertension, 75% of multiparity had no history of pregnancy-induced hypertension.

2. Almost pregnant women with pregnancy-induced hypertension (96.7%) had high or rather high level of self-esteem. Was only 3.3% of the subjects at a rather low level of self-esteem.

3. A total mean score of self-care behaviors was at a rather good level. Considering each subscale, it was found that mean scores of all three subscales were also at a rather good level including universal self-care subscale, developmental self-care subscale, and health-deviation self-care subscale.

4. Self-esteem, parity, and duration of being diagnosed were able to explain 18.8% of the variance of self-care behaviors of the pregnant women with pregnancy-induced hypertension.

Implications and Recommendations

The results of the study suggested that nurses should screen pregnant women with pregnancy-induced hypertension by parity, duration of being diagnosed and self-esteem. Then they should develop an intervention program to increase the women's self-esteem and self-care behaviors.

Implication and Application of Research Findings

1. Nurses should be assess self-esteem of pregnant women with pregnancy-induced hypertension in order to screen the women who have low self-esteem, then,

initiate an intervention program to teach these women about how to self-care themselves. The women should be emphasized about the importance of self-care. Then, they should be assessed knowledge of taking of themselves during pregnancy with pregnancy-induced hypertension. Later, they should be provided with the knowledge about self-care that they are lack of. The women should be emphasized about some activities such as, exercise, seeking knowledge related to pregnancy, drinking milk, releasing anxiety, taking enough sleep. The teaching program may use flip chart, slides, video to increase the women's knowledge and understanding.

Furthermore, nurse should show appreciation or praise the women when they self-care of themselves well. The women should be supported and encouraged to do self-care activities. Then, they will be proud of themselves, feel confidence and competence. These emotion will reinforce the women to practice more self-care. Moreover, nurse should provide time to the women to ask or discuss their problems. Besides, nurse should respect, be polite, be friendly to the women to make them have more self-esteem, feel important. These will make the women more interested to self-care themselves.

2. Nurses may help pregnant women with pregnancy-induced hypertension to form self-help group. The group can help each member to learn, encourage and support each others that will be facilitated by nurses. The women may be able to define their problems and find the way to cope with it in order to self-care themselves.

Implications for Further Studies

This study found that self-esteem and duration of being diagnosed were positively associated with self-care behaviors, parity was negatively associated with

self-care behaviors in pregnant women with pregnancy-induced hypertension. Then, nurses should initiate an intervention program in order to increase self-esteem and self-care behaviors in pregnant women. Then compare self-esteem and self-care behaviors between a group of pregnant women with pregnancy-induced hypertension that participate in an intervention program and those of a group that is not on the program.

BIBLIOGRAPHY

Al-Bark, Mohammed. (1991). Self-esteem and socioeconomic background: The relationship between self-esteem and work. Dissertation Abstracts International, 52 (2) Aug., 688-A.

Atkinson, L.D., & Murray, M.E. (1992). Fundamentals of nursing: A nursing process approach. New York: Mc Graw-Hill.

Bash, D.B., & Winifred, A. (1981). The nurse and the childbearing family. New York: John Wiley.

Benson, R.C., & Pernoll, M.L. (1994). Handbook of obstetrics and gynecology. (9th ed.). St.Louis: Mc.Graw-hill, Inc.

Branden, N. (1983). Homoning the self. Toronto: Bantam Book.

Burke, M.E., & Poole, J. (1996). Common perinatal complications. In K.R.Simpson, & P.A.Creehan (Eds.), Perinatal nursing (pp. 110-146). Philadelphia: Lippincott-Raven.

Byrne, C., & Hunsberger, M.M. (1989). Concepts of illness: Stress, crisis, and coping. In R.L.R.Foster, M.M.Hunsberger, & J.J.T.Anderson (Eds.), Family-centered-nursing care of children(pp. 703-724). Philadelphia: W.B.Saunders.

Cashion, K. (1999). Pregnancy at risk: Gestational conditions. In D.L. Lodermilk, S.E. Perry, & I.M. Bobak (Eds.), Maternity nursing (5th ed., pp. 643-653). St.Louis: Mosby.

