

**THE RELATIONSHIP OF PERSONAL FACTOR, SELF-ESTEEM
AND SOCIAL SUPPORT TO DEPRESSION
IN HIGH-RISK PREGNANT WOMEN
IN SIRIRAJ HOSPITAL**



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PREGNANT WOMEN IN SIRIRAJ HOSPITAL**

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ABSTRACT

Depression in high-risk pregnant women affects the health of pregnant women, fetus as and family members, and may also cause postpartum depression. In this research personal factors, self-esteem, social support to the relationship of depression in high-risk pregnant women was should 166 research subjects who attended the high-risk pregnancy clinic at Siriraj Hospital from May – July 2004. Data was obtained from simple information questionnaires, self-esteem tests, social support tests and a depression test (CES-D)

The research result showed that 63.6% of women with high-risk pregnancies have depression. Self-esteem, social support, family income, number of children, working ability and other problem unrelated to health, were related to depression in high-risk pregnant women to a statistically significant extent. (P-Value < .05)

The research result also suggest that health care the staff should look in signs of depression in high-risk pregnant women from 1st trimester and then through out the 2nd and 3rd trimesters. They should also educate high-risk pregnant women and family member about mental health care to prevent high-risk pregnant women from depression and facilitate good mental health.

KEY WORDS: DEPRESSION / SELF-ESTEEM / SOCIAL SUPPORT /
HIGH-RISK PREGNANT WOMEN

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ความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล ความรู้สึกมีคุณค่าในตนเอง แรงสนับสนุนทางสังคม กับภาวะซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงในโรงพยาบาลศิริราช (THE RELATIONSHIP OF PERSONAL FACTORS, SELF-ESTEEM AND SOCIAL SUPPORT TO DEPRESSION IN HIGH-RISK PREGNANT WOMEN IN SIRIRAJ HOSPITAL)

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บทคัดย่อ

การเกิดภาวะซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงย่อมมีผลกระทบต่อภาวะสุขภาพของหญิงตั้งครรภ์ บุตรและครอบครัว และเป็นสาเหตุทำให้เกิดปัญหาสุขภาพจิตหลังคลอดบุตรได้ การศึกษาครั้งนี้เป็นการวิจัยเชิงพรรณนาเพื่อศึกษาความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล ความรู้สึกมีคุณค่าในตนเอง และแรงสนับสนุนทางสังคมกับภาวะซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง กลุ่มตัวอย่างประกอบด้วยหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง 166 คน ที่มารับบริการฝากครรภ์ ณ คลินิกฝากครรภ์สำหรับหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง โรงพยาบาลศิริราช ระหว่างเดือนพฤษภาคมถึงกรกฎาคม พ.ศ. 2547 เครื่องมือในการรวบรวมข้อมูล คือ แบบสอบถามข้อมูลขั้นพื้นฐาน แบบวัดความรู้สึกมีคุณค่าในตนเอง แบบวัดแรงสนับสนุนทางสังคม และแบบวัดอาการซึมเศร้า CES-D

ผลการวิจัยพบว่าหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงมีภาวะซึมเศร้าร้อยละ 63.6 ความรู้สึกมีคุณค่าในตนเอง แรงสนับสนุนทางสังคม รายได้ จำนวนบุตร ความสามารถในการประกอบอาชีพ และปัญหาอื่นๆนอกเหนือจากปัญหาด้านสุขภาพ มีความสัมพันธ์กับภาวะซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงอย่างมีนัยสำคัญทางสถิติ ($P\text{-value} < .05$)

ข้อเสนอแนะในการศึกษาครั้งนี้ คือ บุคลากรในทีมสุขภาพควรประเมินอาการซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงตั้งแต่ไตรมาสแรกและประเมินต่อเนื่องในไตรมาสที่ 2 และ 3 มีการให้ความรู้ในการดูแลด้านสุขภาพจิตแก่หญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงและครอบครัว เพื่อส่งเสริมการมีสุขภาพจิตที่ดีและป้องกันการเกิดอาการซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง

