THE EFFECTS OF STRUCTURED INFORMATION ON PERCEIVED SELF-EFFICACY, OUTCOME EXPECTATION OF HEALTH BEHAVIORS AND OUTCOME OF PREGNANCY IN PREGNANT WOMEN WITH PREMATURE LABOR PAIN.

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ABSTRACT

The purpose of this quasi-experimental research was to investigate effects of structured information on perceived self-efficacy, outcome expectation of health behaviors, and outcome of pregnancy. The concept of self-efficacy proposed by Albert Bandura was used as the theoretical framework for this study.

Purposive sampling was used to select 50 pregnant women with premature labor pain, with 25 assigned to the experimental group and 25 to the control group. All of the women had attended antenatal clinics. They were admitted to the labor room at either Nakornpathom Hospital or Ramathibodi Hospital form June 2002 to March 2003. Those at Ramathibodi were transferred to the complication ward, those at Nakornpathom to obstetric-gynecology ward. The experimental group received structured information from the researcher together with information usually provided in the wards, while the control group received only the usual information from healthcare providers. Data were collected by using three questionnaires—the demographic characteristic questionnaire, the perceived self-efficacy questionnaire, and the outcome expectation of health behaviors questionnaire. Data analysis was conducted using the Chi square, Fisher's exact test, Independent t-test and ANCOVA.

The results revealed that pregnant women in the experimental group had significantly higher mean score of perceived self-efficacy ($t = -3.005$, $p < .004$) and outcome expectation of health behaviors ($t = -3.506$, $p < .001$) than of the control group. Also, it was found that the outcome of pregnancy was not statistically significantly different between both groups ($t = 1.346$, $p > .05$).

Based on the findings, it can be concluded that structured information encourages perceived self-efficacy and outcome expectation of health behaviors. Therefore, this nursing intervention should be allocated in nursing care.

KEY WORDS: STRUCTURED INFORMATION/ PERCEIVED SELF-EFFICACY/ OUTCOME EXPECTATION OF HEALTH BEHAVIORS/ OUTCOME OF PREGNANCY/ PREMATURE LABOR PAIN

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ผลการให้ข้อมูลอย่างมีแบบแผนต่อการรับรู้สมรรถนะแห่งตน ความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพและผลลัพธ์ของการตั้งครรภ์ของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด(THE EFFECTS OF STRUCTURED INFORMATION ON PERCEIVED SELF-EFFICACY, OUTCOME EXPECTATION OF HEALTH BEHAVIORS AND OUTCOME OF PREGNANCY IN PREGNANT WOMEN WITH PREMATURE LABOR PAIN.)

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บทคัดย่อ

การศึกษาครั้งนี้เป็นการวิจัยกึ่งทดลอง เพื่อศึกษาผลการให้ข้อมูลอย่างมีแบบแผนต่อการรับรู้สมรรถนะแห่งตน ความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพและผลลัพธ์ของการตั้งครรภ์ของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด ภายใต้กรอบทฤษฎีการรับรู้สมรรถนะแห่งตนของแบนดูรา การเลือกกลุ่มตัวอย่างเป็นแบบเฉพาะเจาะจง โดยกลุ่มตัวอย่างเป็นหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดที่นอนพักรักษาตัวในห้องคลอด ตึกสูติกรรม 3 และมาตรวจตามนัดที่คลินิกฝากครรภ์โรงพยาบาลรามาธิบดี และหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดที่นอนพักรักษาตัวในห้องคลอด ตึกสูตินรีเวชกรรม และมาตรวจตามนัดที่คลินิกฝากครรภ์ โรงพยาบาลศูนย์นครปฐม ระหว่างเดือนมิถุนายน 2545 ถึงมีนาคม 2546 จำนวน 50 ราย แบ่งเป็นกลุ่มทดลองและกลุ่มควบคุมกลุ่มละ 25 คน กลุ่มทดลองได้รับข้อมูลอย่างมีแบบแผนโดยผู้วิจัยร่วมกับการได้รับข้อมูลตามปกติ ในขณะที่กลุ่มควบคุมได้รับข้อมูลตามปกติ การเก็บรวบรวมข้อมูลโดยใช้แบบสอบถาม 3 ชุด ได้แก่ แบบสอบถามข้อมูลส่วนบุคคล แบบสอบถามการรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพ แบบสอบถามความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพ การวิเคราะห์ข้อมูลโดยใช้ Chi square, Fisher's exact test, Independent t-test และ ANCOVA

ผลการวิจัยพบว่า หญิงตั้งครรภ์ในกลุ่มทดลองคะแนนเฉลี่ยการรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพ ($t = -3.005$, $p < .004$) ความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพ ($t = -3.506$, $p < .001$) สูงกว่าหญิงตั้งครรภ์ในกลุ่มควบคุมอย่างมีนัยสำคัญทางสถิติ ส่วนผลลัพธ์ของการตั้งครรภ์ไม่มีความแตกต่างอย่างมีนัยสำคัญทางสถิติระหว่างกลุ่มทดลองและควบคุม ($t = 1.346$, $p > .05$)

ผลการวิจัยสนับสนุนว่า การให้ข้อมูลอย่างมีแบบแผน ส่งเสริมให้หญิงตั้งครรภ์รับรู้สมรรถนะแห่งตน ความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพ และสามารถใช้เป็นแนวทางในการพัฒนาคุณภาพในการให้การพยาบาลต่อไป

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CHAPTER 1
INTRODUCTION

Background and rationale of the study

Premature labor pain is a complication of obstetric condition that affects public health in every country. Thirteen years of research in USA found that the incidence rate of preterm labor has not declined (More & Freda, 1998: 201). In developing countries, the incidence of preterm labor accounted for 5 to 10% of pregnancy. In Thailand, according to the data of the Ministry of Public Health, among all morbidity causes of the in-patient complication during pregnancy, labor, delivery, puerperium, and other obstetric conditions, preterm labor ranks second. The number of in-patients admitted because of premature labor pain was 171,593 cases, which was equal to the rate of 319.4 per 100,000 population in the fiscal year 1995. In Bangkok, 33,188 cases were found, or 593.9 per 100,000 population (Health Information Division, Bureau of Health Policy and Planning, B.E. 2543). However, the data of the Ministry of Public Health did not represent inclusive and specific data of premature labor pain but showing only the incidence of preterm labor reported by certain hospitals such as Ramathibodi Hospital. Data gathered from 1997 to 2000 showed that the rate of women who delivered at 27-31 weeks was 0.8, 0.8, 0.8, and 0.9, respectively, while the rate of those who had delivery at 32-36 weeks was 7.3, 8.2, 8.8, 9.5, respectively (Faculty of Medicine, Ramathibodi Hospital, Statistics Unit, B.E., 2544). In each year, premature labor pain rate continues to increase as an end result of complex and varied factors that are not yet fully understood. Answers why premature labor pain has not inclined are not yet found either. However, it is more than certain that these problems affect physical and psychosocial well-being of both the fetuses and pregnant women. Also, the government has to waste a huge amount of money each year to cover treatment for women with premature labor pain and their fetus.

Premature labor pain causes a number of adverse effects on both the fetuses and pregnant women. The most important effect on neonatal respiratory system is

respiratory distress syndrome, which is a major cause of neonatal death. Another effect is patent ductus arteriosus. In addition, the hyperbilirubinemia and necrotinizing enterocolitis condition can also be found in the gastrointestinal system, and retinopathy can be found to affect the neurosensory system (Fuch, et al., 1993: 465- 475; Mandeville & Trioano, 1992: 58). Besides this, premature labor pain adversely affects pregnant women. The effects on pregnant women include physiological changes caused by the side effect of tocolytic drugs such as tachycardia, chest pain, headache, fatigue, nausea, vomiting, and diarrhea (Dickson, et al., 1994: 549). In terms of psychosocial effects, pregnant women will have a feeling of uncertainty, fear that their baby will not be normal, loneliness, and separation from home and family (Knupper & Drukher, 1993: 706). This can also lead to changes in lifestyle patterns such as eating, sleeping, having sexual relationship, and doing work-related activities, which may need to be reduced or adjusted, leading to disruptions in career, financial commitments, and other plans in life (Staiton, 1994: 24-25). These conditions affect self-efficacy regarding health behaviors, disruption of cognitive performance, thinking, decision-making, increased emotional liability, and default of assistance (Gupton & Heamam, 1994: 122-123; Schroeder, 1998: 45-49). It is possible that pregnant women may not be able to mobilize their ability to face with these changes. Thus, they need help from healthcare providers who can equip them with necessary information to improve their ability.

Need of information occurs in people who perceive a lack or need of necessary information. Individuals who lack information cannot perform action to achieve outcome of action (Meesukkhow, 1998: 3). Some studies found that pregnant women do not know the number of gestational weeks considered term pregnancy or possible health problems of the fetus (Freda, et al., 1991: 140). Furthermore, they can be confused about assessment of signs and symptoms of premature labor pain and labor pain (Freston, et al., 1997: 35; Paterson, et al., 1992: 367). It has been reported that the information mostly needed within the first 24 hours after hospitalization of pregnant women is the information about medical usage, health status, treatment and care, severity of disease, outcome of pregnancy, prevention of premature labor pain, psychological status, emotion, and feelings. Other needed information includes rules and regulations of the hospital, hospital environment, and medical instruments

(Gupton & Heaman, 1994: 118-124; Jankhow, 1997: 71-73). The lack of information about premature labor pain can lead to inhibition of health behavior, lack of observation of signs and symptoms, and delayed treatment (Freda & Moore, 1998: 202), which can cause unexpected outcome of pregnancy. For this reason, promoting health behaviors to prevent diseases and complications by providing structured information is one of the choices available in the present economic and public health system of the country.

Information giving is an important role of healthcare providers. Nevertheless, at present, nurses give only information based on the theories that have ever been studied, or they always use their view more than paying particular attention to the need of patients (Dodge, 1972: 502-512). Giving information is usually done by means of instruction alone or combined with a handbook or sheets. (Nootchalee Laipan, B.E. 2542: 5). This type of one-way information is less successful because patients usually forget the content taught to them (Jetter, 1992: 59-63), and this can lead to mistakes in practicing health behaviors or even complete ignorance of practice because they do not have enough confidence to carry out the practice (Rankin, 1996: 85). Therefore, using media and giving information to pregnant women should be done by means of participated learning, modeling, demonstration, and self-practice. The content must include information of illness which responds to patients' emotion (Johnson, 1989: 157-160; Khanjanasorn, 1993: 89). In so doing, pregnant women will be enabled to attain knowledge, maintain interests, and memorize steps of the practice. It will also help pregnant women to develop self-efficacy and outcome expectation of health behaviors to prevent premature labor pain and have appropriate self-care during premature contraction. These results may help make the pregnancy go on to term.

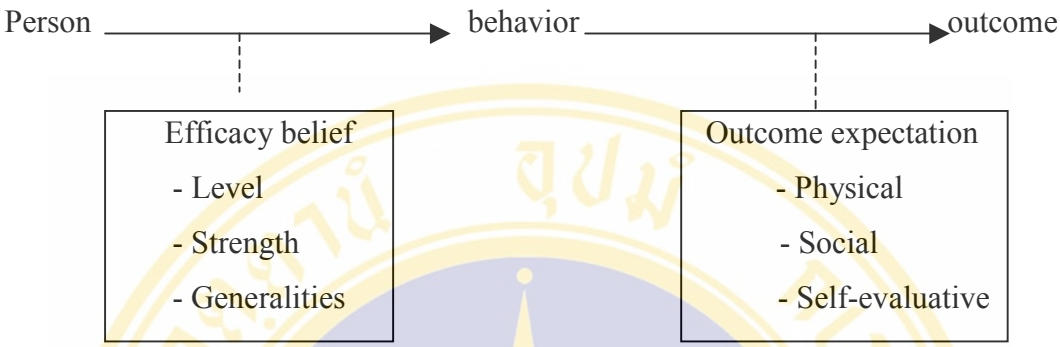
Health behaviors of pregnant women with premature labor pain are what pregnant women do to avoid illness or to perform self-care during illness to maintain health behaviors. Health behaviors make individuals believe in their ability to perceive self-efficacy and practice desirable behaviors, leading to certain outcome or outcome of expectation (Bandura, 1997: 13-14). Individual who have high self-efficacy will have self-care behavior, seeking information to prevent, control, or hold back high risk behaviors. They will also begin to search for information once they experience early symptoms faster than those who have low self-efficacy (Seeman & Seeman, 1983:

144; Stretcher, et al., 1986: 80). In other words, pregnant women who have high self-efficacy will be patience and try to perform health practice. Research in pregnant women who confronted pain in during labor found that pregnant women who had high self-efficacy in confronting pain at the stage of labor requested for analgesic less and endured pain longer (Manning & Wright, 1983: 426-431; Sosome, 1996: iv). Structured information applied based on self-efficacy theory is considered an important way to help pregnant women develop their self-efficacy, confidence in performing health behaviors while dealing with premature labor pain, and ways to protect themselves from recurrence of the condition. For example, one research study has offered support for the usefulness of structured information provided to increase knowledge of disease and self-care behaviors in diabetic pregnant women. The results indicated that pregnant women with diabetes mellitus who received structured information had higher scores of knowledge of the disease than pregnant women who received only formal information (Leadpadungkhunchai, 1995: iv).

A review of literature showed that there were only few studies, which investigated the influence of structured information on perceived self-efficacy, outcome expectation of health behaviors and outcome of pregnancy in pregnant women with premature labor pain. For this reason, the researcher felt the need to fill the gap in existing knowledge. In the present study which aimed to explore the effectiveness of structured information, the researcher developed a structured information program applying the self-efficacy theory proposed by Bandura to pregnant women with premature labor pain in order to understand their changing behaviors, confidence in new choice of behaviors, and health practice to go on to term pregnancy, all of which could have an effect on both the mother's and fetus' health status in the future.

Theoretical Framework

The present research was based on the self-efficacy theory of Albert Bandura (1997) as shown in Figure 1 below:



Figures 1: The relationship between self-efficacy belief and outcome expectancies from behavior (Bandura, 1997: 22)

Self-efficacy is defined as a person's feeling and thoughts about his/her own capability of accomplishing any giving task that is an ability to perform particular responses that affect the act of the person. Individuals do not have different capability, but the quality of their action can be different. The quality of action depends on self-efficacy in each situation (Evan, 1989, cited in Somphot Eamsupasit, B.E. 2541: 57-58). According to Bandura (1997: 42), self-efficacy varies on three dimensions, which could be assessed in pregnant women with premature labor pain as follows:

1. Level that task is ordered according to level of difficulty and self-evaluation of action. Pregnant women with premature labor pain have to face with more difficulty when trying to continue to reach term pregnancy than without having any complication during pregnancy. Another way, the health behaviors of women with risk pregnancy are more difficult to perform than those of women with normal pregnancy. If pregnant women have self-efficacy, they are expected to be able to perform appropriate self-care regardless of the premature labor pain they are experiencing.

2. Strength is the confidence in one's own ability in performing an activity. Even though there are plenty of obstacles, individuals with confidence will struggle to achieve their goal. In contrast, individuals who lack confidence in their ability tend to give up when face with obstacles. Pregnant women with premature labor pain usually face with emotional labile, lack of support, loss of control (Lynam & Miller, 1991:

126) and lack of knowledge about premature labor pain. These situations results in a decrease in desire and ability to practice health behaviors. Structured information will promote knowledge especially information about self and management of the preterm labor (Magpume, 1987: 43) that enables pregnant women to develop confidence in their self-efficacy to perform health behaviors.

3. Generalities of expectation refers to the realization of the ability of oneself based on past successes and the ability to do other similar activities in similar situations in the future. One study showed that pregnant women who had the experiences of dysmenorrhea, headache, and migraine perceive more pain relief during birth than pregnant women who did not have such experiences (Lowe, 1991: 475-463). Thus, it is expected that pregnant women who experience premature labor pain can use their experience to increase perceived self-efficacy to perform health behaviors.

Outcome of expectation is defined as a person's estimate that a given behavior will lead to certain outcome (Bandura, 1997: 79). Outcome expectation can take three major forms, each of which has both positive and negative effects (Bandura, 1997: 21-23):

1. Physical effects include pleasant sensory expectancies, and physical pleasure in the positive form and aversive sensory experience, pain, and physical discomfort in the negative form.

2. Social effects include, on the positive side, such social reactions of others as expressions of interest, approval, social recognition, momentary compensation, conferral of status, and power, whereas the negative side includes disinterest, disapproval, social rejection, censure, deprivation of privileges, and improved penalties.

3. Self-evaluation, on the positive side, includes such self-satisfaction sense of pride, while on the negative side includes self-sanction, self-dissatisfaction, and self-worth.

Self-efficacy and outcome expectation are related to psychosocial and emotional effects. A high sense of personal efficacy in a responsive environment that rewards valued accomplishment fosters aspiration, productive engagement in activities, and sense of fulfillment. Efficacious individuals who cannot gain valued outcome through personal accomplishments will not necessarily cease trying. On the

contrary, those with low perceived efficacy tend to quickly give up when their efforts fail to produce desired results (Bandura, 1997: 20-21). It is noteworthy that judgment of behavioral changes is associated with a high sense of personal efficacy and that outcome expectation tends to lead individuals to perform action. However, if persons have too high or low efficacy and only one side of outcome expectation, they tend not to perform action (Somphot Eamsupasit, B.E. 2541: 59).

Pregnant women who believe that health behavior practice has the effect on physical health will be able to go on to term pregnancy, with no complication, and with positive outcome expectation on physical and social conditions as well as self–evaluation will perform behaviors. One study found that self-esteem, one form of self-evaluation, played an important role on performing behavior. Individuals who had low self-esteem were unable to think of or do anything because they had no confidence, while those who had high self-esteem had confidence to do things (Tassanapoonchai, 1997: 39). Thus, outcome expectation plays an important role in motivating individuals to change their self-care behaviors (Supanun, 1996: 101-106).

The sources of self-efficacy based on the four principal sources of information (Bandura, 1997: 80-113) are as follows:

1. Enactive mastery experience is the most influential source of efficacy information because it provides the most authentic evidence of whether one can muster whatever it takes to succeed. Successes build a robust belief in one's personal efficacy. In pregnant women with premature labor pain, those who have physical and psychological discomfort such as lack of rest, pain from uterine contraction, and loss of body-image (Lynam & Miller, 1991: 127) are likely to have decreased self-efficacy. However, they can develop self-efficacy if they receive support and develop necessary skills by learning from other pregnant women's experience. Success leads to pride, self-efficacy, and readiness to perform other behaviors (Chowpreecha, 1998: 47). Kaplan and colleagues point out that self-efficacy is activity specific; if persons experience successes in any activity, they will have increased self-efficacy (Kaplan, et al., 1984: 223-242).

Developing enactive mastery experience can be done via self-assessment, which is a process of observation and identification of the characteristic of ones' behaviors that meet the goal. Self-assessment should be observed carefully, with

records of both stimuli and outcomes as records make known factors of self-regulator leading to change in behaviors (Bandura, 1989; cited by Hjelle & Ziegler, 1992: 349). Pregnant women can use self-assessment to develop enactive mastery experience by observing health behavior practices in each day. If they practice successful behaviors according to the goal previously set, they will have confidence and pride in self-efficacy to further perform health behaviors. Moreover, self-assessment does not only mean collecting information of goal behaviors but also helping behavioral changes (Patearng Pumpattarakham, B.E. 2535: 372).