Clark, A.L., Affonso, D., & Harris, T. (1979). Childbearing: A nursing perspective. (2nd ed.). Philadelphia: F.A.Davis.

Coopersmith, S. (1967). The antecedents of self-esteem. San Francisco, WH Freeman and company.

Cope, D.G. (1992). Self-esteem and the practice of breast self examination. Western Journal of Nursing Research, 14 (5), 618-631.

Cunningham, F.G., et al. (1997). Williams obstetrics. (20th ed.). Connecticut: Appleton & Lange.

Glangeaud, F.M. (1994). Psychological stress facters related to prenatal hospitalization. Journal-Gynecology-Obstetrics-Biological-Reproductive of Paris, 23(1994), 289-293.

Glasgow, R.E., McCaul, K.D., & Schafer, L. (1987). Self-care behaviors and glycemic control in type I diabetes. Journal of Chronic Disease, 40 (January-June), 399-412.

Ires, H.T., Gross, S.S., Werthamer-Lasson, L.A., & Koldner, K.B. (1994). Self-esteem of young adults with chronic health condition: Apprising the effects of perceived impact. Developmental and Behavioral Pediatrics, 15(6), 409-415.

Kemp,V.H., & Page,C. (1987). Maternal self-esteem and prenatal attachment in high-risk pregnancy. Maternal-child Nursing Journal, 16 (Fall), 195-200.

Knuppel, R.A., & Drukker,J.E. (1993). High-risk pregnancy: A team approach. (2nd ed.). Philadelphia: W.B. Saunders.

Leicht, T.G., & Harvey, C.J. (1999). Hypertensive disorders in pregnancy. In L.K. Mandeville, & N.H. Troiano (Eds.), High-risk & critical care: Intrapartum nursing (2nd ed., pp. 159-172). Philadelphia: Lippincott.

Lowenstein, V., & Rinehart, J. (1981). Psychosocial factors related to health maintenance behaviors of pregnant women. In S.D. Krampitz, & N. Pavlovich (Eds.), Reading for nursing research (pp. 246-257). St.Louis: The C.V. Mosby Company.

Marino, L.B., & Kooser, J.A. (1981). The psychosocial care of cancer clients and their families: Period of high-risk. Cancer Nursing. St.Louis, Marino: The C.V. Mosby company.

Meisenhelder, J.B. (1986). Self-esteem in women: The influence of employment and perception of husband appraisal. Image: Journal of Scholarship, 18 (1), 8-13.

Muhlenkamp, A.F., & Sayles, J.A. (1986). Self-esteem, social support, and positive health practices. Nursing Research, 35 (6), 334-338.

Newman, V., & Fullerton, J.T. (1990). Role of nutrition in the prevention of preeclampsia: Review of the literature. Journal of Nurse-Midwifery, 35 (5), 282-291.

Noris, J., & Kunes-Connell, M. (1985). Self-esteem disturbance. Nursing Clinics of North America, 20 (December), 745-761.

Novak, J.C., & Broom, B.L. (1995). Maternal and child health nursing. (8th ed.). St.Louis: Mosby.

O'Brien, P. (1998). High-risk pregnancy and neonatal care. Critical Care Nursing Clinics of North America, 10 (3), 350-355.

Olds, B., et al. (1980). Obstetric Nursing. California: Addison Wesley.

Orem, D.E. (1995). Nursing: Concepts of practice. (5th ed.). St.Louis: Mosby-Year Book.

Pender, N.J. (1982) Health promotion in nursing practice. (2nd ed.). Norwalk: Appleton & Lange.

_____. (1996). Health promotion in nursing practice. (3rd ed.). Stamford, Connecticut: Appleton & Lange.

Porapakkham, S. (1979). An epidimiologic study of eclampsia. Obstetrics and Gynecology, 54 (July), 26-30.

Roberts, J. (1994). Current perspectives on preeclampsia. Journal of Nurse-Midwifery, 39 (2), 70-90.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton University Press.

_____.(1989). Society and the adolescent self-image. Connecticut: Wesleyan University Press.

Roy, S.C. (1976). Introduction to nursing: An adaptation model. New Jersey : Prentice Hall.