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CHAPTER 1

INTRODUCTION

Background and Significance of the Study

Depression is a menace to human beings' conditions. The study in 1967 discovered that the populations who suffer from depression and need to be cured were approximately 100 million people, repeatedly increased to 150 million people in 1981 and 200 million people in 1987 (Naraporn Charnchai, 1990:1). From the prediction of the World Health Organization discovered that in the next two decades (year 2017) depression, mental problem disease will be the next in rank to the heart disease (Sompob Ruengtrakul, 1999:93). There will be no differences of the phenomenon of the disease in alien individuals, educational, economic status and marital status. Yet discovered the higher risk in female than male (Hamilton and Halbreich,1993;Nolen-Hoeksema,1990;Shaw,et al.,1996;Weissman,et al.,1984 cited by Laura, et al.,1999:23) approximately 10 – 25 percent in female and 5 – 12 percent in male (American Psychiatric Association, 2000:372). This is to say that it may results from the changes of body chemical in each female individual such as the production of neuroendocrine and menstruation. The changes of the said chemicals in a female body may cause the over-secretion of steroid, which affect female mood and emotion (Weissman, et al., 1987 cited by Laura, et al., 1999:24). Especially changes of chemicals in the body on a pregnant woman, there is high chance of emotional problem and lead to depression.

As Cox's (Cox, 1976 is referred in Wattanee Seanghiran, 1993: 38) research has discovered that pregnant women have twice as higher rate of emotion problems than normal women. The rate was approximately 25.9 percent and 12.4 percent consecutively.

During the prenatal period of the female often experienced crisis and vast changes that can affect the emotion and cause depression (Wattana Sripojanarot, 1999:23). The first change that usually occurs is emotional changes. Pregnant woman usually moody, unreasonable, anxious, seek attention of help from others and

connection with the fetus is low in the first trimester of pregnancy. For the second trimester of pregnancy, pregnant woman fear of unhealthiness of herself and the baby. Yet given attention or importance to satisfied herself more than the importance of the baby. In the third trimester, she will be anxious about giving birth to her child and safety of herself and the baby. She may feel despair that cause moody condition. The second change during the prenatal period is appearance changes. Pregnant women are often upset with their appearances and lost confident. Relationship among the family member is the final change during the prenatal period. Pregnant women seek attention and help from their family members. Statement above shows that pregnant women have to face drastic changes and uncertainties, which cause depression. And if the pregnancy diagnosed to be a risky in losing lives due to physical problem or illness, it increase pressure and anxiety to the mother and child. (Winit Puapradit, 1994:1; Gilbert & Harmmmon, 1993:25) Physical problems or diseases that indicate risk of pregnant women may discovered before the pregnancy such as diabetes mellitus, chronic hypertension, heart disease, kidney disease or disease during pregnancy such as pregnancy induced hypertension, eclampsia or gestational diabetes mellitus, which affect the body systems and endanger to both mother and child's health. Abnormalities may vary depending on the mother's health, for instance, an overweight fetus in diabetic mother will experience difficulty during delivery, and the child may grow and develop slowly and may die. (Jirasak Manasakorn, 1996:45).

As a result, pregnant women who are diagnosed in risky conditions must consult the physician often, limitation of some activities. In some cases, the patients are under serious medical treatment throughout the pregnancy and suffer from sickness and physical problems. Some were hospitalized several occasions and consumed unnecessary amount of money. Physician must end the pregnancy in some cases due to the severe case of physical problem by abortion or inducing.

Besides the direct physical affects to high-risk pregnant women and child, also mental and emotional effects as well. (Siriporn Chatpothong, 1993:131 cited by Rungthip Changsila, 2001). As Jones (Jones, 1998:117 cited by Duanghathai Songtrairat, 1997:13) stated that the risky pregnancy, pregnant women would blame themselves, husband and the fetus that cause the risk. They feel guilty and failed to become the mother.

According to the statements above may be the reason why pregnant women depressed, sad, despair, lost of interest, isolated, tired, discourage and sometimes feel hopeless, think that they are burden to others. These feelings may happen from time to time or almost all the time. If it becomes worst, they may feel tired of living and may commit suicide. If these indications show, it is to be understood that the person is suffering from depression and must consult physician immediately (Orapan Thongtang, 2001:37)

The researcher suggests that most of the mood and emotional changes occurs unconsciously. Most of the high-risk pregnant women are unaware that they are actually depressed. They notice the signs by the family members, who inform them if they look sad, not cheerful, irritated, moody, lost of sexual interest, change the way of living, neglecting health importance of themselves and the fetus.