2. Vicarious experience refers to noticing and watching a model that helps individuals realize their own abilities. The model must be similar to them so that the model can influence them to change their behaviors. The model can be either live or symbolic modeling. If pregnant women observe the model or others' behaviors which are similar to themselves, they can more easily develop perceived self-efficacy (Chowpreecha, 1998: 47-48). For example, a model can be used to develop individuals' problem-solving to encounter with the feeling of fear. Using a model similar to the individuals and in the same situations may enable them to realize their own abilities to overcome their fear, following what the model has shown to them. By the same token, pregnant women can observe and consider skills and health behaviors demonstrated by healthcare providers. When they perceive that healthcare providers are able to practice certain health behaviors, they may realize that they themselves are able to do the same thing. Furthermore, a participated symbolic model can be used. One study was conducted to investigate the effectiveness of a symbolic model to form self-efficacy in premature infants (Khowphai, 1998: 32) using a symbolic model of videos, books, and handbooks about premature infants. The research findings showed that a symbolic model encouraged perceived self-efficacy of the mothers who gave birth to a premature infant.

3. As for verbal persuasion, individuals can be persuaded by verbal means that they have the ability to do anything and can be successful, which is an easy and simple method. Bandura suggests that individuals should develop self-efficacy from enactive mastery and verbal persuasion. Hence, nurses can use verbal persuasion in a health information program provided to pregnant women to help them develop confidence. A study of perceived self-efficacy regarding AIDS prevention information

provided for pregnant women (Tassanapoonchai, 1997: 64) found that verbal persuasion about benefits of learning about the disease could help the subjects develop confidence to practice preventive measures. The rule of thumb is that verbal persuasion should be given when individuals are ready and the information is factual (Kannika Suwannakhot, B.E. 2527 cited by Khowphi, 1998: 26). In brief, verbal persuasion plays a crucial role in encourage pregnant women to develop perceived self-efficacy.

4. Physiological and affective state can be assessed based on stress and anxiety depending on physical arousals such as nausea, vomiting, or panic, in response to autonomic arousal during anticipation or experience of stress (Lowe, 1993: 142). Individuals who have stress, panic, or a high level of anxiety will have low confidence and avoid facing the situation or performing the behaviors. If individuals receive appropriated emotion arousal, they will have good behaviors. Premature labor pain is considered a situation that pregnant women face which comes with emotional labile, timing of the disease, outcome of pregnancy, and physical changes from tocolytic drugs. Furthermore, restricted activities and loss of privacy further develop stress and anxiety in pregnant women (Barnett, 1976: 351-358; Knupper & Druker, 1993:706). These situations affect to self-efficacy. Simply put, the higher the stress, the lower level of self-efficacy individuals have (Lowe, 1989, cited by Drummond & Rickwood, 1997: 615). Promoting self-efficacy in pregnant women with emotion arousal from premature labor pain can be done by offering encouragement in an intimately acquainted situation and using a symbolic model to decrease emotional arousals, while at the same fostering the sense of confidence (Bandura, 1977: 82-83).

In this study, the researcher gave structured information to pregnant women with premature labor pain by applying the self-efficacy theory including the four principal sources of information to obtain self-efficacy in health behaviors practice. Enactive mastery experience was applied in learning activities including assessment of signs and symptoms of premature labor pain, side-effects of tocolytic drugs, quickening, and self-assessment. Vicarious experiences were applied with the use of a symbolic model using a handbook for pregnant women with premature labor pain and a live model demonstrated by the researcher. Verbal persuasions were applied when suggestions were provided following the informational plan. Finally, physiological

and affective state was applied to help them release emotions with premature labor pain and by using modeling with a handbook. It is believed that giving information is one of the most important roles of nursing staff which can help pregnant women with premature labor pain to develop desirable self-efficacy and outcome expectation of health behaviors to continue to reach term pregnancy. The relationships between the variables are illustrated in Figure 2 below:

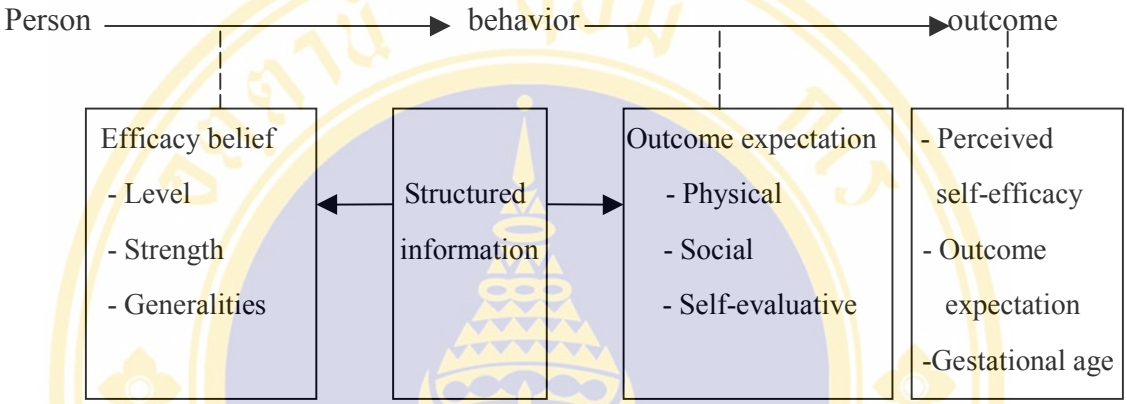


Figure II: Relationships between the studied variables

Research Questions

1. Is perceived self-efficacy of health behaviors mean score in pregnant women with premature labor pain who received structured information higher than pregnant women with premature labor pain who received usual nursing information?

2. Is outcome expectation of health behaviors mean score in pregnant women with premature labor pain who received structured information higher than pregnant women with premature labor pain who received usual nursing information?

3. Is outcome of pregnancy in pregnant women with premature labor pain who received structured information different from that of pregnant women with premature labor pain who received usual nursing information?

Research Objectives

1. To compare perceived self-efficacy of health behaviors between pregnant women with premature labor pain who received structured information and perceived self-efficacy of those who received usual nursing information.

2. To compare outcome expectation of health behaviors in pregnant women with premature labor pain who received structured information and outcome expectation of those who received usual nursing information.

3. To compare outcome of pregnancy in pregnant women with premature labor pain who received structured information and outcome of pregnancy of those who received usual nursing information.

Research Hypotheses

1. Pregnant women with premature labor pain who received structured information will have perceived self-efficacy higher than those who did not.

2. Pregnant women with premature labor pain who received structured information will have outcome expectation higher than those who did not.

3. Pregnant women with premature labor pain who received structured information will have outcome of pregnancy in term of gestational age at delivery more term than those who did not.

Scope of the study

This study employed a quasi-experimental design to compare perceived self-efficacy, outcome expectation of health behaviors, and outcome of pregnancy in pregnant women with premature labor pain who received structured information and those of pregnant women who received usual nursing information. The population was pregnant women who had the onset of labor during 28 to 37 gestational weeks and were admitted to Ramathibodi Hospital or Nakornpathom Hospital during June 2002 to March 2003.

Definition of variables

Structured information refers to planned knowledge provided individually to pregnant women with premature labor pain. The knowledge was constructed based on the four principal sources of information of Bandura's self-efficacy theory. First, performance accomplishment was applied in learning activities including assessments of signs and symptoms of premature labor pain, side-effects of tocolytic drugs, quickening, and self-assessment. Second, vicarious experiences were applied with the

use of a symbolic model with a handbook for pregnant women with premature labor pain and a live model demonstrated by the researcher. Third, verbal persuasions were applied when providing suggestions when pregnant women dealt with the problems. Finally, physiological and affective states was applied to enable pregnant women to release emotions caused by premature labor pain using a model handbook.

Usual nursing information refers to any kind of knowledge that was provided by staff nurses or healthcare teams that did not have any restrictions in terms of forms, content, time provided, and number of times the information was provided.

Perceived self-efficacy of health behaviors refers to the pregnant women with premature labor pain's confidence in their ability to practice daily health practices. This could be assessed from nutritious eating, rest and activity, medication administration, elimination, prevention of infection, observation of abnormal signs, stress management, maintenance of role and interpersonal relationships, and acceptance of changing body image. In the present study, it was measured by means of the Perceived Self-efficacy of Health Behaviors Questionnaire developed by the researcher. The questionnaire consisted of 25 items arranged in a five-point rating scale ranging from one to five. The possible total scores ranged from 25 to 125, with higher total scores indicating that pregnant women had a higher level of perceived self-efficacy to practice health behaviors and vice versa.

Outcome expectation of health behaviors refers to estimation or beliefs that a given daily practice of health practices will lead to certain outcome of pregnant women with premature labor pain. This can be assessed from nutritious eating, rest and activity, medication administration, elimination, prevention of infection, observation of abnormal signs, stress management, maintenance of role and interpersonal relationships, and acceptance of changing body image. In this study, this was measured by the Outcome Expectation of Health Behaviors Questionnaire developed by the researcher. The questionnaire consisted of 25 items arranged in a five-point rating scale ranging from one to five. The possible total scores ranged from 25 to 125, with the higher total scores indicating that pregnant women had a higher level of outcome expectation to practice health behaviors.

Outcome of pregnancy refers to a full number of gestational ages counted from the first day of the pregnant women's last menstrual period up to the date of child delivery.

CHAPTER 2
LITERATURE REVIEW

In this study, related literature in the following topics was reviewed: premature labor pain, health behaviors of pregnant women with premature labor pain, perceived self-efficacy and outcome expectation of health behaviors, giving structured information, and outcome of pregnancy.

Premature labor pain

Preterm labor refers to the onset of labor before 37 weeks (WHO, 1997, cited by Silverton, 1993: 368). At present, the mechanism of preterm labor is not described but a number of epidemiology studies have identified risk factors associated with preterm labor as follows: sociodemographic factors such as races, marital status, socioeconomic status, age, location, and education; obstetric factors such as abortion, history of low birth weight, preterm labor, infertility, interval of pregnancy, and uterus abnormality; medical factors such as heart disease, anemia, urinary infection, hypertension, and diabetes mellitus; factors during pregnancy such as delayed antenatal care, low body weight, bleeding per vagina during first trimester, vaginal infection, abnormal placenta implantation, twin pregnancy, operation during pregnancy, incompetent cervix, membrane rupture, and neonatal abnormalities; lifestyle factors such as malnutrition, lack of exercise, smoking, drinking, addiction, sexual activity, employment, and journey; and psychological factors such as stress, negative attitude of pregnancy, and psychological effects (Buckley & Kulb, 1993: 353; Burroughs, 1997: 711; Rana, 1998: 922-923).

Premature labor pain affects pregnant women's health and neonatal health. As for neonatal effects, the major cause of death is respiratory distress syndrome. The statistics of the Ministry of Public Health during 1995-1998 showed that the rates of neonatal death from preterm labor were 0.5, 0.5, 0.3, and 0.4 per 1000 live birth, respectively (Health Information Division, Bureau of Health Policy and Planning, B.E.

2543: 1). Generally, the first complication initially found when the neonatal age is less than 28 weeks and body weight is less than 1,000 grams is respiratory distress syndrome, which decreases when the gestational age is more than 34 weeks (Sripitchyakharn, 1993: 19-21). Other complications are intracranial hemorrhage that is caused by fragile artery. On the second day after birth, about 28% of infants will die. Even if the infants survive, survival is associated with high risk of neurological disorder or developmental disability. For instance, IVH occurs in 20 to 30%, while retinopathy occurs in as many as 75% of the infants with birth weight less than 1,000 grams due to immature retinal arterioles, most often due to oxygen-induced vasoconstriction (Fuch, et al., 1993: 472). Furthermore, the cause of necrotinizing enterocolitis is still unknown, but etiology is related to ischemic of the gut with local necrosis of the luminal mucosa and secondary invasion of the wall of the gut by bacterial and/or viral organism. Unfortunately, about 20-40% of infants who develop NEC will die. Another effect is the complication of RDS by patent ductus arteriosus (PDA), which is associated with an increase in mortality and morbidity. Infants who develop a significant PDA have often been treated with higher intravenous fluid intakes than infants who do not develop a PDA (Sripitchyakharn, 1993: 21).

Moreover, premature labor pain also affects the mothers' physically and psychosocially. When mothers experience signs and symptoms of premature labor pain, they develop anxiety and fear that their baby will die. When they are admitted into the hospital for tocolytic drugs, they tend to feel that the situation is getting out of control, and they may also suffer boredom, loneliness, emotion labile, and loss of efficacy because they have to endure restricted activities and cannot perform their usual role. In addition, premature labor pain affects the family members who have to face increased responsibility, higher expenses, and disrupted lifestyle (Lowdermilk, et al., 1999: 698).

When pregnant women with premature labor pain are on tocolytic drugs in an attempt to continue childbearing until term pregnancy, the following care and advice form healthcare providers are deemed crucial (May & Mahlmeister, 1994: 730):

1. Bed rests are required to take pressure of the fetus off the cervix, increase blood volume to the uterus, and decrease uterine contraction. Previous studies have

found that bed rest decreases uterine contraction by 20% to 48% (Teera Tongsong & Chanane Wanapirak, B.E. 2541: 201).

2. Hydration may help stop contractions. This is probably related to the fact that oxytocin is secreted by the pituitary gland, which also secretes the antidiuretic hormone. This may also release oxytocin. By keeping pregnant women well hydrated, the release of oxytocin may be minimized.

3. The number of vagina examination should be reduced.

4. Uterine contraction should be observed for severity, interval, and duration.

5. The fetal heart sound should be monitored.

6. The cause of premature labor pain should be sought after and identified by such means as urine analysis and urine culture.

7. Other investigations that take each mother's individual factors into account should be conducted. For example, ultrasound may be needed to assess abnormality, gestational ages and body weight should be measured to plan for implementation, amniocentesis may be required to assess lung maturity. Also, infections may be diagnosed by white blood cell count, blood urea nitrogen, and electrolytes, all of which are basic laboratory examinations.

8. Tocolytic agent cannot be used with every pregnant woman because it has side effects on both the women and the neonatal. The criteria for administration of tocolytic drugs (Knupple & Drukker, 1993: 414; Rana, 1998: 934; Sripitchyakharn, 1993: 76-77) are as follows:

8.1 Uterine contraction is at least one time in ten minutes and the duration is longer than 30 seconds.

8.2 Cervix effacement is less than 50% or cervix dilatation is less than three centimeters.

8.3 Gestational age is 20-34 weeks and the neonatal weight is less than 2,000 grams.

8.4 Lecitine/sphingomyelin rate is more than 2:1.

8.5 Pregnant women do not have complications such as hypertension, severe heart disease, uncontrolled diabetes mellitus, severe antepartum hemorrhage, a sustained membrane rupture, and chorioamnionitis.

8.6 Pregnant women do not have complications warring on tocolytic drugs: absolute warring such as dead fetus, abnormalities, or chorioamnionitis, and unabsolute warring such as placenta previa, abruptio placenta, diabetes mellitus, IUGR, hypertension, and neonatal hypoxia.

Premature labor pain can be caused by different factors, and it affects both the pregnant women and the fetus physically and psychosocially. Therefore, determining health behaviors in pregnant women with premature labor pain is one way which enables healthcare providers to promote health behaviors so that the pregnant women can protect themselves and their fetus form complications to ensure term pregnancy.

Health behaviors of pregnant women with premature labor pain

During pregnancy, women experience both physical and psychological changes such as anxiety, stress, etc. If they have complications during pregnancy, these changes can become more trying than those of women with normal pregnancy. Appropriate health behaviors help decrease complications and increase the chance that the women will go on to reach term pregnancy. Health behaviors of pregnant women with premature labor pain are as follows:

Nutrition

During pregnancy, there are changes in the generation of cells and tissues in pregnant women and their fetus. Generally, pregnant women should receive nutrition of 2,500 kcal/day (Teera Tongsong & Chanane Wanapirak, B.E. 2541: 95). Pregnant women with premature labor pain must receive food with better quality and more quantity than do those with normal pregnancy. They should not fast for more than 24 hours, except for fasting during Ramadan (Sripitchyakharn, 1993: 53) because malnutrition is considered a risk factor of premature labor pain (Lowdermilk, et al., 1999: 695). In addition, adequate nutrition can help decrease mortality and neonatal illnesses. Appropriate nutrition for pregnant women is as follows:

Protein contained in meat, eggs, nuts, and milk can generate tissue. Pregnant women need to have meat or substitute meat of 60 grams per day (Teera Tongsong & Chanane Wanapirak, B.E. 2541: 95) or 1½ - 2 cups/day. They should also drink more than one glass of milk daily (Hornbounherm, 1994: 14). During the last six months of

pregnancy, pregnant women need around 1 kg of protein per day(Witoon Phasertjareansuk, B.E. 2542: 142).

Vegetables and fruits are excellent sources of vitamins and minerals. Pregnant women must receive high vitamin C and vegetables especially the green leaf type more than normal. Vegetables with green leafs contain vitamins A, B2, and also calcium (Koonsan, 1997: 16) which can reduce the risk of constipation.

As for water, pregnant women should drink about eight to ten glasses of water or 2,000-2,500 ml/day. However, pregnant women with premature labor pain may need to increase water intake by four or five glasses to prevent dehydration (Johnson, 1989: 158). If they dehydrate, the pituitary gland is activated to secrete the antidiuretic and oxytocin hormones. When pregnant women are well hydrated, the release of oxytocin may be minimized.

Rest and Activity

Rest promotes physical and psychological well-being during pregnancy. Pregnant women with premature labor pain may rest for eight to ten hours at night and take a nap of about one hour for two or three times during the day (Sripitchyakharn, 1993: 50). In particular, the position during rest should be a lateral position that can increase blood return to the heart, kidney, and placenta. Bed rest could decrease uterine contraction by 20% to 48% (Teera Tongsong & Chanane Wanapirak, B.E. 2541: 201), and it helps take pressure of the fetus off the cervix that decreases cervical dilatation (May & Mahlmeister, 1994: 730).

As for activities appropriate for pregnant women, they should not perform any strenuous physical sports or activities including jogging, running, tennis, long walks, heavy lifting, and they should not make frequent trips up and down stairs. In addition, they should not do heavy cleaning, including scrubbing floor, changing curtains, and moving furniture. A discussion with physicians is recommended if they are to take long trips by car (Johnson, 1989: 158), and it is also recommended that they should stop working during the onset of the symptoms to decrease uterine contraction and take pressure off the cervix (Pilliteri, 1999: 399-401). A study of Papienik (1984: 619) conducted with a working class population in the town of Haguenau (in eastern France) found that among women who had already sustained full term pregnancies, if their work required heavy lifting, the rate of preterm deliveries increased form 5% to

12.4%. When a previous preterm birth was recorded, the preterm birthrate related to heavy lifting jumped form 19% to 50%.

With regards to sexual activities, if the pregnant women have a risk of premature labor pain, they must avoid sexual activities during the gestational age of 20-37 weeks (Johnson, 1989: 158). This is because when they have an orgasm, it influences uterine contraction. Therefore, after sexual activity, they should observe their symptoms continuously for more than 2-3 hours (Teera Thongsong & Chanane Wanapirauk, B.E. 2541: 205). In addition to this, sperm fluid contains the prostaglandin hormone that influences cervical rippening and uterine contraction (Fuchs, et al., 1993: 162).

Regarding breast and nipple massage, pregnant women should avoid breast massage and nipple preparation for breastfeeding until three weeks before the due date. This includes stimulating the breasts and nipples during sexual intercourse as it activates secretion of the oxytocin hormone (Johnson, 1989: 158).

Medication administration

Taking medicine correctly, consistently, and on time can protect complications. Oral medication should start when intravenous medicines are discontinued. Pregnant women receive tocolytic drug 15-20 mgs until 36 weeks (Teera Thongsong & Chanane Wanapirauk, B.E. 2541: 203) or 2.5-5 mgs every six hours for 48 to 72 hours. After that, when they return home, they should take tocolytic agent three times a day for four to five days until 36 weeks (Sripitchyakharn, 1993: 85).