Sherwen, L.N., Scoloveno, M.N., & Weingarten, C.T. (1995). Nursing care of the childbearing family. (2nd ed.). Norwalk, Connecticut: Appleton & Lange.

Sinsuksai, N. (1998). The relative contributions of maternal demographics, social support, stress, and maternal self-efficacy to home environment of 6-12-month-old infants of Thai mothers. Doctoral dissertation, University of Texas at Austin,USA.

Steiger, N.J., & Lipson, J.G. (1985). Self-care nursing: Theory and practice. Bowie,Md: Brady Communication.

กนกวรรณ ตั้งวุฒิกร. (2530). (Kanogwan Tangvutikorn, 1986) การเปรียบเทียบการปฏิบัติตนของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงที่ควบคุมอาการได้และที่ควบคุมอาการไม่ได้. วิทยานิพนธ์ปริญญาครุศาสตรมหาบัณฑิต, ภาควิชาพยาบาลศึกษา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.

กมลพรรณ หอมนาน. (2539). (Kamonpun Homnan, 1996) ความสัมพันธ์ระหว่างความรู้สึกมีคุณค่าในตนเอง การรับรู้สมรรถนะในตนเองกับพฤติกรรมการดูแลตนเองของผู้สูงอายุ. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลผู้ใหญ่ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

กรรณิการ์ กันธะรักษา. (2527). (Kunnika Kuntharuksa, 1984). การศึกษาความสัมพันธ์ระหว่างความเชื่ออำนาจภายในภายนอกตนเกี่ยวกับสุขภาพอนามัย กับพฤติกรรมการปฏิบัติเพื่อดำรงไว้ซึ่งภาวะสุขภาพในหญิงตั้งครรภ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

จิรภา หงษ์ตระกูล. (2532). (Jirapa Hongtrakul, 1989) ความสัมพันธ์ระหว่างปัจจัยบางประการแรงสนับสนุนทางสังคมกับความสามารถในการดูแลตนเองในผู้ป่วยความดันโลหิตสูงชนิดไม่ทราบสาเหตุ. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

จุฑาทิพย์ ซื่อสัตย์. (2537). (Jutatip Suesat, 1994) ความสัมพันธ์ระหว่างการรับรู้เกี่ยวกับโรค การสนับสนุนจากคู่สมรส กับความร่วมมือในการปฏิบัติตนตามแผนการรักษาของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ชวลี โฆษิตทาภิวัธน์. (2534). (Chawalee Kositapiwat, 1991) ความสัมพันธ์ระหว่างปัจจัยคัดสรร ความสามารถในการดูแลตนเอง และภาวะสุขภาพในผู้ป่วยโรคต้อหินชนิดเรื้อรัง. วิทยานิพนธ์ปริญญาวิทยาศาสตร มหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ธวัชชัย วรพงศธร. (2532). (Tawatchai Vorapongsathorn, 1989) ข้อพิจารณาการใช้สถิติการถดถอยพหุสำหรับงานวิจัย. วารสารวิทยาศาสตร์การแพทย์, 3(1), 55-62.

ธิดาทิพย์ ชัยศรี. (2541). (Tidatip Chaisri, 1998). การศึกษาพฤติกรรมส่งเสริมสุขภาพของผู้ป่วยโรคความดันโลหิตสูงชนิดไม่ทราบสาเหตุ. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลผู้ใหญ่ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

นวลขนิษฐ์ ลิมปนวัสส์. (2531). (Nuankanit Limpanavas, 1988) ศึกษาความสัมพันธ์ระหว่างการรับรู้การเปลี่ยนแปลงทางกายภาพและจิตสังคมกับพฤติกรรมการดูแลตนเองในผู้ป่วยมะเร็ง

บริเวณศีรษะและคอ. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

เพียงเพ็ญ จันทรชนะ. (2533). (Piengpen Chanchana, 1990) ผลการสอนอย่างมีแบบแผนต่อพฤติกรรมการดูแลตนเองและภาวะสุขภาพในหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ภาวินี โภคสินจำรูญ. (2538). (Pawinee Pokasinjumroon, 1995) ความสัมพันธ์ระหว่างความเชื่อด้านสุขภาพกับพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ชาวไทยมุสลิมที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