Hence, emotional and physical health related to each other and will shows obstruction behaviors to appropriateness of being health conscious during the pregnancy. The studies by Wattanee Saenghiran (1993) studied the effects of depression towards health conscious behaviors in 90 pregnant women at Ratchwithee Hospital using CES-D discovered that in each phases of the pregnancy, depression play an important role to pregnant women with clinical significantly ($P < .0001$). Besides, it is discovered also that pregnant women in a frustration condition is risky to become depressed after the pregnancy (Naraporn Charnchai, 1990:74; John, 1992:18; Laura, 1999:24) The studies in 1984 found 6 percent of depression in the starting phase of pregnancy and 6 weeks after the delivery found 16 percent of depression (Watson, et al., 1984:453-62) and the studies in 2001 by gathering 84 copies of the related literatures found that 21 out of 84 stated that a prenatal depression effect postpartum depression (Cheryl Tatano Beck, 2001 : 75-282).

From the above statement, the researchers see to it that the pregnant women are at risk of becoming depressed, which affect their health, the fetus's health, relationship within the family and can cause mental problem at the postpartum phase. This could lead to a social problem and nation in the future. Nowadays, it is discovered that mental problem has continually increase yet, methods to improve and develop such issues are a few. Therefore, the researcher is interested to discover some factors that associate with depression in high-risk pregnant women such as age, education,

occupation, family income, gravidity, numbers of children, marital status, family planning, physical health history, mental health history, self-esteem and social supportiveness. Hence, it is to prevent depression in mental health in pregnant women.

Purpose of the Study

1. To study the personal factors, self-esteem, social support and depression in high-risk pregnant women.
2. To study the relationship between personal factors, self-esteem, social supportiveness and depression in high-risk pregnant women.

Hypothesis

Personal factors, self-esteem and social support are in relation to each other in the high-risk pregnant women.

Scope of the Study

This research is a narrative approach of the study and to find the relationship of personal factors, self-esteem, social support and depression in the above 29 weeks pregnant women who come to the high-risk clinic at Siriraj Hospital from May–July 2004. Information gathered from the questionnaire.

Basic agreement

1. Samples must be willing to participate and in a normal condition to answer the questionnaires.
2. Information taken is reliable.
3. Physical health history, prenatal care history from different prenatal care center is reliable.
4. The Center for Epidemiologic Studies–Depression Scale Test is used to categorize the depressed individuals but not a test to diagnose depression.

Paradigm of the study

Independent Variable are:

1. Personal Factors consist of.

- Age
- Education
- Occupation
- Family Income
- Number of children
- Gravidity
- Numbers of children
- Marital Status
- Family planning
- Physical health history
- Mental health history

2. Self-esteem

3. Social support

Dependent Variable is depression.

Expected Outcomes and Benefits

1. Know the factors the effect depression in high-risk pregnant women.
2. Lead to the planning to develop and help individuals suffer from depression in high-risk pregnant women held by the public health staffs. By emphasizing the importance of the social support, self-esteem and every factor to evaluate and conduct a healthy living.

Definition of Terms

Personal Factors refer to factors that cause the risk of becoming depressed in a high-risk pregnant women such as age, education, occupation, family income, gravidity, numbers of children, marital status, family planning, physical health history,

mental health history. Each factor is emphasized in detail as follow:

Age refers to numbers of years of samplers until the day of collection of information.

Educational refers to the highest educational attainment of the samplers.

Occupation refers to position, duty and responsibilities of samplers if they can perform the tasks normally, less than normal or unable to perform tasks.

Family income refers to monthly income from the high-risk pregnant women and her spouse whether it is enough or not and whether they have savings or in debt.

Gravidity refers to number of time of pregnancy from the first until the present.

Numbers of children refer to the number of living children in present.

Marital status refers condition of the high-risk pregnant women whether they live with their spouses, separated, divorced or widowed.

Family Planning refers to the planning of the high-risk pregnant women and spouse whether when to start having a child, how many children, period of rest during pregnancy including birth control when not ready.

Physical health history refers to physical health problems which diagnosed by an Obstetrician.

Mental health history refers to mental health problems, which diagnosed by a Psychiatrist.