Elimination

Elimination of pregnant women is not the same as that before pregnancy. The gastrointestinal system functions less because the progesterone hormone is secreted (Simpson & Creehan, 1996: 53). They may experience constipation and flatulent. The forces out in pregnant women with premature labor pain stimulate uterine contraction. Therefore, they should train themselves for elimination and eat high fiber foods such as vegetable and fruit and avoid spicy or fermented foods that result in intestinal gas (Koonsan, 1997: 17).

Preventing infections

Pregnancy is a cause of changes in the urinary system. Pregnant women have dilatation of the kidney and urether more than before the pregnancy (Kanok Srijohn, et al., B.E. 2542: 37). In the first trimester and when near term, pregnant women will have frequent urination. The pressure is again exerted on the bladder, and this pressure can impair the drainage of blood and lymph from the hyperemic bladder, rendering it more susceptible to infection and trauma that stimulate premature labor pain (Fuch, et al., 1993: 97). Therefore, women may urinate every two to four hours. It is imperative that they clean the perineal and rectum after each elimination (Rodjanapradit, 1997: 85).

Observing abnormal signs

Signs of premature labor pain are unclear, and sometimes there can be only false signs. Observation can be done by observing uterine contraction one to two times per day more than 30 minutes to one hour. If uterine contraction occurs increases frequency at least one time in ten minutes and the duration last than 30 second , this can be a sign of premature labor pain (Burrough, 1997: 715; Lowdermilk, et al., 1999: 679; May & Mahlmeister, 1994: 729). Furthermore, symptoms of premature labor pain are backache, cramping or dysmenorrhea, diarrhea, bloody show, and rupture of membrane (Burrough, 1997: 402; Mandeville & Troiano, 1992: 107; Queenan, 1994; 467). Observing signs and symptom of premature labor pain can help pregnant women conduct self-assessment resulting in timely admission in the hospital.

Observation of side effects of drugs should also be done by pregnant women who are on tocolytic drugs. Advice on special care and information to prevent complication should be sought from doctors. Drugs currently used for tocolysis include:

1. β-mimetic drug can affect pregnant women's physical conditions (Lowdermilk, et al., 1999: 701; Mandeville & Troiano, 1992: 65; Sripitchyakharn, 1993: 81-84). For example, effects on the cardiovascular system include arterial dilatation, increased systolic pressure, decreased diastolic pressure, wide pulse pressure, tachycardia cardiac arrhythmia, palpitation, tremors, chest tightness, chest pain from ischemia, and hypokalemia. If they have hypokalemia, they will have cardiac arrhythmia. After stopping the medication, the level of potassium will return to

normal. Moreover, if pregnant women have diabetes mellitus, drugs can stimulate severity of the disease, increasing insulin need and uncontrolled blood sugar. In addition, even pulmonary edema is rarely found, it is dangerous. The causes of pulmonary edema are fluid overload and steroid. Furthermore, hypokalemia, heart disease, anemia, and twin pregnancy reinforce side effects of the drugs. Other side effects are nausea, vomiting, flushing, a feeling of warmth, headache, mystamus, and dizziness. On the other hand, there can be side effects on the fetus which include increased fetal heart rate, decreased blood pressure and bowel movement, hypokalemia, and jaudice.

2. Smooth relaxant that disturbs intracellular and extracellular of calcium decreases actomyocin of uterus contraction and nerve impulses. Side effects of drugs on the central nervous system are dizziness, lethargy, blurred vision, muscle weakness, depressed respiratory system, and loss of tendon reflex. The effects on vasodilatation are flushing, a feeling of warmth, and low blood pressure. Other side effects are nausea, vomiting, increased thirst, diarrhea, and fatigue (May & Mahlmeister, 1994: 730).

Quickening is an important sign to assess the fetus' s well-being. The mothers' perception of fetal movement occurs about 18 to 20 weeks after the menstrual period in primigravidarum but may occur as early as 16 to 18 weeks in multigravidarum. Quickening comes in three forms as follows (Junthira Wachirapakhorn, B.E. 2540: 62-63):

1. Simple movement is a movement of the body, arms, and legs. Intensity and frequency are one to 15 seconds. Pregnant women feel the fetus kick, hit, and knock.

2. Rolling or stretching movement is a movement of the body. Intensity and frequency range from three to 30 seconds. Pregnant women have a feeling when the fetus rolls and stretches.

3. High frequency movement is a movement of the chest or part of arms. Intensity and frequency lasts about one second. Pregnant women can feel the fetus hiccup.

Daily fetal movement record (DFMR) developed by Sadovaski and Yaffe (1997) can be used. Pregnant women should be taught to count the number of fetal

movements occurring in a 30-minute period, twice daily. This is best done at least one hour after eating. Five or six movements should occur in 30 minutes. If fetal movements are fewer than three movements, the women should continue counting for one hour. The woman can count and record movements for eight to twelve hours. On the other hand, Cardiff "Count to Ten," based on Pearson and Eaver (1976), contends that pregnant women count fetal movement for ten movements within the period no shorter than twelve hours.

Stress management

Stress is a sensation or response to loss or harmful situation (Kemp & Hatmaker, 1989: 331). Premature labor pain can lead to pregnant women's and their family's stress. Stress management in women with premature labor pain include (La-ongphon, 1999: 25; Sripitchyakharn, 1993: 168-171):

1. Seeking information about causes of stress from the doctor, nurses, or documents;

2. Changing health practice in compliance with environment changes such as time management, eating, elimination, and changes in personal relationships;

3. Changing personality and self-perception such as performing authentic assessment to prevent stress from being activated, learning ones' limits, and observing signs of stress;

4. Learning and developing skills of stress management such as concentration, breathing, diversion of interest, and talking with close persons.

Role and interpersonal relationship

Pregnant women have to undergo role changes from normal pregnant women to pregnant women with a risk, resulting in changing role attainment. Previous studies conducted with pregnant women with premature labor pain found they had to change their role and learn to accept the fact that they were unable to carry the fetus to reach full term (Mason & Kaplan, 1965, cited by Aguilera & Messick, 1982: 74). Therefore, role attainment is necessary to prevent problems caused by role changes, which can be done by:

1. Accepting the situation during illness;

2. Asking and talking with other persons for attainment with environment change;

3. Participating in nursing care and following the treatment plan;
4. Performing self-care, especially ones' daily tasks;
5. Having a family member or friend to substitute work during illness.

Acceptance of body image

Acceptance of body image after pregnant women have complications is very important. If they cannot adjust themselves, the problems can follow. Therefore, pregnant women may practice the following (La-ongphon, 1999: 27):

1. Accepting the situation of complications during pregnancy and cure;
2. Seeking information of practice during premature labor pain from doctors, nurses, or other pregnant women with premature labor pain;
3. Talking with other persons such as family members and pregnant women for release tension.

Perceived self-efficacy and outcome expectation of health behaviors

Perceived self-efficacy proposed by Bandura was developed from a social learning theory that includes: learning by observation, self-regulation, and perceived self-efficacy. Perceived self-efficacy is part of self-reflective capability (Bandura, 1986: 21) in the cognitive process that results in changing behaviors. Social learning includes rapid changes by effective performance of person (Bandura, 1997: vi-vii). According to the social learning theory, behaviors do not happen or change by environmental factors only. Behavior is a reciprocal determinant of three factors including internal person factor = P, behavior condition = B, and environment condition = E. These three factors form an interlocking system, with each factor influencing more or less differences on the effect, as show in Figure 3:

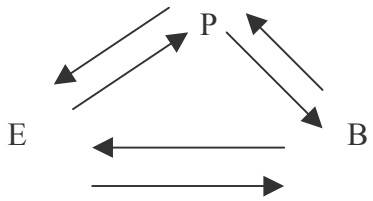


Figure 3: Relationship of internal person factor, behavior condition, and environment condition (Bandura, 1997: 6)

Perceived self-efficacy is a judgment of one's ability to organize and execute given type of performance (Bandura, 1997: 21). Persons' action is based on self-efficacy. If persons believe that they have self-efficacy, they will show capability, tolerance, and accomplishment behaviors. Thus, persons who have high self-efficacy will seek information to prevent or stop risk behaviors and seek care during the onset of symptoms more than those with low self-efficacy (Stretcher, et al., 1986: 80). Furthermore, self-efficacy is considered the best prediction of health promotion (Yamchanchai, 1995: 44). On study on self-care to prevent illness and self-regulator in pregnant women found that the variable which made pregnant women relapse to smoking in the third trimester of pregnancy was self-efficacy (Woodby, et al., 1999: 283). Similarly, a study on maternal perceived self-efficacy, maternal caring behaviors, and health outcome of one-to-five-year-old asthmatic children suggested that self-efficacy was positively related to maternal caring behaviors ($r = .54$, $p < .001$) (Sumranchaiyaham, 1998: 79). In another study, the variable that was found to predict child health promotion behaviors in mothers of toddlers was self-efficacy, and it could predict variance of health promotion behaviors by 34.27% (Danchai, 1997: v). Likewise, a study of pregnant industry workers found that self-efficacy could predict health promotion behaviors by 29.6% (Patahavanichnum, 2000: iv). In addition, a study conducted with 570 older women with heart disease in outpatient clinics of six large hospitals in southeastern Michigan discovered that self-efficacy could predict disease management behaviors such as medicine use, exercising, stress reduction, and dietary control (Clark & Dodge, 1999: 72). Finally, a study of 308 female college students' self-efficacy and sexually transmitted disease preventive behaviors revealed that perceived self-efficacy could predict 19% of behavioral risks for sexually transmitted disease (Hale & Trumbetta, 1996: 101).

Self-efficacy varies on three dimensions (Bandura, 1997: 42), and self-efficacy could be assessed as follows:

1. Magnitudes of expectancies that tasks are ordered according to level of difficulty and self-evaluation to action.

2. Strength: Confidence in ones' own ability to perform an activity. Even though there are plenty of obstacles, the persons will struggle to achieve the goal of

the tasks. Conversely, persons who lack confidence in their ability will give up when faced with obstacles.

3. Generalities of expectation: realizing the ability of oneself based on the success in the past and the ability to do other similar activities in similar situations in the future. Generality can vary in a number of different dimensions, including the degree of similarity of activity, the modalities in which capabilities are expressed (behaviors, cognitive, affective), qualitative feature of the situation, and the characteristics of the persons toward whom the behaviors are directed. Bandura (1986: 390-435) suggests that assessment of self-efficacy can be done in two steps: In the first step, persons perform self-assessment to accomplish behaviors. In the second step, they assess their level of confidence to practice behaviors. After that, development of the instrument of self-efficacy can be done by including these two steps. In Thailand, the instrument of self-efficacy has been developed. For instance, La-ongphon (1999: 43) constructed the instrument to investigate the relationship between perceived self-efficacy and outcome expectancy and health practices in-patients with open fracture on lower extremities after receiving external fixation.

A review of literature revealed that the dimension of self-efficacy has been used to assess self-efficacy of health behaviors. For instance, studies were carried out to explore the relationship between perceived self-efficacy and health behaviors in pregnant adolescent mothers receiving antenatal care at Saraburi Hospital, Phrabuddabat Hospital, and Lopburi Hospital. These studies investigated the magnitudes of expectancies, strength, and generalities of expectation of adolescent mothers with health behaviors. The results indicated that there was a statistically significant positive correlation between perceived self-efficacy and health behaviors at 0.5482 ($p < .001$). In addition, confidence of adolescent mothers to perform health behaviors came from care received from expanded families, and these mothers indicated empathy and attention received as helping them to develop and sustain will power and confidence (Khahadilok, 1998: 53-59). Furthermore, only one or two dimensions of self-efficacy assessment could be evaluated. A study of self-efficacy in female and male adolescent groups aged between 12 and 16 years with insulin dependent in Massachusetts was conducted. This study assessed only magnitudes of expectancies and generalities of expectation, and it found that only the female gender

had a positive correlation with perceived self-efficacy about disease and metabolism control (Grossman, et al., 1987: 324).

Outcome expectation is defined as persons' estimate that a given behavior will lead to certain outcome (Bandura, 1977: 79). Outcome expectation can take three major forms, and within each form there is a positive and negative effect (Bandura, 1997: 21-23):

1. Physical effects: these include pleasant sensory expectancies and physical pleasure in the positive form and aversive sensory experience, pain, and physical discomfort in the negative form.

2. Social effects: on the positive side, they include such social reaction of others as expressions of interest, approval, social recognition, momentary compensation, conferral of status and power; on the negative side, they include disinterest, disapproval, social rejection, censure, deprivation of privileges, and improve penalties.

3. Self-evaluation: on the positive side, they include such self-satisfaction as sense of pride; on the negative side, they include self-sanction, self-dissatisfaction, and lack of self-worth.

If persons have outcome expectation of health behaviors, it can motivate judgment to change behaviors. This is consistent with a study by Peanmongkhon (1994: 21) which investigated the relationship between perceived health behaviors of primigravidarum and outcome expectation and found that belief of drug benefit, cure, and capability of doctors could lead to rid of illness. These beliefs enabled pregnant women to develop practice following the doctor's suggestions. However, outcome expectation alone doses not cause behaviors, but it occurs with self-efficacy. The relationship between the two variables affecting judgment of behaviors is as follows:

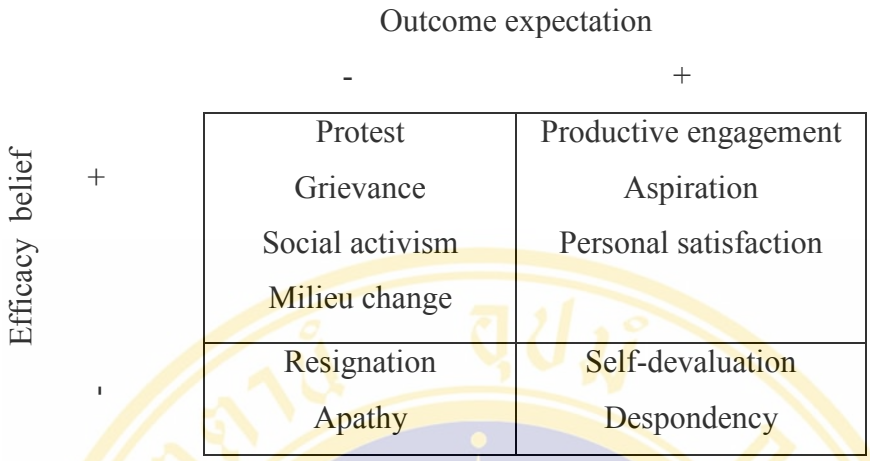


Figure 4: Relationship between self-efficacy and outcome expectation of health behavior (Bandura, 1997: 20)

Self-efficacy and outcome expectation have psychosocial and emotional effects. A high sense of personal efficacy in a responsive environment that rewards valued accomplishment fosters aspiration, productive engagement in activities, and sense of fulfillment. On the other hand, high personal efficacy can be combined with low environmental responsiveness. Efficacious individuals who cannot gain valued outcome through personal accomplishments will not necessarily cease trying. However, those with low perceived efficacy quickly give up when their efforts fail to produce result (Bandura, 1997: 20-21).

Sources of self-efficacy are based on four principal sources of information (Bandura, 1977: 80-85; Bandura, 1997: 80-113; Somphot Eamsupasit, B.E. 2541: 59) as follows:

1. Enactive mastery experience is the most influential source of efficacy information because it provides the most authentic evidence of whether one can muster whatever it takes to succeed. Successes build a robust belief in one's personal efficacy. Failure undermines it, especially if failure occurs before sense of efficacy is firmly established. If persons experience only easy success, they come to expect quick results and become easily discouraged by failure. Learners can learn authentic experience by self-practices. One study found that human beings perceive direct or indirect situations by five senses; that is, eyes (75% of total perception), ears (13% of

total perception), skin (6% of total perception), nose and tongue (3% of total perception each) (Chawha, 1990 cited by Khowphai, 1998: 25).

2. Vicarious experience influences less than enactive mastery experience, but it can help observers perceived self-efficacy. The model includes live and symbolic modeling as follows:

2.1 Live model is defined as the model that observers can interact with or the model in which observers do not have to depend on conductors or symbols.

2.2 Symbolic model is defined as the model that observers can pass symbols such cinema, video, slide, cartoon or written materials. The presentation of the model depends on behaviors and application.

Studies have been carried out to examine self-efficacy by using modeling. A study of psychological adaptation of primigravidarum in confronting anxiety of labor found that learning form other sources such as classroom, reading materials about labor, and talking with those who had experience could help encourage confidence of pregnant women during labor (Leaderman, 1984, cited by Lowe, 1991: 457-463). Furthermore, a study experimenting using videotape for relapse smoking in pregnant women found that hearing and learning vicarious experience form videotape encouraged self-efficacy of pregnant women with relapse smoking (Secker-Walker, et al., 1995: 86-93).

3. Verbal persuasion: Social persuasion serves as further means of strengthening people's beliefs that they possess the capabilities to achieve what they seek. It is easier to sustain a sense of efficacy, especially when struggling with difficulties, if significant others express faith in one's capabilities than if they convey doubts. Verbal persuasion has been used in health information programs depending on people's beliefs that they possess the capabilities to achieve their goal. Using verbal persuasion by instructors is a slow way to build self-efficacy (Khuanchean, 1994: 45).

4. Physiological and affective state: In judging their capabilities, people rely partly on somatic information conveyed by physiological and emotional states. Somatic indicators of personal self-efficacy are especially relevant in domains that involve physical accomplishment, health functioning, and coping with stressors. People often read their physiological activation in stressful or taxing situations as signs of vulnerability to dysfunction. Because high arousal can debilitate performance,

people are more inclined to expect success when they are not beset by aversive arousal than if they are tense and viscerally agitated. This is the same as a study of Gross and colleagues (1994: 19) which was a study of a longitudinal model of maternal self-efficacy, depression, and difficult temperament during toddlerhood. The findings revealed that mothers who had low self-efficacy experienced depression and high difficult temperament during toddlerhood. Emotional arousal can develop self-efficacy depending on intimacy of the situation, relaxing and decreased emotion, or make sense by using symbols.

At present, nursing care makes use of sources of self-efficacy to develop self-efficacy as follows:

Khowphai (1998: 75) studied a group of mothers with premature infants to determine the effect of preparation of mothers with premature infants to achieve perceived self-efficacy and caring behaviors. The study applied self-efficacy theory using four resources: enactive mastery was applied in training infant caring from easy to difficult activities; modeling was applied in the caring for premature infant handbook and daily caring for infants; verbal persuasion was applied in suggestions and encouragement given when they had problems; and physiological and affective state was applied to release tension. The result revealed that mothers who received preparation had higher perceived self-efficacy and caring behaviors than mothers who did not receive preparation with statistical significance ($p < .05$).

Sakamanee (1997: iv) studied effect of using a perceived self-efficacy promoting program on maternal role attainment of first time postpartum mothers applying the self-efficacy theory using four resources. The findings revealed that maternal role attainment of first time postpartum mothers in the experiment group, after using the perceived self-efficacy-promoting program, was significantly higher than maternal role attainment of those who received only routine advice and teaching form staff nurse at the .05 level.

Tassanapoonchai (1997: 125) studied effectiveness of training for development of perceived self-efficacy regarding AIDS prevention provided for pregnant women attending Lerdsin Hospital. The experimental group was trained on perceived self-efficacy in three issues: the comprehension of AIDS, the communication skill with husbands, and the skill of using a condom. The results

revealed that the experimental group had the post-test mean score of perceived self-efficacy regarding AIDS prevention higher than that obtained in the pre-test and that of the control group with statistical significance ($p < .0001$). Thus, it led to a conclusion that pregnant women who received learning, training, trying, practice, repetition, and meditating information and new experience to be blended with past experience had higher perceived self-efficacy regarding AIDS prevention and judgment of AIDS prevention behaviors.