มยุรี นิรัตธราดร. (2539). (Mayuree Nirattharadorn, 1996) การศึกษาการรับรู้ประโยชน์ การรับรู้อุปสรรคของการส่งเสริมสุขภาพและพฤติกรรมการส่งเสริมสุขภาพของหญิงตั้งครรภ์วัยรุ่น. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

เยาวลักษณ์ มหาสิทธิวัฒน์. (2529). (Yaowalak Mahasittiwat, 1986) ความสัมพันธ์ระหว่างการรับรู้การเปลี่ยนแปลงทางกาย จิต สังคม ความรู้สึกมีคุณค่าในตนเองและพฤติกรรมสุขภาพของผู้สูงอายุ. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ฤดี ปุ่งบางกระดี่. (2540). (Rudee Pungbangkadee, 1997) การศึกษาการรับรู้ภาวะสุขภาพ และพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์วัยรุ่น. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

วรรณระวี อัคนิจ. (2534). (Wanrawee Aukanit, 1991) ความรู้สึกมีคุณค่าในตนเอง และการดูแลตนเองในผู้ป่วยโรคปอดอุดกั้นเรื้อรัง. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ศิริวิทย์ หลิ่มโตประเสริฐ. (2534). (Sirivit Limtoprasert, 1991) ความสัมพันธ์ระหว่างการดูแลตนเองของหญิงตั้งครรภ์กับความรู้ การรับรู้เกี่ยวกับการตั้งครรภ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ศุภาวดี วายุเหือด. (2536). (Supawadi Wayuhuerd, 1993) ความสัมพันธ์ระหว่างความรู้สึกมีคุณค่าในตนเอง การสนับสนุนทางสังคม กับพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

สมจิต ปทุมานนท์. (2532). (Somchit Pathumanon, 1989) ความเชื่ออำนาจภายใน-ภายนอกตนด้านสุขภาพ ปัจจัยบางประการทางลักษณะประชากร กับประสิทธิผลการสอนหญิงมีครรภ์ในการดูแลตนเองด้านอนามัยแม่และเด็ก. วิทยานิพนธ์ปริญญาสาธารณสุขศาสตรดุษฎีบัณฑิต, สาขาการพยาบาลสาธารณสุข บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

สมจิต หนุเจริญ. (2536). (Somchit Hanuchalearnkul, 1993) การดูแลตนเอง: ศาสตร์และศิลปะทางการพยาบาล (ฉบับปรับปรุงแก้ไขครั้งที่ 1). กรุงเทพฯ: วี.เจ.พริ้นติ้ง.

สมสุข สิงหปัญจนที. (2540). (Somsuk Singhapanjanatee, 1997). คุณภาพชีวิตของผู้สูงอายุที่มีความดันโลหิตสูงชนิดไม่ทราบสาเหตุ. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลผู้ใหญ่ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

สำนักงานปลัดกระทรวงสาธารณสุข. กองสถิติสาธารณสุข. (2539). (Department of Public Health Statistic, 1996) สถิติสาธารณสุข พ.ศ.2539. กรุงเทพฯ: โรงพิมพ์องค์การสงเคราะห์ทหารผ่านศึก.

สุธีรัตน์ แก้วประโลม. (2538). (Suteerat Kealpralom, 1995) ความสัมพันธ์ระหว่างความรู้สึกมีคุณค่าในตนเอง การสนับสนุนทางสังคม กับพฤติกรรมการดูแลตนเองของผู้ป่วยเบาหวานสูงอายุ โรงพยาบาลอุตรดิตถ์ อ.เมือง จ.อุตรดิตถ์. วิทยานิพนธ์ปริญญาสาธารณสุขศาสตร มหาบัณฑิต, บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

สุปาณี พันธ์น้อย และกรรณิการ์ สุวรรณโคต. (2529). (Supanee Pannoi & Kannikar Suwanakode, 1986). การพยาบาลในภาวะสุขภาพอนามัยผิดปกติ. ในเอกสารการสอนชุดวิชามโนมติและกระบวนการพยาบาล หน่วยที่ 8-13: (หน้า 959-961). กรุงเทพฯ: หนึ่งเจ็ดการพิมพ์.