Self – esteem refer to an impression upon her, the high-risk pregnant women, comprises of 4 kinds, that is, realizing the importance, capability, morality and power. This realization result from the family member or friends around them. They develop these feeling and realization from the acceptance from the family members and friends. This study evaluated by the total score of the self – esteem scale by Rosenberg (Rosenberg, 1989:325 - 7). This self – esteem scale comprises of 10 questions and the score is between 10–40 scores. The higher the score is the higher the self–esteem is.

Social support refers to the realization of the high-risk pregnant women that they are accepted in the community and confirmed that they possessed self-confident. This study evaluate by using the total score of Personal Resource Questionnaire by Brantt and Weinert (1981) specifically the second part of the questionnaire, which has translated into Thai by Jirapa Hongtrakul. The questionnaire comprises of 21 questions. The scoring is between 21 – 105 scores. The higher the score is, the more social supportiveness the samplers received.

High-Risk Pregnant women refer to the pregnant women whom diagnosed by the Obstetrician that they are in the risky condition that results from the pregnancy such as pregnancy induced hypertension, antepartum hemorrhage, the multiparity, history of abnormal pregnancy or delivery, history of having under weight or over weight baby, history of having multiple pregnancy or having medical complication such as heart disease, kidney disease, diabetis mellitus, chronic hypertension, thalassemia, appendicitis or accident, mental disorder, schizophrenia and drug addicted.

Depression refers to the perception of the high-risk pregnant women that they are sad, worried, lonely, guilty, neglected or physical symptoms such as lost appetite, constipation, insomnia, nervous, unreasonable tiring and lost of sexual interest. These symptoms or conditions usually happen for at least one week. This study is to evaluate the emotion of the pregnant women by using CES – D (Center of Epidermiologic Depression Scale) by mental health institute of America, developed by Wilai Kupnirattisayakul and Panom Kateman (1997). The range of score is between 0–60 score. If scored higher than 19, it indicates that the samplers are depressed.

CHAPTER 2

LITERATURE REVIEW

This research is to study the relationship of personal factors, self-esteem and social support to depression in high-risk pregnant women. The researcher has stipulated factors as followed:

- Depression in high-risk pregnant women
- Self-esteem
- Social support
- Relation among personal factor, self-esteem and social support with depression in high-risk pregnant women

Depression

Depression is an illness in physical, mental and thought, which affect life quality of the patients, patient's family members and daily life style, for instance, to eat, to sleep, self-consciousness, the patients were unable to solve problem. Some patients are depressed, discouraged, and hopeless and may commit suicide. Approximately, 1 out of 10-20 of normal population (20%) tends to depressed. (Duangjai Kasantikul, 2002). From the prediction of WHO (World Health Organization) found that approximately in the next 2 decades (2017), depression will be a major health problem next to the cardiac disease. (Sompob Ruengtrakul, 1999:93) The phenomenons of disease cross-nations, education level, economic status, marital status will not differ and found higher risk in female than male. (Hamilton and Halbreich, 1993; Nolen-Hoeksema, 1990; Shaw, et al., 1996; Weissman, et al., 1984 cited by Laura, et al., 1999:23 ; American Psychiatric Association , 2000:372)

Sompob Ruengtrakul, (1999 : 92-6 ; 1-8) has defined the characteristic of this disease as; depressed, boredom, lost of interest, insomnia, exhausted, lost concentration, self-unworthiness, suicidal idea. Important symptoms of depression are as follow:

1. sorrowful
2. agitated, moody
3. lost of interest
4. lost appetite
5. insomnia
6. exhausted
7. slow-motion, frantic
8. self-unworthiness, blame himself
9. lost concentration
10. suicidal
11. anxious
12. physical illness

Besides that, Duangjai Kasantikul (1999:6-8) defined signs of depression in patient as, patients tend to be bored, downhearted, lost enthusiasm. These signs may persist in more than 2 weeks to affects studies and career performance. Overall symptoms are as follow

Vegetative such as unable to take any diet, insomnia, lost weight, exhausted, dried lips, constipation, lost sexual interest, headache, body ache.

Psychomotor – young patient often found retardation, isolation and no communication with anyone.

Cognitive – bad intention, pessimistic, lost concentration, lost self-confident, anxious, and unable to solve problems, easily frightened, nervous, chest pain and repeatedly behaviors. In severely affected patients, he will blame himself and feel bad about himself, hopeless and tends to be suicidal.