Pheurksomon (1996: 117) studied the effectiveness of a childbirth preparation model to improve self-efficacy in coping with labor pain of primigravida at King Chulalongkorn Memorial Hospital using self-efficacy development tools including childbirth preparation by lectures with slide, discussion about past illness from dysmenorrhea, headache, migraine, and demonstration to release pain during labor pain. The results revealed that the experimental group had mean score of self-efficacy in coping with labor pain higher than that the control group with statistical significance ($p < .001$).

Chowpreecha (1998: 80) studied effects of teaching by applying the self-efficacy theory on self-efficacy perception and practice of preventive behavior of hepatitis B carrier pregnant women. The teaching applied the self-efficacy theory including use of group discussion, flip chart, documents, and stimulating mail. The study findings revealed that the mean scores of self-efficacy perceptions and practice of preventive behavior of pregnant women who were hepatitis B virus carriers in the experimental group, after being taught with the application of the self-efficacy theory, was statistically significantly higher at the .05 level than the scores obtained prior to the teaching of the self-efficacy theory.

Factors affecting self-efficacy

1. Age is the factor that indicates maturity, perceptions, and ability to make judgment about action. Age has a direct relationship with developmental stage and maturity of persons. When persons get older, they have more maturity, ponderous thinking, and correct belief (Tassanapoonchai, 1997: 34). Older persons have more learning, experience, and perception (Nootcharee Laipan, B.E. 2542: 26). Thus, adult pregnant women are supposed to have more health behavior practice than pregnant teenagers. Maturity helps persons adapt and tolerate during pregnancy depending on

cognitive and learning from past experience (Kanika Khantharak, B.E. 2531: 119). A study of maternal perceived self-efficacy, maternal caring behaviors, and health outcome of one-to-five-year-old asthmatic children found that the personal factor that encouraged perceived self-efficacy was age. The majority of mothers were adults, so they had maturity and experience enabling them to develop social, cognitive, and problem-solving skills (Sumranchaiyaham, 1998: 79).

2. Education is based on thinking and judgment. Better education helps persons to perceive helpful factors, and high education can help persons in seeking information, asking others about doubtful questions, and using sources of profit more than people with low education (Muhlenkamp & Sayles, 1986: 338). A study by Thungjarearn (1991: v) on perceptions of AIDS and self-care agency to prevent AIDS in prostitutes indicated that education was the best prediction of self-care agency to prevent AIDS. Also, a study conducted with groups of mothers with premature infants led to a conclusion that confidence was related to education. Thus, persons who have high education have more confidence to perform the maternal role than those with a low level of education (Zahr, 1991: 279). Timing of education was also found to be positively related to self-efficacy (Cutrona & Troutman, 1986: 1512; Yamchanchai, 1995: 44).

3. Past experience is a factor that can help persons apply learning in new situations. Persons who recognize situations similar to those in the past can have rapid learning (Rice, 1999: 110-112). A study of mothers who had experience with toddlerhood found that these mothers had more confidence than mothers who did not have experience (Gross, et al., 1989: 7). Similarly, a study conducted in a group of pregnant women who had experience in labor and delivery showed that they had more confidence to have labor adaptation than primigravidarum (Booth & Meltzoff, 1984: 79-91; Lowe, 1991, cited by Drummond & Rickwood, 1997: 614; Stolte, 1987: 99-103). In brief, positive experience increases self-efficacy, while negative experience decreases self-efficacy (Bandura, 1977: 191-215).

4. Economic and social status includes income and marital status. Income is an influential factor on lifestyle in responding to a basic need of persons. If they have low economic status, they could not have correct health behavior practice. Pregnant women who have high income have better self-care and more confidence during

pregnancy than pregnant women with low income (Boontub, 1991: 8-11; Tassnapoonchai, 1997: 34; Zahr, 1991: 283). A study of syphilitic pregnant women suggested that income could predict health behaviors of syphilitic pregnant women (Thaepai, 1998: v). Also, persons who have low economic status were found to have low confidence before labor because they lacked knowledge of labor (Hillier & Slade, 1989: 3-13).

Marital status is a source of benefits, set role, opinion, judgment, problem solving, social support, relation activity, and self-care, and it indicates status and family system. The spouse helps decrease energy, increase motivation, and encourage the need to develop health knowledge to increase self-efficacy (Hillbert, 1985: 217-220). Kurat (1996: 220) studied the relationship between perceived self-efficacy and marital relationship and found that marital relationship was positively related to self-efficacy.

Based on a review of literature, it can be concluded that perceived self-efficacy can predict behavior outcome in each situation as well as outcome expectation. If pregnant women with premature labor pain have perceived self-efficacy and outcome expectation of health behaviors, they are likely to have better health behavior practices.

Giving structured information

Information is defined as a fact or something accepted as fact that is used as standard of fact finding and calculation (Dictionary of the Royal, B.E. 2524: 524).

Health information is defined as a list which describes causes and expected outcome for cure and nursing care. It includes a list of patients' treatment thought to be correct practices (Perry, 1981: 34).

Information as specified in the communication theory includes transfer of information and contains certain stimulations and responses. The quality of information does not depend on stimulation but on past experience (Harold, et al., 1985, cited by Danyuthasilpe, 1997: 40). Four elements and dynamics of information include the sender, the message, the channel, and the receiver (SMCR) (Berlo, 1960, cited by Janswang, B.E. 2532: 4). The sender is defined as the beginning point of the source. The sender may be one person, many people, or even a situation. Message is

defined as something that is sent to the receiver such as story or content by means of records or translations. It transfers thinking or message by using symbols or waves. The channel is defined as the central point through which such messages as pictures or letters can be sent. There are both formal and informal channels. The receiver is important for the information system. When the sender sends a message, the receiver, who already has the detail, records symbols or waves and translate them. Successful sending and receiving information depends on positive feedback.

Good information is characterized by being reliable, beneficial, complete in content, and up-to-date, as well as coming from trusted sources, while incorrect information is wrong when using. A study of Thelma (Thelma, 1960, cited by Danyuthasile, 1997: 41) lists information for patients as follows:

1. Necessary information is defined as the information that can help patients perform correct practices during hospitalization and discharge. Potter and colleagues (1997: 113) point out that the information that patients need during 24 hours includes rules and regulations of the hospital, environment, practice, and payment. Needs of information before hospital discharge include practice behavior, continuation of care, timing of restricted activities, and suggestion on drug usage. This is consistent with the findings by Jankhow (1997: 49-61) that information needs in pregnant women with premature labor pain in the first 24 hours of hospitalization includes drug usage, side effects on the fetus, reasons of drug use, kind and intensity of drugs, health status of the fetus and themselves, health status change, cure and care, timing and effect of treatment, severity of disease, outcome of pregnancy and predictable disease, preventive disease, and self-care during premature labor pain. Information concerning psychological status changes such as emotional change is also needed, as well as other information such rules and regulations of the hospital, environment, measures, doctors' and nurses' names, and methods of payment.

2. Information that responds to emotional support refers to information that can help release anxiety during hospitalization such suggestions about nursing care and specific problems that patients face. Rodjanapradit (1997: iv) investigated the effects of support and information giving on anxiety and satisfaction of women who experienced preterm labor and found that pregnant women who experienced preterm labor who received support and usual information when admitted into hospital had

anxiety scores in 24-36 hours lower than in those obtained during the first 12 hours with statistical significance ($p<.001$). Women who received support and usual information had anxiety score and satisfaction score lower than women who received usual information with statistical significance ($p<.001$). The result is similar to that of the study by Kanjanajari (1993: 75) who studied effects of formal information on the level of anxiety and satisfaction in primigravidarum with pre-eclampsia at Rajavithi Hospital and found that before the experiment, both the experimental and control groups were not different in terms of anxiety and satisfaction scores. However, after the experiment, the anxiety and satisfaction scores of both groups decreased with statistical significance ($p< .01$).

The information and suggestions patients receive from nurses should be provided in a polite manner. A relationship between patients and nurses can enable patients' adaptation during hospitalization (Jumlongluk Sighakhun, B.E. 2528: 102-105). Offering information, suggestions, and instruction is a direct role of nurses. Nurses must communicate with people especially pregnant women with premature labor pain. Therefore, when giving information, nurses need to ensure quality of communication. If giving information does not have direct objectives or lack quality, it can affect the receiver. Nurses have to plan for instruction, need seeking of pregnant women, and evaluation. Instruction can be formal and informal. Health instruction comes in two forms as follows (Jintana Yunipan, B.E. 2527: 222):

1. Individual instruction is defined as information given by the instructor to the patient one by one. Different learner variables and capability of learning affect the instruction as follows: Learners can choose best leaning. Instruction that is related to self-leaning has outcome of leaning scores more than the one which is unrelated. Advantages of individual instruction include the following: it helps the instructor to learn about problems, perceive needs of each learner, and evaluate learning. As for the learner, they can seek solution to the problem and build a relationship with the instructor. Individual instruction responds to interest, capability, and needs of each learner depending on individual capability, intelligence, interest, need, emotion, and society (Danyuthasilpe, 1997: 43).

2. Group instruction is defined as instruction that has more than two learners interacting with the instructor. There can be a big group instruction (lecture), medium

group instruction which includes 35-60 learners and subgroup including two to 35 learners. Group instruction is beneficial in that group members can learn about others' problems that might help them change their behavior. However, if the group is too big, problem solving may not be achieved.

Advantages of information are suggested by Skipper and Leonard (1965: 61-80) as follows:

1. It helps decrease anxiety and stress. Pattiya (1987: v) studied the effect of systematic instruction on the level of anxiety and adaptation in motherhood in primiparity delivered by cesarean section and found that systematic instruction decreased anxiety and increased adaptation more than usual instruction.

2. It makes the patients gain confidence in the doctor and the doctor's capability to help them.

3. It helps patients to cooperate with other patients.

4. It enables patients to evaluate self-efficacy in health behaviors. Nittwiboon (1997: 1) studied the effect of systematic instruction for mothers on self-efficacy and breastfeeding and found that mothers who received systematic instruction had higher scores on self-efficacy, outcome of practice following suggestions, and knowledge about breastfeeding than before the experiment.

From a review of literature, it was discovered that pregnant women with premature labor pain who are hospitalized have anxiety. This could have an effect on the fetus, the mothers themselves, and their family. They can also experience complications brought about by tocolytic drugs. Therefore, pregnant women with preterm labor had an urgent need of information as early as in the first 24 hours of hospitalization. If pregnant women did not receive adequate information, they may have low self-efficacy, which can adversely affect health behaviors. Based on a review of literature related to the self-efficacy theory proposed by Bandura, the researcher was interested in studying the effect of structured information by applying Bandura's theory to encourage pregnant women with premature labor pain to develop perceived self-efficacy of health behaviors during hospitalization. The outcome of the present study could be subsequently used to develop a health promotion program to assist pregnant women to achieve term labor.

Outcome of pregnancy

Pregnancy is an occurrence in the life span of women that entails physical and biochemical changes. Pregnancy lasts about 250 days, 40 weeks, or ten months or nine months following the last menstrual period (Teamsorn Tongsawat, B.E. 2531: 182). If labor starts before 37 weeks from the last menstrual period, the pregnant women have premature labor pain. Term pregnancy is defined with the onset of labor at 38-42 weeks from the last menstrual period (Kanok Srijohn, et al., B.E. 2542: 353). Outcome of pregnancy that is a result of health behaviors during pregnancy and support form gained form other people. Therefore, the evaluation outcome of pregnancy should be considered condition that affects to pregnancy. According study of Smoke and Grace (1988: 178-184) who study established caring and learning program on health practice during pregnancy for pregnant teenager since their first attendance in average 20 weeks gestation. The result showed that experimental group had better knowledge on their health practice and less incidence of premature labor than the control group. In addition, The study of relationship between maternal nutritional status, knowledge and practice during the third trimester and product conception that found maternal knowledge during pregnancy was significantly correlation with birth weight ($p = .05$) and maternal practice during pregnancy was significantly correlation with birth weight birth length and placental weight ($p < .001$) (Perunavin, 1987: v). The other hand, study on effects of a supportive-educative nursing system on pregnancy outcome of 74 pregnant teenagers: with consisted of 37 women in control group and 37 women in experimental group found that there was no statistically significant different between the experimental and control groups ($p > 0.05$) (Thadapipat, 1995: iv). Furthermore the factors leading to outcome of pregnancy are as follows:

Demographic factors that have been found to be related to preterm pregnancy is age. The most suitable ages for women to become pregnant are 20 to 30 years. If the women are younger than 20 years old, the organ development may not yet be complete (Darasrisak, 1995: 12). Klebanoff and colleagues (1990: 1040-1045) studied the outcome of pregnancy in USA using a mailed questionnaire and found that 10.1% and 10.6% of women who were younger than 25 years old and those older than 35 years old had preterm labor, respectively, while the rate of preterm labor among those aged

25 and 34 was between 4.3% and 7.5%. Furthermore, low education, income, and single status affect self-care and risks of preterm labor (Peacock, et al., 1995: 531).

As for obstetric factors, abortion is one factor that encourages premature labor pain. A study of some selected factors affecting pregnancy outcome revealed that abortion is related to pregnancy outcome with statistical significance ($p<.05$) (Riewpitak, 1993: v). Pregnant women who had experienced preterm labor had three times higher risk (Cuhningham, et al., 1997: 805). Moreover, a study of Rakchay Bukhachart & Sutum Pinjarearn (B.E. 2541: 113) found that low birth weight rose with premature labor pain and duration of pregnancy posed a risk of premature labor pain. Finally, a study of Basso and colleagues (1998: 259) found that duration of pregnancy equal to or longer than eight months was related to premature labor pain and low birth weight.

As regards medical factors that are related to premature labor pain, a study of Hediger and colleagues (1989: 6-12) investigating increased body weight of adolescent pregnant women, effect of body weight when delivery, and preterm labor in 1,970 pregnant women aged 18 years or younger with the gestational age less than 37 weeks showed that pregnant women who had chronic illnesses such as hypertension or diabetes mellitus had 1.53 times higher risk of preterm labor ($p < .05$). Likewise, in another study, pregnant women who had heart disease and pulmonary disease had 3.47 times higher risk of preterm labor when compared to those who had no complications ($p < .05$) (Abrams, et al., 1989: 577).

Regarding other factors during pregnancy, it was found that complications during pregnancy can be a risk factor of preterm labor. Furthermore, body weight of women less than normal can result in premature labor pain, including increased body weight less than 32 kg. at the 22 gestational age and less than 2.3 kg at the gestational age more than 22 weeks (Dickson, et al., 1994: 545). Besides, infections can be causes of premature labor pain. It has been found that 15 to 20% of pregnant women have vaginal infection, and this increases the risk of preterm labor by 40% (Freda & Moore, 1998: 204). Operation during pregnancy can also affect preterm labor. Mourad and colleagues (2000: 1027) conducted a retrospective study with 66,993 pregnant women who had appendicitis and found that 13% of them had preterm labor and cervix change. Other factors include bleeding in the first trimester such as placenta previa.

A study of Crane and colleagues (1999: 541) showed that 46.56% of 305-singleton pregnancy with placenta previa had preterm labor.

In terms of lifestyle factors, if pregnant women have incorrect health practice, it can stimulate preterm labor. Suvaree (1988: v) studied biochemical risk factors of pregnant women on outcome of preterm labor among the sample of 150 pregnant women. The finding revealed that 15% of these women had preterm labor and it was found to be related to changing experience of pregnancy and occupation. Finally, smoking accounts for 34% of preterm labor (Mittendorf, 1994: 1056).

Psychological factors such as stress, negative attitudes toward pregnancy, and psychological effects have an influence on preterm labor. A retrospective study of Newton and colleagues (1979: 411) on psychosocial stress in pregnancy and its relation to the onset of premature labor which interviewed 132 postpartum mothers indicated that mothers who had premature labor had experienced more stress than those with term pregnancy ($p < .05$).

Based on the review of literature and related research, it can be concluded that factors that affect outcome of pregnancy are internal factors. If pregnant women have appropriate self-care, complications may be prevented. Also, receiving necessary information from healthcare providers can help pregnant women go on to achieve term pregnancy.

CHAPTER 3
MATERIALS AND METHODS

In the present study, a quasi-experimental design was used to compare the perceived self-efficacy, outcome expectation of health behavior, and outcome of pregnancy in pregnant women with premature labor pain who received structured information and usual information.

Population and Sampling

The population for this study was the pregnant women with premature labor pain who were admitted into Ramathibodi Hospital and Nakornpathom Hospital. Data were collected during June 2002 to March 2003.

Fifty pregnant women with premature labor pain, who were admitted into the labor room, the complication ward, and attended the antenatal clinic of Ramathibodi Hospital and those who were admitted into the labor room, the obstetric-gynecological ward and attended the antenatal clinic of Nakornpathom Hospital were selected by means of purposive sampling. They had to meet the following inclusion criteria previously set:

1. They were pregnant women who had the onset of labor during 28 to 37 weeks of gestational age, had no experience of previous hospitalization, and stayed in the hospital for at least 3-5 days;
2. They had received tocolytic drugs;
3. They understood and were able to communicate in the Thai language;
4. They were willing to participate in the study.

The sample size was calculated following the suggestion of Polit and Hungler (1983, 426-427) that the sample of ten cases or fewer are needed in general phenomena studies to compare between groups. However, the sample should be at least 20 to 30 cases for experimental research. Therefore, the researcher considered

using 50 cases as the sample size. The first 25 cases selected were assigned into the control group (Nakhornpathom hospital was collected 13 cases and Ramathibodi hospital was collected 12 cases) and the other 25 cases (Nakhornpathom hospital was collected 13 cases and Ramathibodi hospital was collected 12 cases) were assigned into the experimental group to prevent contamination of the sample.

In terms of loss of subjects during data collection, about 50% of the total number of subjects were lost in the present study. To be more specific, ten cases of the subjects gave birth to their child before the end of the experiment, while eight cases of the subjects in the control group were lost due to child delivery and two cases simple disappeared.

Exclusion criteria

The exclusion criterion in the study was pregnant women who were re-admitted into the hospital or had a follow- up within seven days after the first hospitalization.

Setting

The study was conducted at the labor room, the complication ward, and attend in the antenatal clinic at Ramathibodi Hospital and the labor room, the obstetric-gynecological ward, and attend in the antenatal clinic at Nakornpathom Hospital. Both hospitals are similar in terms of nursing care provided and treatment protocol used.

Ramathibodi Hospital

The labor room of Ramathibodi Hospital comprises 20 beds and seven rooms—one admission room, two attended rooms, one high risk room, a delivery room, an immediate postpartum room, and a nursery. In the high risk room, there are three beds to provide intensive care for high-risk pregnancy, with one nurse and one practical nurse per shift responsible for caring for the pregnant women. When pregnant women' statuses improve, they will be moved to the complication ward.

The complication ward comprises 18 beds, with five to six beds in each of the three rooms and one bed for single rooms. Visiting periods are two segregated times—11:00 a.m. to 01:00 p.m. and 04:00 p.m. to 06:00 p.m. There are two to three registered nurses and two to three practical nurses working per shift.

The antenatal clinic provides antenatal cares on Mondays, Wednesdays, and Fridays. When pregnant women with premature labor pain are discharged, the doctor will make an appointment for a follow-up after one week.

The hospital is also a training center for obstetric specialists, medical students, and nursing students of the Faculty of Medicine, Ramathibodi Hospital, Mahidol University.

Nakornpathom Hospital

The labor room of Nakornpathom Hospital comprises 21 beds in four rooms which are divided into one admission room, one attended room, one delivery room, and one immediate postpartum room. The attendance room has two beds providing intensive care for high-risk pregnancy. There are up to two nurses per shift working in this room. When pregnant women's status improves, they will be moved to the obstetric and gynecology ward.