สุพัตรา ศิริโชติยะกุล และธีระ ทองสง. (2541). (Supattra Sirishotiyakul & Teera Tongsong, 1998) ความดันโลหิตสูงขณะตั้งครรภ์. ใน ธีระ ทองสง และชเนนทร์ วนาภิรักษ์ (บรรณาธิการ), สูติศาสตร์ (ฉบับเรียบเรียงครั้งที่ 4, หน้า 262-276). กรุงเทพฯ: พี.บี.ฟอเรนบุ๊คส์ เซ็นเตอร์.

สุมิตตา สว่างทุกข์. (2539). (Sumitta Swangtook, 1996) การศึกษาพฤติกรรมการปฏิบัติตนเพื่อคงไว้ซึ่งภาวะสุขภาพของหญิงตั้งครรภ์ที่ฝากครรภ์ไม่ครบตามเกณฑ์. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

สุรีย์ โอภาสศิริวิทย์. (2531). (Suree Opassiriwit, 1988). ความสัมพันธ์ระหว่างการรับรู้และปัจจัยบางประการกับการดูแลตนเองของหญิงตั้งครรภ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาการพยาบาลสาธารณสุข. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

สุวชัย อินทรประเสริฐ. (2530). (Suwachai Intaraprasert, 1987) คู่มือตั้งครรภ์และเตรียมคลอด. กรุงเทพฯ: อักษรสัมพันธ์.

เสาวภา วิชิตวาที. (2534). (Saowapa Vichitvatee, 1991) ความสัมพันธ์ระหว่างความรู้สึกมีคุณค่าในตนเอง การสนับสนุนทางสังคม กับพฤติกรรมการดูแลตนเองของผู้ป่วยที่สูญเสียแขนขา. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

โสภิต สุวรรณเวลา. (2537). (Sopit Suwanvala, 1994) ความสัมพันธ์ระหว่างความรู้สึกมีคุณค่าในตนเอง การสนับสนุนทางสังคม กับพฤติกรรมการดูแลตนเองของมารดาวัยรุ่นหลังคลอด. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

อรทัย ธรรมกันมา. (2540). (Orathai Tumgumma, 1997) การสนับสนุนจากคู่สมรส และพฤติกรรมการส่งเสริมสุขภาพในหญิงตั้งครรภ์ที่มีภาวะเสี่ยง. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

อังคณา นวลยง. (2535). (Aungkana Nualyong, 1992) ความสัมพันธ์ระหว่างการรับรู้เกี่ยวกับโรค การสนับสนุนจากคู่สมรส กับความร่วมมือในการปฏิบัติตนตามแผนการรักษาของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

อุ่นจิตต์ บุญสม. (2540). (Unjit Boonsom, 1997) การศึกษาพฤติกรรมการส่งเสริมสุขภาพของหญิงตั้งครรภ์. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

อุษา ฤทธิ์ประเสริฐ. (2540). (Usa Ritprasert, 1997). พฤติกรรมการดูแลตนเองในระยะหลังคลอดของมารดาวัยรุ่น. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

APPENDIX A

The Name of Validators

The name of qualified persons who examined the validity of the self-esteem questionnaire and self-care behaviors questionnaire for pregnant women with pregnancy-induced hypertension.