American Association of Psychology has defined Major Depressive Episode in a manual Desk Reference to the diagnostic of mental disorder 4th edition (DSM - IV) where there are depression details shown as follow (Pramote Sukanit and Manote Lortrakul, 1998:124-5)

1. Often found depressed in almost entire day without patients' account.
(For instance, feel sad and emptiness)
2. No appreciation and lost interest in daily activities. Found in almost entire day.
3. Weight lost or gained not due to the diet control. (weight change 5% per month, lost appetite or gained appetite daily)
4. Experience insomnia or problem going to bed.
5. Psychomotor agitation or retardation daily. (observed by person around him and not only patient's observation)
6. Exhausted and weaken daily.
7. self-degraded, lost self-esteem, inappropriately feel guilty daily (may lead to delusion) which is not because of the sickness.
8. Lost concentration and interest in reading and thinking. May not be able to solve even small problems. (observed by person around him and not only patient's observation)
9. Often think of suicide without planning (not because of fear death), plan of the suicide or tried to committed suicide.

To be considered depressed, it has to be 5 or more signs as mentioned for more than 2 weeks and the gradual change in several aspects than usually, for instance, 1) sadness 2) boredom. According to these symptoms, when occur in any one; his perception to all things is melancholic. It is the time of internal conflicts. With prolonged depression, anyone may be unable to accept some truth in an appropriate way and he may commit suicide to get rid of sufferings. Depression is invisible and its severity depends on its level. (Puri ,et al ,1996:231) generally it is found that 20% of pregnant women depressed any period of pregnancy. If diagnosed in the third trimester, it may persist in the postpartum period that 10 to 20 percent developed to depression illness. (Puri,et al.,1996:235; Thongchai Serirat, 2004)

High-risk pregnancy

High-risk pregnancy experiences in 10–30 percent of pregnancy. (Jirasak Manatsakorn, cited by Jirasak Manatsakorn and Wittaya Thithapan, editor, 1996:41).

During pregnancy, a physical, mental and emotional were changed, which affectde health of a pregnant women and the fetus. Moor (1983:326) stated that high-risk pregnancy meaned pregnant woman who suffers from physical, emotion and mental health problem which may lead to an unhealthy pregnancy or abnormal birth delivery. Gilbert & Harmon (1993: 25) has defined high-risk pregnancy are result from the condition of physical and mental health problem. Somkiat Srisupandit (1991:25) has defined this condition as same as Winit Puapradit and Sompol Pongthai (1994:1). They defined the high-risk conditions endangered both the mother and child during prenatal, peripartum and postpartum periods, including abnormal delivery, that may result a child in later stage. Siriporn Chatpothong (1993:132) defined the high-risk pregnant women as a pregnant woman who is at risk of physical, mental and emotional problem that may affect both the mother and the child.

Risky conditions affect mother and fetus in physical, mental, and emotional health. Physical health problem depends on the severity of the disease, which may cause maternal death, for instance, high-blood pressure during pregnancy (severe pre-eclapcia). This is the third rank which caused death in pregnant woman according to the statistic of the Ministry of Public Health. Besides, 10 – 50% of perinatal mortality resulted from Pre-eclapsia condition. (Kanok Srikajorn and colleagues, 1995:43; cited by Rungthip Changsila, 2001:17). Mental and emotion health problem depends on several conditions such as a lot of antenatal care, limitation of daily activities and life styles that worry may the pregnant woman and cause anxiety. If the conditions were worse, the pregnant women may had to be hospitalized and isolated from family. She may feel despaired and worried. Some patients need adjustment to the medical treatments, medication thorough pregnancy and apprehensive expenses. Moreover, she has to terminate employment due to the difficulties or restricted conditions from the pregnancy.

It is shown that pregnant woman normally affected from physical, mental, emotional and social changes. These changes result anxiousness, complex conditions and changes of behaviors and personality, such as isolated, lost interest in all activities, lacks communication with society. If the condition became worsen, the patients may

neglect self-hygiene, refuse to communicate. Woman who found these symptoms persist during pregnancy, she may suffer from depression.