The obstetric and gynecology ward consists of 30 beds, which has three sections and six private rooms. The visiting periods are two segregated time—11:00 a.m. to 01:00 p.m. and 04:00 p.m. to 08:00 p.m. There are two or three registered nurses and two or three practical nurses working in this unit per shift.

The antenatal clinic provides antenatal cares on Mondays, Tuesdays, Wednesdays, and Thursdays. When pregnant women with premature labor pain are discharged, the doctor will make an appointment with them for a follow-up after one week.

The hospital is a training center for medical students of the Faculty of Medicine, Siriraj Hospital, Mahidol University, nursing students of the Faculty of Nursing, Christian University and Phrachomklao Phetchaburi Nursing College.

Instruments

The instrument used in this study consisted of two parts: the experimental instruments and the instrument for data collection as follows:

1. Experimental instruments

The experimental instruments were developed based on the four major sources of information of Bandura's self–efficacy theory. Firstly, the enactive mastery experience to investigate learning activities and assessment of signs and symptoms of

premature labor pain, side-effects of tocolytic drug, quickening, and self-assessment. Secondly, vicarious experiences were elicited using the symbolic model with a handbook for pregnant women with premature labor pain and the live model provided by the researcher. Thirdly, the verbal persuasions regarded suggestions when pregnant women were facing problems following the informational plan. Fourthly, physiological and affective states concerned release of emotions caused by premature labor pain and using a handbook. The experimental instruments could further be divided into two parts as follows:

1.1 Information plans to develop individual self-efficacy of pregnant women with premature labor pain created by the researcher, comprising knowledge from textbooks, documents, and related literature. It included the definition of premature labor pain, causes and risks of premature labor pain, signs and symptoms of premature labor pain, treatment for pregnant women with premature labor pain during hospitalization, and practical guidelines to prevent premature labor pain (Appendix F).

1.2 A handbook for pregnant women with premature labor pain was developed by the researcher based on knowledge from textbooks, documents, and related literature which included the following contents (Appendix G):

- Definition of premature labor pain
- Causes and risks of premature labor pain
- Signs and symptoms of premature labor pain
- Treatment for pregnant women with premature labor pain during hospitalization
- Practical guidelines to prevent premature labor pain
- Self-assessment

The self-assessment part consisted of 24 items arranged in a form of a checklist. The scoring was 1 for the “practice” response and 0 for the “not practice” response.

Scoring of self-assessment was conducted based on Bloom’s taxonomy which suggested that individuals should get more than 80% of the practice in order to have enough belief to perform such practice (Bloom, 1981: 84). The interpretation of the scores was as follows:

Scores between 19 and 24 mean that pregnant women had a good practice of health behaviors to prevent premature labor pain.

Scores lower than 19 mean that pregnant women had a poor practice in health behaviors to prevent premature labor pain.

Content Validity

Both experimental instruments were examined for content validity and language appropriateness by five experts who were one obstetric and gynecological physician, one obstetric nursing instructor, and three nursing instructors who had expertise in the self-efficacy theory who validated the instruments (Appendix A). After that, the instruments were revised and improved based on the comments and suggestions of the experts. Before data collection began, the instruments were tried out with five pregnant women who were similar characteristics with the subjects of the present study.

2. The data collection instruments were divided into three parts as follows:

Part 1 Demographic Characteristic Questionnaire

This questionnaire was used to obtain information concerning the demographic characteristics of the pregnant women. It elicited information including hospital number, admission number, name of the hospital, number of gravida, the women's age, gestational age, marital status, religion, occupation, average monthly family income, educational background, number of weeks of gestation at delivery, complications with premature labor pain, and length of hospital stay (Appendix C).

Part 2 Perceived Self-Efficacy of health behaviors Questionnaire

This instrument was developed by the researcher based on Bandura's self-efficacy theory (1997) and data attained from the literature review. It consisted of 25 items including the self-efficacy of (Appendix D):

Nutritious eating	3 items, items 1-3
Rest and activity	6 items, items 4-9
Medication administration	1 item, item 10
Elimination	1 item, item 11
Preventing infections	2 items, items 12-13
Observing abnormal signs and symptoms	4 items, items 14-17

Stress management 2 items, items 18-19

Maintenance of role and interpersonal relationships 5 items, items 20-24

Acceptance of body image 1 item, item 25

Each item was rated on a five-point Likert scale. The subjects were required to respond to all of the items by rating them from 1 to 5 as follows:

No confidence = 1

Little confidence = 2

Moderate confidence = 3

Much confidence = 4

Most confidence = 5

The total scores of perceived self-efficacy ranged from 25 to 125. The higher the total score indicating pregnant women' s higher level of perceived self-efficacy to practice health behaviors; the lower the total score indicating pregnant women' s lower level of perceived self-efficacy to practice health behaviors.

Content Validity

The perceived self-efficacy questionnaire was examined for content validity and language appropriateness by five experts—one obstetric and gynecological physician, one obstetric nursing instructor, and three nursing instructors who were experts in the self-efficacy theory (Appendix A). The questionnaire was revised based on these experts' comments and suggestions.

Reliability

To test the internal validity of the questionnaire, Cronbach's alpha coefficient was applied. The instrument was assigned to 20 pregnant women who had similar characteristics to those of the subjects. Cronbach's alpha coefficient was 0.84.

Part 3 Outcome Expectation of Health Behaviors Questionnaire

This instrument was constructed based on Bandura's self-efficacy theory (1997) and a literature review. It consisted of 25 items including outcome expectation of (Appendix E):

Nutrition eating 3 items, items 1-3

Rest and activity 6 items, items 4-9

Medication administration 1 item, item 10

Elimination	1 item, item 11
Preventing infection	2 items, items 12-13
Observing abnormal signs	4 items, items 14-17
Stress management	2 items, items 18-19
Maintenance of role and interpersonal relationships	5 items, items 20-24
Acceptance of body image	1 item, item 25

Each item was rated on a five-point Likert scale. The subjects were asked to respond to all of the items by rating them from 1 to 5 as follows:

No benefit	= 1
Little benefit	= 2
Moderate benefit	= 3
Much benefit	= 4
Most benefit	= 5

The total scores of the outcome expectation questionnaire ranged from 25 to 125, with higher total scores indicating pregnant women's higher level of outcome expectation to practice health behaviors and lower total scores indicating pregnant women's lower level of perceived outcome expectation to practice health behaviors.

Content Validity

The outcome expectation in health behaviors questionnaire was examined for content validity and language appropriateness by a group experts consisting of one obstetric and gynecological physician, one obstetric nursing instructor, and three nursing instructors who were experts in the self-efficacy theory (Appendix A). The questionnaire was revised and improved based on the comments and suggestions provided by these experts.

Reliability

To test internal validity, Cronbach's alpha coefficient was calculated. The instrument was assigned to 20 pregnant women who had the same characteristics as the subjects of the study. Cronbach's alpha coefficient was 0.90.

Protection of human rights

This study was conducted based on the protection of human rights and was approved by the administrators of Ramathibodi Hospital, the committee on Human

Rights Related to Research Involving Human Subjects, and the chairperson of Nakonpathom Hospital. Eligible subjects would be approached and asked to participate in the study. They received information about the purpose of the study, the data collection process, benefits, and completion of the questionnaire, and they were given an opportunity to ask questions in case they had doubt. Also, they were informed about their rights to refuse to participate in this study, with an assurance that their refusal would not affect the treatment and care they and their infants would received in any way. The subjects who were willing to cooperate were asked to sign the informed consent form and were assured that the data collected from them would be kept strictly confidential and would be reported only as group data (Appendix B).

Data collection

The steps taken during the data collection were as follows:

1. Preparation

1.1. An introduction letter was obtained form the Faculty of Graduate Studies, Mahidol University, and sent to the director of Ramathibodi Hospital, Faculty of Medicine, Mahidol University, and the director of Nakonpathom Hospital asking for permission to collect data.

1.2 The researcher introduced herself to the head nurse and nursing staff in each hospital, explained the research procedure, and asked for cooperation in data collection.

1.3 Two research assistants were trained to collect data form pregnant women by using the Demographic Characteristics Questionnaire, the Perceived Self-Efficacy of Health Behaviors Questionnaire, and the Outcome Expectation of Health Behaviors Questionnaire.

2. Steps of data collection

The researcher recruited and assigned the subjects into the experimental group and the control group. The researcher collected data from the control group before proceeding with the experimental group to prevent contamination of information. The date and time when data collection took place was on Mondays to Sundays from 08:00 a.m. to 06:00 p.m.

The Control Group

The first visit on the first day after the subjects were admitted into the hospital (duration = 30 minutes)

1. The researcher introduced herself, explained the objective and research procedure, and asked for cooperation from potential subjects.

2. After the subjects agreed to participate in the study, the researcher asked the subjects to answer the three questionnaires after explaining them to the subjects thoroughly, starting with the Demographic Characteristics Questionnaire, followed by the Self-Efficacy of Health Behaviors Questionnaire, and the Outcome Expectation of Health Behaviors Questionnaire. The subjects answered them within 25-30 minutes. While answering the questionnaires, the subjects could ask any question if they did not understand them. After the subjects returned the questionnaires, the researcher checked them to ensure completeness.

3. The subjects received only routine usual information form nurses or healthcare providers with no specification in terms of duration and time after they were admitted into the hospital.

The second visit when the subjects had a follow-up seven days after hospital discharge (duration = 30 minutes)

1. The research assistant introduced herself and asked the subjects to respond to the two questionnaires starting with the Self-efficacy of health behaviors Questionnaires followed by the Outcome Expectation of health behaviors Questionnaire. The subjects answered them within 25-30 minutes

2. The research assistant checked the answers for completeness, and after that, the assistant thanked the subjects for their cooperation in the study.

3. The researcher followed up on the outcome of pregnancy based on the subjects' hospital records.

The Experimental Group

The first visit on the first day after the subjects were admitted into the hospital (Duration = 40 minutes)

1. The researcher introduced herself, explained the objective and research procedure, and asked for cooperation from potential subjects.

2. After the subjects agreed to participate in the study, the researcher asked the subjects to answer the three questionnaires after explaining to them thoroughly, starting with the Demographic characteristics Questionnaire, followed by the Self-Efficacy of Health Behaviors Questionnaires and the Outcome Expectation of Health Behaviors Questionnaire. The subjects answered them within 25-30 minutes. While answering the questionnaires, the subjects could ask any question if they did not understand them. After the subjects returned the questionnaires, the researcher checked the answers for completeness.

3. The researcher then interacted with the subjects individually making a friendly conversation to establish rapport and trust. The step took about 10 minutes.

4. The researcher then provided information according to the information plan and the handbook for pregnant women with premature labor pain. The topics the subjects were supposed to know included definition of premature labor pain, causes and risks of premature labor pain, treatment in the hospital, and health status of pregnant women and their fetus during hospital stay. The step took about 30 minutes.

5. The researcher then gave the subjects a chance to release tension caused by premature labor pain and to share feelings during their stay in the hospital. The setting where this activity took place was on the hospital bed because at that moment the subjects were experiencing the symptoms of premature labor pain, receiving tocolytic drugs, and having restricted activities.

6. During the information giving session, the researcher also provided the subjects with a chance to ask any question and share their ideas. The researcher listened, gave suggestions, gave emotional support, and encouraged the subjects when they had enactive mastery.

7. The researcher summarized the content of the talk and made an appointment for the following next day.

The second visit on the second day after the subjects were admitted into the hospital (Duration = 30 minutes)

1. The researcher talked to the subjects to strengthen the relationship and to provide the subjects with a chance to release their tension regarding health behaviors during their hospital stay. The step took about 10 minutes.

2. The researcher gave information following the information plan and the handbook previously prepared. The topics included practical guideline to prevent premature labor pain and health status of pregnant women and the fetus during hospitalization. The researcher again gave the subjects a chance to ask questions, while the researcher listened, gave suggestions, offered emotional support, and encouraged them when they had enactive mastery. The step took about 20 minutes.

3. The researcher summarized the content of the talk and made an appointment for the following next day.

The third visit on the third day after the subjects were admitted into the hospital (Duration = 30 minutes)

1. The researcher engaged in a conversation with the subjects to establish rapport and allow them to release tension regarding health behaviors in the hospital. The step took about 10 minutes.

2. The researcher summarized all the content of the conversation following the information plan and the handbook previously prepared. The researcher also used this opportunity to describe self-assessment to the subjects. The step took about 20 minutes.

3. The researcher gave the subjects a chance to ask questions and then made an appointed for the next visit.

The fourth visit when the subjects came for a follow-up seven days after hospital discharge (Duration = 30 minutes)

1. The research assistant introduced herself and asked the subjects to answer the two questionnaires starting with the Self-Efficacy of Health Behaviors Questionnaires followed by the Outcome Expectation of Health Behaviors Questionnaire. The subjects answered them within 25-30 minutes.

2. The research assistant checked the answers for completeness. At the end of the session, the research assistant talked to the subjects to thank them for their cooperation.

3. The researcher followed up on the outcome of pregnancy using the subjects' hospital records.

The summary of the data collection process is presented in Figure 5.

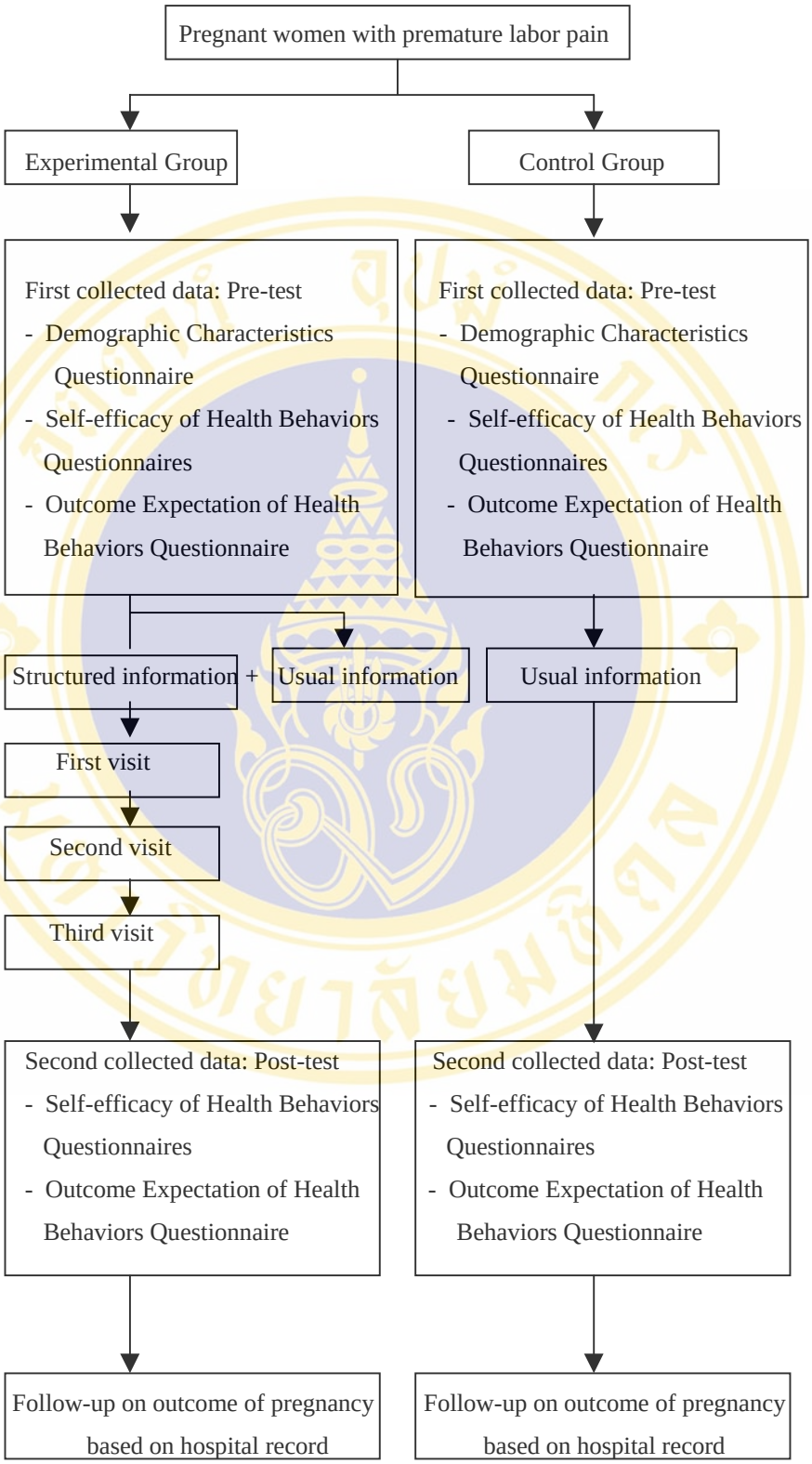


Figure 5: Steps in data collection

Data Analysis

All data were analyzed by using the Statistical Package for the Social Science/Personal Computer (SPSS/PC) as follows:

1. Chi-square test, Fisher's exact probability test, and independent t-test were analyzed to identify the differences in the subjects' demographic characteristics.

2. Independent t-test was used to analyze statistical differences in the pre-test scores of self-efficacy and outcome expectation between the experimental group and the control group.

3. Independent t-test was also employed to analyze statistical differences in the post-test scores of self-efficacy and outcome expectation between the experimental group and the control group.

4. Student t-test was also employed to analyze statistical differences in outcome of pregnancy between the experimental group and the control group.

5. Analysis of covariance was finally used to analyze and test statistical differences in the post-test scores between the experimental group and the control group using the pre-test scores as covariate.

CHAPTER 4
RESULTS

This research aimed to study the effects of structured information on perceived self-efficacy, outcome expectation of health behaviors, and outcome of pregnancy in pregnant women with premature labor pain. In this chapter, the research results are presented in two parts. The first part compares the demographic characteristics of the subjects in the experimental group and the control group, while the second part presents the results of the hypothesis testing.

Demographic Characteristics of the Subjects

To describe and determine the homogeneity among the subjects, descriptive statistics, Chi-square, Fisher's exact probability test, and t-test were performed. The results are shown in Tables 1, 2, and 3.

The subjects who participated in this study consisted of 50 pregnant women with premature labor pain. The largest groups of those in the experimental group held a Bachelor's degree (44%) or completed high school (40%). On the other hand, the largest group of the subjects in the control group (40%) graduated from primary school, followed by those who held a Bachelor's degree (36%). In terms of complications caused by premature labor pain, about three-fourths of the subjects did not have any complications with premature labor pain, or 76% of the experiment group and 72% of the control group. A comparison of these characteristics using χ^2 showed that there was no statistically significant difference in educational background and complications with premature labor pain between the control group and the experimental groups ($p > .05$) (Table1).

Table 1: Number, percentage, and a comparison of subjects' demographic using the Chi-square test.

Characteristics	Experimental group (n=25)		Control group (n=25)			
	Number	%	Number	%	χ^2	p-value
Educational level					3.771	.152
Primary school	4	16	10	40		
High school	10	40	6	24		
Bachelor's degree	11	44	9	36		
Complications with premature labor pain					.104	.747
Without complications	19	76	18	72		
With complications	6	24	7	28		

* $p < .05$

In terms of marital status, 96% of the subjects in both groups were married. In addition, 92% and 100% of the subjects in the experimental group and the control group had an occupation, respectively. As for religious beliefs, 96% of the subjects in the experimental group were Buddhists, while all in the control group were Buddhists. However, Fisher's exact probability test did not yield any statistically significant difference between the two groups of subjects ($p > .05$) (Table 2).

Table 2: Number, percentage, and a comparison of the subjects' characteristics using Fisher's exact probability test.