1. Assistant Professor Dittakarn Boriboonhirunsarn
   Department of Obstetric and Gynecology
   Faculty of Medical, Siriraj Hospital, Mahidol University.
2. Assistant professor Siriratana Sugeetorn
   Department of Obstetric and Gynecology Nursing
   Faculty of Nursing, Mahidol University
3. Assistant Professor Yaowalax Serisathien
   Department of Obstetric and Gynecology Nursing
   Faculty of Nursing, Mahidol University
4. Assistant Professor Doctor Yajai Sittimongkol
   Department of Mental Health and Psychiatric Nursing
   Faculty of Nursing, Mahidol University
5. Mrs. Supannee Lertpadungkulchai
   Head nurse of Juthathut 8 North, Siriraj Hospital

APPENDIX B

Consent Form

วันที่____เดือน_____พ.ศ._____

ข้าพเจ้า_____อายุ_____ปี อาศัยอยู่บ้านเลขที่_____ ถนน_____แขวง_____เขต_____จังหวัด_____ ได้รับทราบรายละเอียดของโครงการวิจัยเรื่อง ความรู้สึกมีคุณค่าในตนเอง และพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์

ข้าพเจ้ามีสิทธิ์ที่จะของดการเข้าร่วมการวิจัยนี้ และการงดการเข้าร่วมการวิจัยนี้จะไม่มีผลกระทบต่อการได้รับบริการหรือการรักษาที่ข้าพเจ้าหรือผู้เกี่ยวข้องมีสิทธิ์จะได้รับแต่ประการใด อีกทั้งได้รับทราบจากผู้วิจัยว่า จะไม่เปิดเผยข้อมูลหรือผลการวิจัยของข้าพเจ้าหรือผู้เกี่ยวข้องกับข้าพเจ้าเป็นรายบุคคลต่อสาธารณชน

ข้าพเจ้าและผู้เกี่ยวข้องกับข้าพเจ้าได้รับทราบข้อมูลจากผู้วิจัยจนหมดข้อสงสัยโดยตลอดแล้ว และยินดีตอบแบบสอบถามของการวิจัยนี้ จึงได้ลงลายมือชื่อไว้เป็นหลักฐานต่อหน้าพยาน

ลงชื่อ_____ผู้ยินยอมหรือผู้แทนโดยชอบธรรม

( )

ลงชื่อ_____หัวหน้าโครงการวิจัย

( )

ลงชื่อ_____พยาน

( )

ลงชื่อ_____พยาน

( )

APPENDIX C

Instrumentation

ส่วนที่ 1 แบบสัมภาษณ์ข้อมูลส่วนบุคคลของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์

คำชี้แจง เติมคำในช่องว่าง และขีดเครื่องหมาย √ ลงในช่อง ( ) หน้าข้อความที่ตรงตามความเป็นจริง

1.1 ข้อมูลจากการสัมภาษณ์

1. อายุ _____ ปี
2. ระดับการศึกษา สูงสุด _____
3. อาชีพ_____

.

.

.

1.2 ข้อมูลจากประวัติการฝากครรภ์

7. G____P____A____อายุครรภ์ปัจจุบัน _____ สัปดาห์ ความดันโลหิต_____mmHg
8. การวินิจฉัยโรค_____
9. เริ่มมาฝากครรภ์เมื่ออายุครรภ์_____สัปดาห์ ความดันโลหิต_____mmHg

.

.

.

14. ประวัติการตั้งครรภ์ในอดีต

( ) เคยได้รับการวินิจฉัยว่ามีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ชนิด____

( ) ไม่เคยได้รับการวินิจฉัยว่ามีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์

ส่วนที่ 2 แบบวัดความรู้สึกมีคุณค่าในตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์

คำชี้แจง แบบสอบถามชุดนี้มีวัตถุประสงค์เพื่อสอบถามเกี่ยวกับความรู้สึกหรือความคิดเห็นที่มีต่อตัวท่านเองตั้งแต่เริ่มตั้งครรภ์จนถึงปัจจุบัน โปรดอ่านข้อความต่อไปนี้และทำเครื่องหมาย √ ลงในช่องที่ตรงกับความรู้สึกที่แท้จริงของท่านมากที่สุดไม่มีคำตอบถูกหรือผิดแต่อย่างใด ในแต่ละข้อคำถามให้ท่านเลือกตอบเพียงข้อเดียว (กรุณาตอบทุกข้อ) คำตอบมีให้เลือกดังนี้