Depression in high-risk pregnant women

A full 20% of women (one in five) had high scores indicating depression during pregnancy. However, only 14% of the depressed women were receiving any mental health counseling, drugs or other treatment (Brunilda Nazario, 2003). Depression in a pregnant woman is the same as in normal individual. This condition during pregnancy about physical health problem is not easily distinguished due to the similarity of the physiological changes of pregnancy such as, exhausted, slow-movement, cravings, anxiety. Pregnant woman may be affected from the symptoms at any period of pregnancy or thorough pregnancy. Tow-Third of pregnant woman often found to be anxious, agitated and apprehensive in the first and third trimester. (Puri, et.al., 1996:235) which is consistent with the study of Buesching, Glasser and Frate (1986) regarding depressed condition in the pregnancy and postnatal period by using Zung Selk Rating Depression Scale. It has shown that the most affected period was in the third trimester. Because the delivery is soon approached, it caused worries and fearfor the complication during labor (Kathryn,1990 : 95-6) . As the research by Jeanie Lerche Davis (2003) found that depression during pregnancy may cause of preterm births and complications such as pre-eclampsia , and their babies have lower birth weights. Pregnant women who suffer from depression are also at risk for postpartum depression and their children can suffer from behavioral problems and delayed cognitive and language development.

Moore (1983:226) stated that pregnant woman whom diagnosed to considered high-risk pregnancy tends to be more depressed than normal pregnant woman. This factor leads to emotional conditions such as fear, anxiety, insecurity that she is the reason of difficulties. (Siriporn Chatpothing, 1993:132-3) Devorce (1990:15-17 cited by Wattanee Saenghiran, 1993:49) reported that high-risk pregnancy woman found to be fearful of complication of delivery that may occur and also adjustment to the frustration in neurotic, psychotic or psychophysiologic.

As mentioned earlier, depression in high-risk pregnant women result crisis and difficulties of adjustment to the changes of motherhood. The researcher realized that if the high-risk pregnant women were realized the depressive conditions and consulted the Psychologist or Physician for a proper treatment, the physical, mental and emotional health problems will prevent.

Self-esteem

Self-esteem is a crucial factor that highly influenced adjustment of a motherhood. Rosenberg (Rosenberg, 1989:30) defined self-esteem as “positive or negative realization of one’s self”

Coopersmith (Coopersmith, 1981:5, 1984:5) defined self-esteem as a positive realization, respectation, acceptance, and also confident in one’s self.

In order to clearly understand self-esteem, it is necessary to understand relationship of self-perception as follow: (Taft, 1985:77-78 referred in Pornthip Wongwisetsirikul, 1997:41-42)

Self-perception refers to comprise of beliefs and realization of one’s self in a period of time, result from acknowledgment and interaction specifically on one matter, moreover, the proper suggestion by other that consist of :

1. Body Image refers to perception of an individual towards himself. It is the satisfactory towards body sizes, body resistance, and attractiveness to others. Body Image changes according to experiences and times.

2. Identity or self-ideal is an acknowledgment of one’s self regarding specific personality of an ideal person. This may derived from an imagination.

3. Self esteem is a judgment of a person towards virtue in one’s self by analyzing personalities of one’s self and comparing with the ideal self.

4. Role Performance refers to the gathering of the social-expected behaviors with the real self-performance in order to be proud and realizing self-esteem which is consistence with the one’s self.

High self-esteem results from the successfulness of an individual who achieve their goals. It makes the persons think that they are the winner, makes them a self-

conceit person. On the other hand low self-esteem result from the persons who failed in achieving their goal, making them a low self-esteem and lost self-confident. Self perception in high-risk pregnant women varies and correlates with body image. It is the quality of an individual perception to respect and to remain in virtue to one's self. Pregnant woman who suffer from ailments accompanying pregnancy thinks that partial part of her body has lost its functions. Daily life style and activities has changes resulting self-degrading and unworthiness in life of pregnant woman related to self-unworthiness in one's self. (Norris & Kunes-Connel, 1985:746 referred in Pannee Choonpradap, 1995:32). Mercer & Ferketich (1988:26) have found that self-esteem can predict or measure the occurrence of depression accurately by 7.64% – 19.37%.