Characteristics	Experimental group (n=25)		Control group (n=25)		Fisher's exact	p-value
	Number	%	Number	%		
Marital status					.000	1.000
Married	24	96	24	96		
Divorced/Separated	1	4	1	4		
Occupation					2.856	.490
Employed	23	92	25	100		
Unemployed	2	8	-	-		
Religion					1.407	1.000
Buddhism	24	96	25	100		
Christianity	1	4	-	-		

* $p < .05$

The ages of the subjects in the experimental group ranged from 17 to 36 years, with the mean age of 26.12 years (SD = 5.34), while the ages of those in the control group ranged form 18 to 42 years, with the mean age of 29.88 years (SD = 6.42). The independent t-test revealed a statistically significant difference in age of the subjects ($p < .05$). In addition, in terms of gestational age, the gestational ages of the subjects in the experimental group ranged from 196 to 248 days, with the mean of 223 days (SD = 14.30), whereas those of the subjects in the control group ranged from 196 to 247 days, with the mean of 223.76 days (SD. = 14.88). The gravidarum of the subjects in the experimental group ranged from one to four, with the mean of 1.88 (SD = 0.97), and the gravidarum of the subjects in the control group ranged form one to six, with the mean of 2.28 (SD = 1.54). When considering the monthly family income, it was found that the monthly incomes of the subjects in the experimental group ranged form 3,000 to 49,800 Baht, with the mean of 15,060 Baht (SD. = 12,256.87), while the monthly income of those in the control group ranged from 1,000 to 65,000 Baht, with the mean of 14,020

Baht (SD = 12795.21). The only one person had 1,000 Bath per family's monthly income in control group. Moreover, the length of hospital stay of the subjects in both groups equally ranged from three to seven days, with the means of 3.92 (SD = 1.41) in the experimental group and 3.72 (SD = 1.14) in the control group. When the independent t-test was performed, the findings revealed no statistically significant differences between the gestational age, gravidarum, monthly family income and length of hospital stays between the subjects in both ($p > .05$) (Table 3).

Table 3: Range, mean, and standard deviation of subjects' characteristics.

Characteristics	Experimental group (n=25)			Control group (n=25)				
	Range	$\overline{X}$	SD	Range	$\overline{X}$	SD	t	p-value
Age	17-36	26.12	5.34	18-42	29.88	6.42	2.250	.029*
Gestational age	196-248	223	14.30	196-247	223.76	14.88	.184	.885
Gravidarum	1-4	1.88	0.97	1-6	2.28	1.54	1.098	.278
Average Family's monthly income	3000-49800	15060	12256.87	1000-65000	14020	12795.21	-.293	.770
Length of hospital stay	3-7	3.92	1.41	3-7	3.72	1.14	-.552	.584

* $P < .05$

The pre-test mean score of perceived self-efficacy of health behaviors of experimental group was 95.56 (SD = 12.13) and control group was 95.92 (SD = 12.24). These mean scores of both groups were in the vicinity. Nevertheless, there were not significantly statistical different ($p > .05$). It resemble the pre-test mean scores of outcome expectation of health behaviors of experimental group was 109.68 (SD = 11.88), control group was 105.72 (SD = 12.22). They were not significantly statistical different ($p > .05$) (Table 4).

Table 4: Comparison of pre-test mean scores, standard deviation of self-efficacy and outcome expectation of health behaviors between the experimental group and the control group by independent t-test.

Characteristics	Experimental group (n=25)		Control group (n=25)			
	$\overline{X}$	SD	$\overline{X}$	SD	t	p-value
Self-efficacy	95.56	12.13	95.92	12.24	.104	.917
Outcome expectation	109.68	11.88	105.72	12.22	-.162	.251

* $p < .05$

Part 2 Hypothesis testing

Hypothesis 1: Pregnant women with premature labor pain who received structured information will have perceived self-efficacy higher than those who did not.

The post-test data were collected seven days after the subjects were discharged to investigate the effects of structured information on perceived self-efficacy by comparing the mean self-efficacy post-test scores using the independent t-test. The test results showed that mean self-efficacy post-test score of the subjects in the experimental group had higher than the mean score of those in the control group with statistically significant ($p < .01$) (Table 5).

Table 5: Comparison of mean self-efficacy post-test scores of health behaviors between the experimental and control groups by independent t-test.

Characteristics	Experimental group (n=25)		Control group (n=25)		t	p-value
	$\overline{X}$	SD	$\overline{X}$	SD		
Self-efficacy	107.20	9.25	98.08	12.03	-3.005	.004*

* $p < .01$

The influence of pre-test mean scores on the post-test mean scores of self-efficacy was tested by regression analysis which is the ANCOVA assumption testing. The finding revealed that mean self-efficacy pre-test score accounted for 35% of variance to explain the mean self-efficacy post-test score with statistically significance ($\beta = .592$, $t = 5.090$, $p < .001$). After that comparison of the mean self-efficacy post-test scores between the experimental group and the control group by analysis of covariance using the adjusted pre-test mean score as the covariate confirmed that the mean self-efficacy pre-test score had a significant effect on the mean self-efficacy post-test score ($F_{1,47} = 34.744$, $p < .001$). Also, there was a statistically significant difference of mean self-efficacy post-test scores between the experimental group and the control group ($F_{1,47} = 16.076$, $p < .001$) (Table 6). Therefore, Hypothesis 1 was supported.

Table 6: Comparison of mean self-efficacy post-test scores using mean self-efficacy pre-test scores as covariate between the experimental and control groups by analysis of covariance (ANCOVA). (n = 50)

Source of variate	SS	df	MS	F	P
Covariate (pre-test)	2349.524	1	2349.524	34.744	.000***
Group	1087.019	1	1087.091	16.076	.000***
Error	3178.316	47	67.624		
Correct total	6567.520	49			

*** p <.001

Hypothesis 2: Pregnant women with premature labor pain who received structured information will have outcome expectation higher than those who did not.

The effect of structured information on outcome expectation of health behaviors was tested by comparing the mean outcome expectation post-test scores using the independent t-test. The test results showed that mean outcome expectation post-test score of the subjects in the experimental group had higher than the mean score of those in the control group with statistically significant ($p < .001$) (Table 7).

Table 7: Comparison of mean post-test scores of outcome expectation of health behaviors between the experimental and control groups using independent t-test.

Characteristics	Experimental group (n=25)		Control group (n=25)			
	$\overline{X}$	SD	$\overline{X}$	SD	t	p-value
Outcome expectation	116.08	7.89	105.56	12.49	-3.506	.001***

*** p< .001

The influence of mean pre-test scores on mean post-test scores of outcome expectation was tested by using the regression analysis which is the ANCOVA assumption testing. The finding showed that the mean pre-test scores of outcome expectation could statistically significantly explain 53% of variance of the mean post-test scores of outcome expectation (β = .731, t = 7.416, p < .001). After that the ANCOVA was used to test the difference of the mean post-test scores of outcome expectation between the subjects in the two groups, using the mean pre-test scores as covariate. The result confirmed that the mean pre-test scores had an influence on the mean post-test scores of outcome expectation ($F_{1,47}$ = 59.276, p < .001). The findings also showed that there was a statistically significant difference between the mean post-test scores of outcome expectation of the subjects in the experimental group and the mean score of those in the control group when adjusted by the influence of the mean pre-test score ($F_{1,47}$ = 15.608, p <.001) (Table 8). Therefore, Hypothesis 2 was supported.

Table 8: Comparison of mean post-test scores of outcome expectation of health behaviors using pre-test mean scores as covariate between the experimental and control groups by analysis of covariance (ANCOVA) (n = 50)

Source of variates	SS	df	MS	F	P
Covariate (pre-test)	2922.643	1	2922.643	59.276	.000***
Group	769.544	1	769.544	15.608	.000***
Error	2317.357	47	49.305		
Corrected total	6623.380	49			

*** p <.001

Hypothesis 3: Pregnant women with premature labor pain who received structured information will have outcome of pregnancy in term of gestational age at delivery more term than those who did not.

The ANCOVA was used to test the difference of the mean outcome of pregnancy between the subjects in the two groups, using the age as covariate. The result confirmed that the mean of age had not influence on the outcome of pregnancy ($F_{1,47}$ = 1.134, p <.001). Thus, student t-test was use to test the hypothesis.

Descriptive data showed that the mean scores of outcome of pregnancy of the subjects in the experimental group and the control group was 257.32 days (SD = 17.05) and 250.44 days (SD = 19.04), respectively. The independent t-test was performed to compare outcome of pregnancy of both groups, and the result showed no statistically significant difference between the subjects in the two groups (t = 1.346, p > .05) (Table 9). Therefore, Hypothesis 3 was not supported.

Table 9: Comparison of outcome of pregnancy between the experimental and control groups by student t-test.

Characteristics	Experimental group (n=25)		Control group (n=25)			
	$\bar{X}$	SD	$\bar{X}$	SD	t	p-value
Outcome of pregnancy	257.32	17.05	250.44	19.04	-1.346	.185

* $p < .05$

CHAPTER 5
DISCUSSION

This research was a quasi-experimental design. The objective was to study the effectiveness of provision of structured information on perceived self-efficacy, outcome expectation of health behaviors, and outcome of pregnancy. In this chapter, the results regarding the demographic characteristics of the subjects and hypothesis testing are discussed.

Characteristics of the subjects

As for the educational background, the largest group of subjects in the experimental group (44%) held a Bachelor's degree, while 40% graduated from high school. On the other hand, 40% of the subjects in the control group completed primary education and 36% graduated with an undergraduate degree. This finding indicated that most of them had a rather good level of education, and it was consistent with the finding of Phavech (2002: 63) which found that over 60% of high-risk pregnant women admitted into Ramathibodi Hospital held at least a certificate or a diploma. In addition, most of the subjects did not have any complication with premature labor pain (76% of the experimental group and 72% of the control group). The majority of the subjects in the experimental and control groups were married (96% of both groups), were employed (92% and 100% in the experimental and control groups, respectively), and were Buddhists (96% of the experimental group and 100% of the control group). In terms of age, the mean age of the subjects in the experimental group was 26.12 years, while that of the control group was 29.88 years, which were considered early adulthood. This was again congruent with the findings of previous studies conducted at Ramathibodi Hospital (Jankhow, 1997: 66; Rodjanapradit, 1997: 79). With regard to average monthly family income, the means were 15,060 and 14,020 Baht per month for the subjects in the experimental group and the subjects in the control group, respectively. The mean incomes were considered higher than the national mean

income of 12,150 Baht (Office of the Prime Minister, National Statistics office, 2000: 1). In terms of gestational age, the gestational ages of the subjects in the experimental group with the mean of 223 days (SD = 14.30), whereas those of the subjects in the control group with the mean of 223.76 days (SD. = 14.88). The gravidarum of the subjects in the experimental group with the mean of 1.88 (SD = 0.97), and the gravidarum of the subjects in the control group with the mean of 2.28 (SD = 1.54). Moreover, both groups of subjects had an equal length of hospital stay of three to seven days, with almost equivalent means (3.92 for the experimental group and 3.72 for the control group). Likewise, Gyetvai and colleagues (1999: 869) found that tocolytic drugs could decrease the risk of delivery within seven days.

The researcher tried to control the factors that may have had an impact on perceived self-efficacy, outcome expectation, and outcome of pregnancy by testing the homogeneity of the subjects by using the Chi-square test and the t-test analysis. The results showed that there were no statistically significant differences between the educational level, complications with preterm labor, marital status, occupation, religion, gravidarum, gestational age, average monthly family income, and length of hospital stay of the subjects in the experimental group and those of the subjects in the control group ($p > .05$). However, when the independent t-test was performed, it yielded a statistically significant difference in age of the subjects in both groups ($p < .05$).

Hypotheses testing

Hypothesis 1: Pregnant women with premature labor pain who received structured information will have perceived self-efficacy higher than those who did not.

The Analysis of Covariance was used to compare the mean post-test scores of self-efficacy, with the mean pre-test score as covariate. The result showed that the mean post-test score of self-efficacy of the subjects in the control group was statistically significantly different from that of the subjects in the experimental group ($F_{1,47} = 16.076$, $p < .001$) (Table 6).

The first hypothesis was supported. It indicated that structured information enabled the subjects to increase perceived self-efficacy in health behaviors. The

increase in perceived self-efficacy of the subjects in the experimental group may have been due to some of the activities that provided information on preterm labor to the subjects. In this study, the researcher applied the major sources included in Bandura's self-efficacy theory to provide information leading to performance accomplishment. The information that these pregnant women obtained included assessment of signs and symptoms of premature labor pain, side effects of tocolytic drugs, quickening, and self-assessment. When learning activities were provided, there were some demonstrations and training that helped the subjects remember the information easily and increased their skills and understanding (Chaibamrung, 2001: 91). Furthermore, the researcher taught the subjects self-assessment, so when the subjects returned home that could help them achieve enactive mastery. Encouraging pregnant women to set goals can foster performance accomplishment. So, in this study the target behaviors were then divided into easily managed tasks that proceeded in incremental steps to facilitate success (Scherer & Shimmel, 1996: 262). It could be concluded that these learning activities made them able to build up their confidence for their own self-efficacy. In addition, modeling is a behavior-modification technique that involves observing the behavior of others. In this study, vicarious experiences were applied to develop self-efficacy by using a symbolic model and a handbook for pregnant women with premature labor pain. A live model was also provided by the researcher in order to help pregnant women gain direct experience. One advantage of observational learning is that it provides the opportunity to develop self-efficacy (Lowe, 1991: 459). For example, in Leaderman's study of psychosocial adaptation during nulliparous pregnancy, women coped with anxieties by learning as much as possible from classes, reading, and talking with other women, and the process was closely related to the women's self-confidence (Leaderman, 1984, cited by Lowe, 1991: 459). Besides, verbal persuasion was also applied when the researcher offered suggestions following the informational plan that encouraged pregnant women to believe they possessed the required capability to deal with specific situations. Furthermore, physical arousal was also applied to release emotions caused by premature labor pain using a model in the handbook. Throughout the process, the subjects had an opportunity to ask questions and to express feelings and opinions. Therefore, pregnant women who prepared and

made themselves both physically and mentally ready would have increased self-efficacy (Bandura, 1986: 399-409).

The study results were consistent with those of the study by Sakamanee (1997: 122) which found that the self-efficacy of the experimental group was statistically significantly higher than that of the control group ($p < .05$) after using the perceiving self-efficacy program on maternal role attainment of first time postpartum mothers. Similarly, Tassanapoonchai's study (1997: 127) which provided training for development of perceived self-efficacy regarding AIDS prevention among pregnant women indicated that in the first and fourth weeks the experimental group had higher mean scores of perceived self-efficacy regarding AIDS prevention than those of the control group with statistical significance at the p-value < 0.0001. Moreover, the study findings were supported by Pheurksomon (1996: 117) who studied a childbirth preparation model to improve self-efficacy for coping with labor pain of primigravidarum. It was found that after entering the preparation program the mean scores of self-efficacy for coping with labor pain of the experimental group was statistically significantly higher than those of the control group at the p-value < 0.001.

Hypothesis 2: Pregnant women with premature labor pain who received structured information will have outcome expectation higher than those who did not.

The Analysis of Covariance was conducted to compare the mean post-test scores of outcome expectation, with the mean pre-test scores as covariate. The results showed that outcome expectation of the control group was statistically significantly different from that of the experiment group ($F_{1, 47} = 15.608$, $p < .001$) (Table 8).

The second hypothesis was supported. The increase in the mean score of outcome expectation of health behaviors in the experimental group may have been due to some activities that provided information on premature labor pain to the subjects. In this study, the researcher applied the major sources of Bandura's self-efficacy theory to provide information including performance accomplishment, vicarious experience, verbal persuasion, and physical arousal. The structured information helped the subjects to increase understanding of health behaviors, leading to outcome expectation in health behaviors. Furthermore, during the learning

activities, the subjects had a chance to practice and obtain outcome expectation such as assessment of signs and symptoms of premature labor pain, side effects of tocolytic drugs, quickening, and self-assessment after hospital discharge, which led to high outcome expectation in health behaviors. According to Bandura (1997: 125-126), persons who have a belief in positive outcome and receive outcome expectation will eventually develop high outcome expectation. This was supported by Rungsiyanon (1997: 50) who reported that the scores of outcome expectancies in coping with labor pain of primigravidarum after participating in the program were significantly higher than the scores obtained before participation in the program ($p < .005$). Similarly, Chaibamrung (2001: 93) studied the effectiveness of a health education program implementing the self-efficacy theory. After the experiment, the experimental group had gained more significant outcome expectation in exercise for health ($p < .001$). In addition, a study of Sonsnam (2001: 108) investigating the effectiveness of a health education program using the self-efficacy theory with pregnant women to promote fetus quality at an antenatal care found that outcome expectation of both first time and multiple time pregnant women was higher than that obtained before the experimental period with statistical significance ($p < 0.05$).

Hypothesis 3: Pregnant women with premature labor pain who received structured information will have outcome of pregnancy in term of gestational age at delivery more term than those who did not.

In this study, it was found that the mean score of outcome of pregnancy of the subjects in the experiment group was 257.32 days (SD = 17.05), while the mean score of outcome of pregnancy of the subjects in the control group was 250.44 days (19.04). However, there was no statistically significant between outcome of pregnancy of the subjects in both groups (Table 11)**.** The Analysis of Covariance was conducted to compare the mean outcome of pregnancy, with the mean of age as covariate. The results showed that outcome of pregnancy of the control group was not statistically significantly different from that of the experiment group ($F_{1, 47} = 1.134$, $p < .001$).

As these results did not confirm that structured information would significantly reduce premature labor pain, the third hypothesis was not supported. A previous study on effects of a supportive-educative nursing system on pregnancy

outcome found that there was no statistically significant different between the experimental and control groups ($p > 0.05$) (Thadapipat, 1995: iv). For the present study, one plausible explanation for such finding might be because the economic statuses of the subjects in both groups were similar as 92% and 100% of the subjects in the experimental group and the control group were employed, respectively. In the present-day modern society, women with a higher socioeconomic status tend to work, while those in lower socioeconomic groups tend to stay home (Fuch, et al., 1993: 17). This causes them to have limited ability in taking care of their health. Also, employment outside the home is considered a risk factor of premature labor pain (Buckley & Kulb, 1993: 353). Similar results were reported by Mammel and colleagues (1984: 309) who found that employment outside the home increased the risk of premature labor pain. In addition, age was also considered one factor leading to premature labor pain, especially among older women having their first child and among teens having their second or third child (Fuchs, et al., 1993: 173). In the present study, the ages of the experimental and control groups were statistically significantly different when the independent t-test was performed ($p <.05$). The mean age of the experiment group was 26.12 years (SD. = 5.34); the mean age of the control group was 29.88 years (SD. = 6.42). Thus, the subjects in both groups were early adulthood. Support can be found in a study of white first time mothers with private health insurance which found no difference in preterm labor among women aged 20 to 29 years old, 30 to 34 years old, and over 35 years old (Fuchs, et al., 1993: 175). In addition, it is worth noting that it was unable to control the quantity of medication treatment of the subjects to ensure that the subjects received the same regimen throughout the program. Therefore, it was possible that part of the results may have influenced the outcome of pregnancy. This result was consistent with the finding of Sanchez and colleagues (1999: 484) who analyzed published randomized trials assessing the efficacy of maintenance of tocolytic therapy after short-term tocolysis in 1,590 patients with acute preterm labor. The results revealed that maintenance of tocolytic drugs did not reduce the incidence of recurrent preterm labor or preterm delivery, nor did it improve perinatal outcome. It may have been possible that the study included a small sample size because a larger number of subjects may have led to increased statistical power (Leucha, et al., B.E. 2534: 83).

Research Limitations

1. In this study, it was unable to control the medication treatment of the subjects to ensure that the subjects received the same treatment regimen throughout the program; therefore, it may have been possible that part of the results was influenced by such medication regimen the subjects received.

2. The research could not control the health information the subjects may have received from other healthcare providers or other sources such as family members or friends who had the same experience, and this may have affected the findings of this study.