ตรงกับความรู้สึกมากที่สุด หมายถึง ข้อความในประโยคนั้นตรงกับความรู้สึกของท่านมากที่สุด
ตรงกับความรู้สึกมาก หมายถึง ข้อความในประโยคนั้นตรงกับความรู้สึกของท่านมาก
ตรงกับความรู้สึกน้อย หมายถึง ข้อความในประโยคนั้นตรงกับความรู้สึกของท่านน้อย
ไม่ตรงกับความรู้สึกเลย หมายถึง ข้อความในประโยคนั้นไม่ตรงกับความรู้สึกของท่านเลย

ข้อความ	ตรงกับความรู้สึกมากที่สุด	ตรงกับความรู้สึกมาก	ตรงกับความรู้สึกน้อย	ไม่ตรงกับความรู้สึกเลย
1.ถ้ามองทุกอย่างในตัวฉันแล้ว ฉันรู้สึกพอใจในตัวเอง				
*2.บางครั้งฉันคิดว่าฉันไม่มีอะไรดีเลย				
3.ฉันคิดว่าฉันมีอะไรดี อยู่ในตัวพอสมควร				
.				
.				
.				
10.ฉันมองตนเองในแง่ดี				

<u>ส่วนที่ 3</u> แบบสอบถามพฤติกรรมการดูแลตนเองของหญิงตั้งครรภ์ที่มีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์

<u>คำชี้แจง</u> แบบสอบถามชุดนี้มีวัตถุประสงค์เพื่อสอบถามเกี่ยวกับการกระทำหรือการปฏิบัติตนด้านสุขภาพอนามัยในระยะตั้งครรภ์ของท่าน กรุณาพิจารณาว่าขณะที่ท่านมีภาวะความดันโลหิตสูงเนื่องจากการตั้งครรภ์ ท่านได้ดูแลตนเองอย่างไร โปรดอ่านข้อความต่อไปนี้และทำเครื่องหมาย √ ลงในช่องที่ตรงกับการปฏิบัติของท่านมากที่สุดเพียงคำตอบเดียว (กรุณาตอบทุกข้อ) แต่ละข้อไม่มีคำตอบถูกหรือผิด คำตอบมีให้เลือกดังนี้

ปฏิบัติเป็นประจำ หมายถึง ข้อความนั้นท่านกระทำสม่ำเสมอ หรือกระทำทุกครั้ง
ปฏิบัติค่อนข้างมาก หมายถึง ข้อความนั้นท่านกระทำค่อนข้างบ่อย แต่ไม่ทุกครั้ง
ปฏิบัติค่อนข้างน้อย หมายถึง ข้อความนั้นท่านกระทำเป็นบางครั้ง หรือกระทำเป็นส่วนน้อย
ไม่เคยปฏิบัติเลย หมายถึง ข้อความนั้นท่านไม่เคยกระทำเลย (กรุณาระบุเหตุผลที่ท่านไม่เคยทำด้วย)

การปฏิบัติตน	ปฏิบัติเป็นประจำ	ปฏิบัติค่อนข้างมาก	ปฏิบัติค่อนข้างน้อย	ไม่เคยปฏิบัติเลย	เหตุผล
1.ท่านอยู่ในสถานที่ที่มีอากาศถ่ายเทได้สะดวก ปลอดโปร่ง					
2.ท่านดื่มน้ำอย่างน้อยวันละ 8 แก้ว					
.					
.					
.					
38.ท่านบอกให้แพทย์หรือพยาบาลทราบ เกี่ยวกับอาการเปลี่ยนแปลงของตัวท่าน และทารกเมื่อมาตรวจครรภ์					

BIOGRAPHY

NAME	Miss Atchraporn Kitjaidure
DATE OF BIRTH	14 April 1966
PLACE OF BIRTH	Bangkok, Thailand
INSTITUTIONS ATTENDED	Mahidol University, 1984 - 1986
	Certificate in Nursing and Midwifery
	Ramkhamhaeng University, 1986 - 1993
	B.B.A. (General Management)
	Bangkok Nursing College, 1990 - 1992
	Diploma in Nursing and Midwifery
	Mahidol University, 1998 - 2000
	Master of Nursing Science
	(Maternal and Child Nursing)
POSITION & OFFICE	1986 - Present
	Rajavithi Hospital, Bangkok
	Position : Register Nurse