3. This study used purposive sampling; thus, the findings could not be generalized to other groups of population with preterm labor.

4. Two settings for collecting data of the research were unable to control circumstance such as the difference of privacy environment that might be influence on the results.

CHAPTER 6
CONCLUSION

This study employed a quasi-experimental design with an aim to determine the effect of structured information, guided by Albert Bandura, on perceived self-efficacy of health behaviors, outcome expectation of health behaviors, and outcome of pregnancy of pregnant women with premature labor pain.

The sample in this study consisted of 50 pregnant women with premature labor pain, 25 were assigned into the control group and the other 25 were assigned into the experimental group. The inclusion criteria for the study were pregnant women who experienced the onset of labor between 28 and 37 gestational weeks, with no experience of hospital admission, with hospitalization lasted from three to seven days, and on tocolytic drugs. They were admitted into the labor room, the complication ward, and the attend in the antenatal clinic at Ramathibodi Hospital or the labor room, the obstetric-gynecological ward, and attend in the antenatal clinic at Nakornpathom Hospital during June 2002 to March 2003.

Data collection was carried out with respect to protection of human rights after approval was granted by the administrators of Ramathibodi Hospital, the Committee on Human Rights Related to Research Involving Human Subjects, and the chairperson of Nakonpathom Hospital. The instruments used were divided into three parts: the Demographic Characteristics Questionnaire designed by the researcher, the Perceived Self-Efficacy of Health Behaviors Questionnaire, and the Outcome Expectation of Health Behaviors Questionnaire constructed by the researcher based on Bandura's self-efficacy theory and a review of related literature. The experimental instruments consisted of an information plan and a handbook for pregnant women with premature labor pain developed based on Bandura's self-efficacy theory together with knowledge and insights gained from a review of relevant literature. Bandura's theory was applied to form major sources of information including performance accomplishment, vicarious experience, verbal persuasion, and physiological and

affective state. These questionnaires were tried out with 20 pregnant women with premature labor pain who shared similar characteristics with the sample of the study to test their reliability. The reliability calculated by Cronbach's alpha coefficient was 0.84 and 0.90, respectively.

Data collection was conducted in two steps: preparation and data collection. The researcher collected data from the control group before moving on to the experimental group. The dates and times to collect data were Mondays to Sundays from 08:00 a.m. to 06:00 p.m.

Data were analyzed by using the Chi square, Fisher's exact test, Independent t-test and ANCOVA. Research findings were summarized as follows:

1. Perceived self-efficacy of health behaviors mean score in pregnant women with premature labor pain who received structured information is higher than pregnant women with premature labor pain who received usual nursing information with statistically significant ($p < .01$).

2. Outcome expectation of health behaviors mean score in pregnant women with premature labor pain who received structured information is higher than pregnant women with premature labor pain who received usual nursing information with statistically significant ($p < .001$).

3. Outcome of pregnancy in pregnant women with premature labor pain who received structured information was not statistically significantly different from that of pregnant women who received usual nursing information.($p > .05$)

Nursing Implications

Based on the results of this study, the following implications for nursing are recommended:

Nursing education:

1. The study findings showing that perceived self-efficacy of health behaviors and outcome expectation of pregnant women with premature labor pain mean score who received structured information were higher than pregnant women with premature labor pain who received only usual nursing information, point out that nursing instructors should support and encourage teaching and learning approaches

which involve how to give structured information to pregnant women with premature labor pain.

2. Nursing instructors should incorporate structured information by incorporating Bandura's theory into the nursing curriculum, both the theoretical and practical aspects, in order to extend nursing students' scope of knowledge and skills in providing premature labor pain care.

Nursing practices:

1. Nurses should develop and utilize a format of structured information so as to promote this particular caring strategy in the obstetrics ward and to assess perceived self-efficacy and outcome expectation in health behaviors of pregnant women with premature labor pain who admitted into the hospital.

2. Nurse should take perceived self-efficacy and outcome expectation in health behaviors of pregnant women with premature labor pain into consideration to assist nursing educators in conducting appropriate implementation of the practice to care for pregnant women with premature labor pain.

3. Nurses should develop a structured information format for pregnant women with premature labor pain based on extensive research in compliance and congruence with the hospital accreditation system in each hospital.

Further Research

1. Similar studies should be conducted to validate the findings of the present study using a larger sample size of pregnant women with premature labor pain from various social, ethnic, and socioeconomic backgrounds so as to generalize the findings to a larger population of pregnant women.

2. Future studies should be carried out to investigate the effectiveness of the structured information given from prenatal care to intrapartum and postpartum cares to determine its effect on the mothers, fetuses/infants, and the whole families.

3. Qualitative research design is strongly recommended especially to explore the outcome of pregnancy such as satisfaction of pregnant women and outcome expectation.

4. Further studies may examine the use of structured information to increase self-efficacy and outcome expectation among high-risk pregnant women.

5. Instruments which used in this study should be determined the psychometric property in the large sample size since they were firstly develop.

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APPENDIX A

List of Experts Consulted on Validation of the Instrument.

List of Experts Consulted on Validation of the Instrument

1. Assistant Professor Dr. Nittaya Sinsuksai, Ph.D.(Nursing)
   Department of Obstetrics and gynecology Nursing, Faculty of Nursing, Mahidol University.
2. Assistant Professor Dr.Yaowaluk Serisathien, DNS.
   Department of Obstetrics and gynecology Nursing, Faculty of Nursing, Mahidol University.
3. Assistant Professor Dr. Somjai Puthapitakpol, DNS
   Branch of Nursing, School of health Science, Sukhothai Thammathirat Open University.
4. Assistant Professor Adithep Jaovisidha
   Department of Obstetrics and gynecology, Ramahibodi Hospital Faculty of Medicine, Mahidol University.
5. Assistant Professor Unapha Phoolsilpe
   Department of Nursing, Ramahibodi Hospital Faculty of Medicine, Mahidol University.

APPENDIX B

CONSENT FORM FOR THE PARTICIPANTS.

การพิทักษ์สิทธิของผู้เข้าร่วมการวิจัย

สวัสดีค่ะดิฉันชื่อ นางสาวสุปิยา วิริไฟ นักศึกษาหลักสูตรพยาบาลศาสตรมหาบัณฑิต สาขาการพยาบาลมารดาและทารกแรกเกิด ภาควิชาพยาบาลศาสตร์ คณะแพทยศาสตร์ โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล ขณะนี้กำลังศึกษาวิทยานิพนธ์เรื่อง ผลการให้ข้อมูลอย่างมีแบบแผนต่อการรับรู้สมรรถนะแห่งตน ความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพ และผลลัพธ์ของการตั้งครรภ์ของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด เพื่อนำผลการศึกษามาใช้เป็นแนวทางในการให้การพยาบาลเพื่อส่งเสริมการปฏิบัติทางด้านสุขภาพแก่หญิงตั้งครรภ์อย่างมีประสิทธิภาพต่อไป การวิจัยครั้งนี้ดิฉันขอให้ท่านตอบแบบสอบถามจำนวน 3 ชุด ดังนี้ 1) แบบสอบถามข้อมูลส่วนบุคคล 2) แบบสอบถามการรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่ภาวะเจ็บครรภ์คลอดก่อนกำหนด 3) แบบสอบถามความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่ภาวะเจ็บครรภ์คลอดก่อนกำหนด

ดิฉันหวังเป็นอย่างยิ่งว่าท่านคงยินดีจะเข้าร่วมโครงการการวิจัยในครั้งนี้ และดิฉันขอรับรองว่าการเข้าร่วมในการวิจัยครั้งนี้จะไม่ก่อให้เกิดอันตรายแก่ท่านแต่อย่างใด ถ้าหากท่านมีข้อสงสัยประการใดเกี่ยวกับการศึกษาครั้งนี้ ดิฉันยินดีอย่างยิ่งที่จะให้ท่านซักถามจนเข้าใจ และไม่ว่าท่านจะเข้าร่วมในการวิจัยครั้งนี้หรือไม่ ท่านยังคงได้รับการรักษาพยาบาลและบริการต่างๆจากทางโรงพยาบาลตามปกติ ท่านมีสิทธิที่จะตอบรับหรือปฏิเสธการเข้าร่วมวิจัยครั้งนี้โดยสมัครใจ และถึงแม้ว่าท่านจะเข้าร่วมในการวิจัยแล้วก็ตาม ท่านยังสามารถยกเลิกการเข้าร่วมวิจัยครั้งนี้ได้ตลอดเวลา โดยไม่มีผลต่อการรักษาพยาบาลและบริการต่างๆที่ท่านได้รับ

นางสาวสุปิยา วิริไฟ
นักศึกษาหลักสูตรพยาบาลศาสตรมหาบัณฑิต สาขาการพยาบาลมารดาและทารกแรกเกิด
ภาควิชาพยาบาลศาสตร์ คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล

หนังสือยินยอมโดยได้รับการบอกกล่าวและเต็มใจ

(Informed Consent Form)

ชื่อโครงการ ผลการให้ข้อมูลอย่างมีแบบแผนต่อการรับรู้สมรรถนะแห่งตน ความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพ และผลลัพธ์ของการตั้งครรภ์ของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด

ชื่อผู้วิจัย นางสาวสุปิยา วิริไฟ

ชื่อผู้ถูกวิจัย.....

อายุ.....เลขที่เวชระเบียน.....

คำยินยอมของผู้ถูกวิจัย

ข้าพเจ้า นาย/นาง/นางสาว.....ได้ทราบรายละเอียดของโครงการวิจัยตลอดจนประโยชน์ และข้อเสี่ยงที่จะเกิดขึ้นต่อผู้ยินยอมตนให้ทำวิจัยจากผู้วิจัยแล้วอย่างชัดเจน ไม่มีสิ่งใดปิดบังซ่อนเร้นและยินยอมให้ทำการวิจัยในโครงการที่มีชื่อข้างต้น และข้าพเจ้ารู้ว่าถ้ามีปัญหาหรือข้อสงสัยเกิดขึ้น ข้าพเจ้าสามารถสอบถามผู้วิจัยได้ และข้าพเจ้าสามารถไม่เข้าร่วมโครงการวิจัยนี้เมื่อใดก็ได้ โดยไม่มีผลกระทบต่อการรักษาที่ข้าพเจ้าพึงได้รับ นอกจากนี้ผู้วิจัยจะเก็บข้อมูลเฉพาะเกี่ยวกับตัวข้าพเจ้าเป็นความลับและจะเปิดเผยได้เฉพาะในรูปที่เป็นสรุปผลการวิจัย การเปิดเผยข้อมูลเกี่ยวกับตัวข้าพเจ้าต่อหน่วยงานต่างๆที่เกี่ยวข้อง กระทำได้เฉพาะกรณีจำเป็นด้วยเหตุผลทางวิชาการเท่านั้น

ลงชื่อ.....(ผู้ยินยอมตนให้ทำการวิจัย)

.....(พยาน)

.....(พยาน)

วันที่.....

คำอธิบายของแพทย์หรือผู้วิจัย

ข้าพเจ้าได้อธิบายรายละเอียดของโครงการ ตลอดจนประโยชน์ของการวิจัย รวมทั้งข้อเสี่ยงที่อาจจะเกิดขึ้นแก่ผู้ยินยอมตนให้ทำวิจัยทราบแล้วอย่างชัดเจนโดยไม่มีสิ่งใดปิดบังซ่อนเร้น

ลงชื่อ.....(แพทย์หรือผู้วิจัย)

วันที่.....

APPENDIX C

DEMOGRAPHIC CHARACTERISTIC QUESTIONNAIRE.

เลขที่แบบสอบถาม……

โรงพยาบาลที่เก็บข้อมูล…….

เลขที่โรงพยาบาล HN……AN……..

อายุครรภ์……สัปดาห์……วัน

ลำดับที่ของการตั้งครรภ์……

ภาวะแทรกซ้อนที่เกิดขึ้นร่วมกับภาวะเจ็บครรภ์คลอดก่อนกำหนด……...

……

ระยะเวลาพักรักษาตัวในโรงพยาบาล……..วัน

อายุครรภ์เมื่อคลอด……..วัน

ส่วนที่ 1 แบบสอบถามข้อมูลส่วนบุคคล

คำชี้แจง กรุณาทำเครื่องหมาย / ลงใน ( ) หน้าข้อความหรือเติมคำลงในช่องว่างตามความเป็นจริง

1. อายุ……ปี
2. รายได้เฉลี่ยครอบครัวต่อเดือน……บาท
3. สถานภาพสมรส

   ( ) 1. คู่ ( ) 2. หม้าย

   ( ) 3. หย่า ( ) 4. แยกกันอยู่
4. ศาสนา

   ( ) 1. พุทธ ( ) 2. คริสต์

   ( ) 3. อิสลาม ( ) 4. อื่นๆ ระบุ……..
5. อาชีพ

   ( ) 1. รับราชการ ( ) 2. ค้าขาย

   ( ) 3. รับจ้าง ( ) 4. นักเรียน นักศึกษา

   ( ) 5. เกษตรกรรม ( ) 6. อื่นๆ ระบุ…….
6. ระดับการศึกษา

   ( ) 1. ประถมศึกษา

   ( ) 2. มัธยมศึกษา / อาชีวศึกษา

   ( ) 3. ปวส. /อนุปริญญาตรี

   ( ) 4. ปริญญาตรี

   ( ) 5. ปริญญาโท

APPENDIX D

PERCEIVED SELF-EFFICACY OF HEALTH BEHAVIORS QUESTIONNAIRE.

แบบสอบถามการรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด

คำชี้แจง แบบสอบถามนี้เป็นข้อคำถามในเรื่องการรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่ภาวะเจ็บครรภ์คลอดก่อนกำหนด กรุณาทำเครื่องหมาย / ลงในช่องที่ตรงตามความคิดเห็นของหญิงตั้งครรภ์เพียงคำตอบเดียว โดยแต่ละคำตอบมีความหมายดังนี้

คะแนน 5 เท่ากับ มั่นใจมากที่สุด หมายถึง ผู้ตอบมีความมั่นใจว่าสามารถกระทำพฤติกรรมนั้นได้อย่างแน่นอน

คะแนน 4 เท่ากับ มั่นใจมาก หมายถึง ผู้ตอบมีความมั่นใจว่าสามารถกระทำพฤติกรรมนั้นได้อย่างมาก

คะแนน 3 เท่ากับ มั่นใจปานกลาง หมายถึง ผู้ตอบมีความมั่นใจว่าสามารถกระทำพฤติกรรมนั้นได้ปานกลาง

คะแนน 2 เท่ากับ มั่นใจน้อย หมายถึง ผู้ตอบมีความมั่นใจว่าสามารถกระทำพฤติกรรมนั้นได้น้อย

คะแนน 1 เท่ากับ มั่นใจน้อยมาก/ไม่มีความมั่นใจ หมายถึง ผู้ตอบมีความมั่นใจน้อยมากหรือไม่มีความมั่นใจว่าสามารถกระทำพฤติกรรมนั้นได้เลย

ตัวอย่าง

ข้อความ ท่านมีความมั่นใจว่าสามารถกระทำพฤติกรรมต่อไปนี้มากน้อยเพียงใด	**ระดับความมั่นใจ**				
	มากที่สุด (5)	มาก (4)	ปานกลาง (3)	น้อย (2)	ไม่มีความมั่นใจ (1)
1. ออกกำลังกายโดยการเดินรอบสนามอาทิตย์ละ 2 ครั้ง	/				

ข้อความ ท่านมีความมั่นใจว่าสามารถกระทำพฤติกรรมต่อไปนี้มากน้อยเพียงใด	**ระดับความมั่นใจ**				
	มากที่สุด (5)	มาก (4)	ปานกลาง (3)	น้อย (2)	ไม่มีความมั่นใจ (1)
1. รับประทานอาหารประเภทเนื้อสัตว์ต่างๆ เช่น เนื้อหมู ไก่ ปลา ฯลฯ ไข่ ถั่ว ครบ 3 มื้อทุกวัน					
2. รับประทานผัก และผลไม้ต่างๆ เช่น ผักใบเขียว ส้ม ฝรั่ง มะละกอสุก ฯลฯ ครบ 3 มื้อ ทุกวัน					
. . . .					
24. พูดคุยหรือซักถามกับบุคคลอื่นๆ เช่น ญาติ แพทย์ พยาบาล หรือผู้ป่วยด้วยกัน ทั้งในเวลาปกติ และเวลามีปัญหาหรือข้อสงสัย					
25. ยอมรับการเปลี่ยนแปลงที่เกิดขึ้นหลังจากเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด เช่น การนอนพักรักษาตัวในโรงพยาบาล เป็นต้น					

APPENDIX E

OUTCOME EXPECTATION OF HEALTH BEHAVIORS QUESTIONNAIRE.

แบบสอบถามความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด

คำชี้แจง แบบสอบถามนี้เป็นข้อคำถามในเรื่องความคาดหวังผลลัพธ์ในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่ภาวะเจ็บครรภ์คลอดก่อนกำหนด กรุณาทำเครื่องหมาย / ลงในช่องที่ตรงตามความคิดเห็นของหญิงตั้งครรภ์เพียงคำตอบเดียว โดยแต่ละคำตอบมีความหมายดังนี้

คะแนน 5 เท่ากับ มีประโยชน์มากที่สุด หมายถึง ผู้ตอบมีความคิดว่าจะได้รับประโยชน์มากที่สุดภายหลังกระทำพฤติกรรม

คะแนน 4 เท่ากับ มีประโยชน์มาก หมายถึง ผู้ตอบมีความคิดว่าจะได้รับประโยชน์มากภายหลังกระทำพฤติกรรม

คะแนน 3 เท่ากับ มีประโยชน์ปานกลาง หมายถึง ผู้ตอบมีความคิดว่าจะได้รับประโยชน์ปานกลางภาย หลังกระทำพฤติกรรม

คะแนน 2 เท่ากับ มีประโยชน์น้อย หมายถึง ผู้ตอบมีความคิดว่าจะได้รับประโยชน์น้อยภายหลังกระทำพฤติกรรม

คะแนน 1 เท่ากับ มีประโยชน์น้อยมาก/ไม่มีมีประโยชน์หมายถึง ผู้ตอบมีความคิดว่าจะได้รับประโยชน์น้อยมาก หรือไม่ได้รับประโยชน์เลยภายหลังกระทำพฤติกรรม

ตัวอย่าง

ข้อความ ท่านคิดว่าจะได้รับประโยชน์มากน้อยเพียงใดภายหลังกระทำพฤติกรรมต่อไปนี้	ระดับประโยชน์ที่ได้รับ				
	มากที่สุด (5)	มาก (4)	ปานกลาง (3)	น้อย (2)	ไม่มีประโยชน์ (1)
1. ออกกำลังกายโดยการเดินรอบสนามอาทิตย์ละ 2 ครั้ง ช่วยทำให้ร่างกายแข็งแรง และลดโอกาสเสี่ยงต่อการเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด	/				

ข้อความ ท่านคิดว่าจะได้รับประโยชน์มากน้อยเพียงใดภายหลังกระทำพฤติกรรมต่อไปนี้	ระดับประโยชน์ที่ได้รับ				
	มากที่สุด (5)	มาก (4)	ปานกลาง (3)	น้อย (2)	ไม่มีประโยชน์ (1)
1. การรับประทานอาหารประเภทเนื้อสัตว์ต่างๆ เช่น เนื้อหมู ไก่ ปลา ฯลฯ ไข่ถั่ว ครบ 3 มื้อ ทุกวัน ช่วยทำให้ร่างกายทารกเจริญเติบโตแข็งแรง และลดโอกาสเสี่ยงต่อการเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด					
2. การรับประทานผัก และผลไม้ต่างๆ เช่น ผักใบเขียว ส้ม ฝรั่ง มะละกอสุก ฯลฯ ครบ 3 มื้อ ทุกวันจะช่วยป้องกันอาการท้องผูก					
. . . .					
24. พูดคุยหรือซักถามกับบุคคลอื่นๆ เช่น ญาติ แพทย์ พยาบาล หรือผู้ป่วยด้วยกัน ทั้งในเวลาปกติ และเวลามีปัญหาหรือข้อสงสัย ช่วยทำให้เข้าใจปัญหา เข้าใจข้อมูล และเป็นการส่งเสริมการสร้างสัมพันธภาพกับบุคคลอื่น					
25. ยอมรับการเปลี่ยนแปลงที่เกิดขึ้นหลังจากเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด เช่น การนอนพักรักษาตัวในโรงพยาบาล เป็นต้น ช่วยทำให้สามารถปฏิบัติตามคำแนะนำได้อย่างเหมาะสม					

APPENDIX F

INFORMATIONAL PLAN.

แผนการให้ข้อมูลเพื่อพัฒนาการรับรู้สมรรถนะแห่งตนของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด

วัตถุประสงค์ทั่วไป

1. เพื่อให้หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดมีการรับรู้สมรรถนะแห่งตนในการปฏิบัติตนทางด้านสุขภาพ
2. เพื่อให้หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดมีความรู้ที่ถูกต้องเกี่ยวกับภาวะเจ็บครรภ์คลอดก่อนกำหนดในเรื่อง ความหมาย สาเหตุและปัจจัยเสี่ยง อาการขณะเจ็บครรภ์คลอดก่อนกำหนด การรักษาพยาบาลขณะอยู่ในโรงพยาบาล และแนวทางปฏิบัติเพื่อป้องกันภาวะเจ็บครรภ์คลอดก่อนกำหนด

กลุ่มเป้าหมาย

หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดที่เข้ารับการรักษาที่ห้องคลอดและตึกสูติกรรม 3 โรงพยาบาลรามาธิบดี จำนวน 12 ราย และห้องคลอดและตึกนรีเวชกรรมโรงพยาบาลศูนย์นครปฐมจำนวน 13 ราย

ระยะเวลา

แผนที่ 1 ใช้เวลาประมาณ 40 นาที แผนที่ 2 ใช้เวลาประมาณ 30 นาที แผนที่ 3 ใช้เวลาประมาณ 30 นาที

สถานที่

ห้องคลอดและตึกสูติกรรม 3 โรงพยาบาลรามาธิบดี และห้องคลอดและตึกนรีเวชกรรมโรงพยาบาลศูนย์นครปฐม

แผนการให้ข้อมูลครั้งที่ 1

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
- เพื่อสร้างสัมพันธภาพระหว่างผู้วิจัยและหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดและให้หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดให้ความร่วมมือในงานวิจัย	1. ผู้วิจัยกล่าวทักทายและแนะนำตัวกับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดด้วยสีหน้ายิ้มแย้มและท่าทางสุภาพ 2. ผู้วิจัยอธิบายถึงวัตถุประสงค์ของการวิจัย วิธีดำเนินการวิจัย ระยะเวลาที่เข้าร่วมการวิจัย ขั้นตอนการเก็บรวบรวมข้อมูล เปิดโอกาสให้ซักถามและขออนุญาตในการทำวิจัย พร้อมทั้งลงนามยินยอมในการร่วมวิจัย 3. ผู้วิจัยพูดคุยในเรื่องทั่วๆไปและซักถามปัญหาที่เกิดขึ้นขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนดเพื่อสร้างสัมพันธภาพ		- จากความสนใจของหญิงตั้งครรภ์ - การเข้าร่วมวิจัย
- เพื่อประเมินการรับรู้สมรรถนะแห่งตนและความคาดหวังในผลลัพธ์ในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดก่อนการให้ข้อมูล	4. ให้หญิงตั้งครรภ์ตอบแบบสอบถามเพื่อประเมินการรับรู้สมรรถนะแห่งตนและความคาดหวังในผลลัพธ์ในการปฏิบัติตนด้านสุขภาพของหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดประมาณ 25 นาที ขณะหญิงตั้งครรภ์ตอบแบบสอบถามหากมีข้อสงสัย ผู้วิจัยจะอยู่ใกล้ๆเพื่อตอบข้อซักถาม	- แบบสอบถามข้อมูลส่วนบุคคล แบบสอบถามการรับรู้สมรรถนะแห่งตนและความคาดหวังในผลลัพธ์ในการปฏิบัติตนด้านสุขภาพ กำหนด 3 ชุด	- การตอบแบบสอบถามครบถ้วน

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
	5. เกริ่นนำเข้าสู่บทเรียนโดยการซักถามหญิงตั้งครรภ์ถึงความรู้สึกที่มีต่อภาวะเจ็บครรภ์คลอดก่อนกำหนด และเปิดโอกาสให้หญิงตั้งครรภ์แสดงความรู้สึกกดดัน ความวิตกกังวล ความกลัว ความหวาดหวั่นต่อการปฏิบัติตนขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด ผู้วิจัยรับฟัง แสดงความเข้าใจเป็นมิตรและอบอุ่น 6. ผู้วิจัยบอกวัตถุประสงค์ของการให้ข้อมูลของวันแรก ลำดับเนื้อหา และประโยชน์ของการได้รับข้อมูล เพื่อให้หญิงตั้งครรภ์สนใจ ตั้งใจและจดจำข้อมูลที่ได้รับ รวมทั้งเปิดโอกาสให้หญิงตั้งครรภ์ได้ซักถาม และผู้วิจัยซักถามข้อมูลที่ต้องการเพิ่มเติมจากข้อมูลที่จะได้รับในวันแรก รวมทั้งแจกคู่มือการปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด 7. ผู้วิจัยซักถามความรู้ก่อนได้รับข้อมูลเกี่ยวกับประสบการณ์หรือความรู้ของหญิงตั้งครรภ์ว่า “ ท่านทราบไหมว่าภาวะเจ็บครรภ์คลอดก่อนกำหนดคืออะไร และเกิดจากสาเหตุใดได้บ้าง ” หลังจากนั้นจึงเกริ่นนำเข้าสู่บทเรียน ภาวะเจ็บครรภ์คลอดก่อนกำหนดเป็นภาวะแทรกซ้อนที่เกิดขึ้นขณะตั้งครรภ์ ซึ่งเป็นปัญหาสำคัญของการสาธารณสุขของประเทศ เนื่องจากเป็นสาเหตุการตายที่สำคัญที่สุดของทารกแรกเกิด ทำให้ทารกเกิดทุพพลภาพ รวมทั้งส่งผลกระทบต่อครอบครัวและสังคมตามมา เมื่อหญิงตั้งครรภ์มีภาวะเจ็บครรภ์คลอดก่อนกำหนดจึงต้องได้รับการดูแลจากบุคลากรทางด้านการแพทย์และ คำแนะนำที่ถูกต้องขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด เพื่อให้หญิงตั้งครรภ์ปฏิบัติตัวถูกต้องเหมาะสม		

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
	และช่วยยืดระยะเวลาการตั้งครรภ์ให้นานขึ้น เพื่อให้ทารกในครรภ์มีความพร้อมต่อการมีชีวิตนอกครรภ์มารดาให้มากที่สุด ผู้วิจัยอธิบายถึงความหมาย ภาวะเจ็บครรภ์คลอดก่อนกำหนดว่าเป็น ภาวะเจ็บครรภ์คลอดที่เกิดขึ้นระหว่างอายุครรภ์ 28- 37 สัปดาห์ ซึ่งสาเหตุของการเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนดส่วนใหญ่แล้วยังไม่ทราบแน่ชัดแต่มีปัจจัยชักนำบางอย่างเป็นสาเหตุส่งเสริมให้เกิดภาวะเจ็บครรภ์คลอดก่อนกำหนดดังนี้ (1). ปัจจัยด้านประชากร พบว่าอายุของมารดาในขณะตั้งครรภ์ ถ้าอายุน้อยกว่า 20 ปี อวัยวะต่างๆยังเจริญไม่เต็มที่และยังไม่มีความพร้อมทั้งทางร่างกาย จิตใจหรือหญิงตั้งครรภ์ที่มีอายุมากกว่า 35 ปี ทำให้เสี่ยงต่อการเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด รวมทั้งหญิงตั้งครรภ์ที่มีระดับการศึกษาต่ำ รายได้เฉลี่ยน้อย สถานภาพสมรสเดี่ยว ส่งผลต่อการดูแลตนเองที่ไม่มีประสิทธิภาพทำให้เกิดภาวะเสี่ยงต่อการเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนดได้เช่นกัน (2). วิถีการดำเนินชีวิต เป็นส่วนสำคัญประการหนึ่งที่กระตุ้นให้เกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด ซึ่งพบว่าการขาดสารอาหาร การใช้สารเสพติด การสูบบุหรี่ การดื่มสุราทำให้กระตุ้นการเจ็บครรภ์คลอดก่อนกำหนด อีกทั้ง การยกของหนัก การเดินทางระยะไกลเกิน 5 ชั่วโมง เป็นปัจจัยเสี่ยงด้วยเช่นกัน		

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
	. . . . 17. หลังจากการให้ข้อมูลผู้วิจัยเปิดโอกาสให้หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดซักถามข้อสงสัย ผู้วิจัยตอบคำถามและให้ข้อมูลเพิ่มเติม 18. ผู้วิจัยสรุปแผนการให้ข้อมูลครั้งที่ 1 โดยใช้คู่มือการปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด และซักถามหญิงตั้งครรภ์เพื่อประเมินความเข้าใจในเนื้อหาที่ได้รับคือ “ ผลข้างเคียงของยายับยั้งการคลอดอะไรบ้างที่ท่านควรแจ้งเจ้าหน้าที่ทันที” 19. ผู้วิจัยนัดหมายกับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดเกี่ยวกับวันเวลาในการให้ข้อมูลในครั้งต่อไป และหัวข้อในการให้ข้อมูลอย่างคร่าวๆในครั้งต่อไปเพื่อให้หญิงตั้งครรภ์เตรียมตัวที่จะพูดคุย ซักถามหรือขอความช่วยเหลือตามประเด็นของหญิงตั้งครรภ์ต้องการในครั้งถัดไป		

แผนการให้ข้อมูลครั้งที่ 2

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
- เพื่อให้หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพเพิ่มขึ้นผ่านวิธีการกระตุ้นเร้าทางอารมณ์	1. กล่าวทักทายหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด 2. ซักถามหญิงตั้งครรภ์เกี่ยวกับความรู้สึกที่มีต่อการปฏิบัติตนขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด และเปิดโอกาสให้หญิงตั้งครรภ์แสดงความรู้สึกกดดัน ความวิตกกังวล ความกลัว ความหวาดหวั่นต่อการปฏิบัติตนขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด ผู้วิจัยรับฟัง แสดงความเข้าใจในปัญหาหรือการแสดงออกของหญิงตั้งครรภ์		- จากการบอกเล่าและปฏิกิริยาของหญิงตั้งครรภ์ - จากการตอบคำถาม
- เพื่อให้หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพเพิ่มขึ้นผ่านการใช้คำพูดชักจูง, ผ่านประสบการณ์ที่ประสบผลสำเร็จ และผ่านการกระตุ้นเร้าทางอารมณ์	3. . ผู้วิจัยบอกวัตถุประสงค์ของการให้ข้อมูลของวันที่ 2 ลำดับเนื้อหา และประโยชน์ของการได้รับข้อมูล เพื่อให้หญิงตั้งครรภ์สนใจ ตั้งใจและจดจำข้อมูลที่ได้รับ รวมทั้งเปิดโอกาสให้หญิงตั้งครรภ์ได้ซักถาม และผู้วิจัยซักถามข้อมูลที่ต้องการเพิ่มเติมจากข้อมูลที่จะได้รับในวันที่สอง 4. เกริ่นนำก่อนที่จะให้ข้อมูลโดยการซักถามหญิงตั้งครรภ์ถึงผลดีและผลเสียของการปฏิบัติตนด้านสุขภาพไม่ถูกต้องขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด เพื่อให้หญิงตั้งครรภ์เห็นความสำคัญในการปฏิบัติตนเพื่อป้องกันภาวะเจ็บครรภ์คลอด ก่อนกำหนด	- คู่มือการปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด	- จากความสนใจและตั้งใจฟังของหญิงตั้งครรภ์ในการให้ข้อมูล - จากความสนใจซักถามปัญหา - จากการตอบคำถาม

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
, การใช้ตัวแบบ	5. ผู้วิจัยให้ข้อมูลเกี่ยวกับ**แนวทางปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดโดย**ใช้คู่มือการปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดดังนี้ (1). การรับประทานอาหาร - ควรรับประทานอาหารประเภทไข่ ถั่ว หรือเนื้อสัตว์ในแต่ละวัน เนื่องจากช่วยเสริมสร้างการเจริญเติบโตของร่างกายหญิงตั้งครรภ์และทารก รวมทั้งภาวะโภชนาการที่ดีจะลดโอกาสเสี่ยงต่อการเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด - รับประทานผัก ผลไม้ต่างๆให้มาก เช่น ผักใบเขียวชนิดต่างๆ ส้ม มะละกอ เป็นต้น เพื่อป้องกันอาการท้องผูกเนื่องจากการเบ่งถ่ายอุจจาระจะกระตุ้นให้มดลูกหดรัดตัว - ดื่มน้ำวันละ 12- 15 แก้วต่อวันมีส่วนช่วยลดการเจ็บครรภ์คลอดก่อนกำหนด ซึ่งการได้รับสารน้ำจะช่วยลดการหลั่งฮอร์โมนที่ออกฤทธิ์ยับยั้งการขับน้ำออกจากร่างกายที่หลั่งจากต่อมใต้สมอง ในขณะเดียวกันมีข้อสันนิษฐานอีกประการหนึ่งว่าภาวะขาดน้ำเป็นสาเหตุของการเจ็บครรภ์คลอด (2). กิจกรรมและการพักผ่อน - นอนหลับอย่างเพียงพอในช่วงกลางคืนวันละ 6- 8 ชั่วโมงและนอนพักช่วงกลางวันในท่านอนตะแคงอย่างน้อยวันละ 2 ครั้งๆละ 1 ชั่วโมงเพื่อช่วยลดแรงดัน		

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
	ต่อปากมดลูกไม่ให้ขยายออกไป ลดการหดรัดตัวของมดลูก และส่งเสริมให้เลือดไปเลี้ยงมดลูกดีขึ้น - การออกกำลังกายหักโหม เช่น วิ่ง เดินเร็ว หรือเดินระยะทางไกล จะกระตุ้นให้เจ็บครรภ์คลอดดังนั้นหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดควรงดออกกำลังกายหักโหม - งดทำงานหนัก เช่น ยกของหนัก นั่งซักผ้า ขึ้นลงบันได งานทำความสะอาดที่หนักเกินไป เช่น ทำความสะอาดพื้น เคลื่อนย้ายเครื่องเรือน เป็นต้น ไม่ควรยืนหรือนั่งทำงานติดต่อกันเป็นเวลานานเกิน 5 ชั่วโมงควรมีการเปลี่ยนอิริยาบถบ่อยๆ และไม่เดินทางไกลเกิน 90 นาทีต่อครั้งเนื่องจากจะกระตุ้นให้เจ็บครรภ์คลอดก่อนกำหนด - การมีเพศสัมพันธ์จะกระตุ้นให้มดลูกหดรัดตัว หากพบว่าหลังจากมีเพศสัมพันธ์มีการหดรัดตัวของมดลูกให้ รีบมาพบแพทย์ทันที แนวทางปฏิบัติที่เหมาะสมที่สุดของหญิงที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด คือ ควรงดมีเพศสัมพันธ์จนกว่าจะคลอด - ควรงดนวดคลึงหัวนมและเต้านม เนื่องจากการกระทำดังกล่าวจะกระตุ้นให้มดลูกหดรัดตัว (3). การขับถ่าย - การขับถ่ายอุจจาระเป็นเวลาอย่างสม่ำเสมอ โดยไม่เบ่งถ่ายอุจจาระเนื่องจากการเบ่งถ่ายอุจจาระทำให้กระตุ้นการหดรัดตัวของมดลูก		

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
	. . . 7. ผู้วิจัยสรุปแผนการให้ข้อมูลครั้งที่ 2 โดยใช้คู่มือการปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดร่วมกับหญิงตั้งครรภ์ และซักถามหญิงตั้งครรภ์เพื่อประเมินความเข้าใจในเนื้อหาที่ได้รับคือ “กิจกรรมใดที่ควรหลีกเลี่ยงสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด” “การป้องกันการการติดเชื้อที่ส่งเสริมให้เกิดภาวะเจ็บครรภ์คลอดก่อนกำหนดจะต้องปฏิบัติอย่างไรบ้าง” 8. ผู้วิจัยนัดหมายกับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดเกี่ยวกับวันเวลาในการให้ข้อมูลในครั้งต่อไป และหัวข้อในการให้ข้อมูลอย่างคร่าวๆในครั้งต่อไปเพื่อให้หญิงตั้งครรภ์เตรียมตัวที่จะพูดคุย ซักถามหรือขอความช่วยเหลือตามประเด็นของหญิงตั้งครรภ์ต้องการในครั้งถัดไป		

แผนการสอนครั้งที่ 3

วัตถุประสงค์	เนื้อหาและกิจกรรม	สื่อการสอน	วิธีประเมินผล
- เพื่อให้หญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนดรับรู้สมรรถนะแห่งตนในการปฏิบัติตนด้านสุขภาพเพิ่มขึ้นผ่านวิธีการกระตุ้นเร้าทางอารมณ์ - เพื่อติดตามเยี่ยมและร่วมแก้ไขปัญหาเกี่ยวกับการปฏิบัติตนด้านสุขภาพกับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด	1. กล่าวทักทายหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด 2. ซักถามหญิงตั้งครรภ์ถึงปัญหาที่เกิดขึ้นในการปฏิบัติตนขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนดทั้ง 2วันที่ผ่านมา และเปิดโอกาสให้หญิงตั้งครรภ์แสดงความรู้สึกกดดัน ความวิตกกังวล ความกลัว ความหวาดหวั่นต่อการปฏิบัติตนขณะเกิดภาวะเจ็บครรภ์คลอดก่อนกำหนด ผู้วิจัยรับฟัง แสดงความเข้าใจในปัญหาหรือการแสดงออกของหญิงตั้งครรภ์อย่างเป็นมิตรและอบอุ่น . . . . . . 5. ผู้วิจัยแนะนำการใช้แบบประเมินตนเองเมื่อกลับบ้านแก่หญิงตั้งครรภ์ และเปิดโอกาสให้หญิงตั้งครรภ์ซักถามข้อสงสัยของการใช้แบบสังเกตตนเอง 6. แจ้งให้หญิงตั้งครรภ์ได้ทราบว่าได้สิ้นสุดการให้ข้อมูล	- คู่มือการปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด	- จากการบอกเล่าและปฏิกิริยาของหญิงตั้งครรภ์ - จากความสนใจและตั้งใจฟังของหญิงตั้งครรภ์ในการให้ข้อมูล - จากความสนใจซักถามปัญหา

APPENDIX G

HANDBOOK OF PREGNANT WOMEN WITH PREMATURE LABOR PAIN.

คู่มือการปฏิบัติตนสำหรับหญิงตั้งครรภ์ที่มีภาวะเจ็บครรภ์คลอดก่อนกำหนด

โดย นางสาวสุปิยา วิริไฟ

นักศึกษาพยาบาลศาสตรมหาบัณฑิต ภาควิชาพยาบาลศาสตร์

คณะแพทยศาสตร์ โรงพยาบาลรามาธิบดี

BIOGRAPHY

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