The study has reveals that self-perception related to self-esteem of the depression in high-risk pregnant women. Since the self-perception is the part where how the individual see himself but the self-esteem is the part where the individual see into the self of how he is. Therefore, if the situations or any incidents in life has achieved the goals or successful, the person will certainly realized self-worthiness. Gordon and Klouda(Gordon & Klouda, 1989:157) stated that individuals who realized highly worthy of himself tend to be highly confident and capable of achieving any thing in life to maintain the physical health. Therefore, it is advisable to create the self-esteem in high-risk pregnant women in order to feel worthy, encouraged, motivated and enabled them to fight against any obstructions that may occur, together with the willing to seek helpful information regarding pregnancy adjustment and proper healthcare through pregnancy period. Edward (Edward et al., 1994:1006) discovered that pregnant woman who realized their self-esteem tend to have a term pregnancy and enables them to adjust to the changes of a motherhood. Robert's study (Robert, 1983:213) had found that self-esteem in a pregnant woman correlates positively with her emotion.

Social Support

There are several studies regarding social support and discovered that “mental-social factors” affected the physical health. Definitions of social support have been defined in various aspects as follow:

Kaplan and colleagues (Kaplan, et al., 1977:50-51) has defined as a satisfaction towards to basic needs of each individual in society which received from group of people or important persons.

Cobb (Cobb, 1976:300-301) has defined social support as information that makes the individual believes that he is loved, cared, worthy, respected and feeling that he is part of the society.

House and Kahn (House & Kahn, 1985:84-85) mentioned social support as a quantity of a social relationship no matter in general or specific aspect such as relationship with spouse, co-workers, organization members including the definition of the structure and duty of social relationship.

Roy (Roy, 1984:309) mentioned the social support as a person or group of persons who help an individual to achieve goals. Social support play role in the aspect of love and respectfulness.

Social support although differ in meaning but its results help an individual living in the society and community happily. Therefore, it is concluded that, social support refers to the assistance received from the loved ones, community members. This comprises of acceptance, information and material mediums and the help from the society in order to solve the problem that may occur and to maintain proper healthcare.

Weiss (Weiss, 1974:23-24) has divided social support in 3 categories, what result will there be if lacks social support, Diamond and Jones has explained hereafter.

1. Love, care and good relationship of a person greatly affect the mental and physical health. Receiving love and care from loved ones such as spouse, parents and relatives is crucial. If an individual lacks this support will leads to emotional problems and pessimistic.

2. To be a part of a community refers to the opportunity that individual has to join the activities, it results the exchanging of feelings, concerning and understandings. If an individual lacks this support will leads to boredom.

3. The opportunity to take care of others refers to the people who have the opportunity to take care of children, and makes him feel worthy and helpful. Otherwise, he may feel unworthiness.

4. To be praised referred to the person who received respect action praised to be an ideal role model of the society and family members. Otherwise, he may lost self-confident and unworthiness.

5. Having friendship with the relatives and received help when needed, otherwise, an individual may feels neglected and abandon.

6. Receiving advices from the professional or physician when facing crisis, without a social support, will lead to hopelessness.

Brandt and Weinert (Brandt & Weinert, 1981:277) has synthesized the social support by using the method relating to the relationship that has been categorized in 5 types as follow 1) confirmation and self-worthiness 2) to acknowledged that he is part of a community 3) to be loved and cared for 4) chance to take care of others 5) receiving information regarding emotion and materials. Receiving social support in everyday life will enables the person to live happily and healthy (Norbeck, 1981:50) and able to face the crisis and adjust one's self to the changes. (Cobb, 1976:300-14). Pregnancy is one crucial factor that caused changes and may caused crisis in the pregnant woman together with physical ailments. High-risk pregnancy woman if receive love and support from husband, father, mother, family members, friends and relatives will be a great help to the adjustment. (Richardson,1982:17-40 ;Cohen ,et al.,1991:408) As what Nuckolls (Nuckolls, et al ., 1972:431- 41) studied about the social support and disease diagnostic in 170 pregnant women population who were pregnant below 24 weeks answered questionnaires the first time they visited the obstetric, in order to measure the social support. Population who were pregnant in their 32 weeks answered questionnaires in order to measure the crisis in life and side affect during pregnancy, when delivering and in the postnatal period. The study shows that pregnant woman experiencing crisis and receiving low social support during pregnancy are at risk of side effects 3 times higher than the highly supported by family members, that is, During the condition of changes in lives and crisis, if receive enough and appropriate support from the society it helps to prevent unwanted side effects during the pregnancy.

It is now known that pregnant woman who experienced rapid changes of physical, mental and social affect emotional agitated as well. She may feel doubtful, lost self-confident, moody, negative self perception, hopeless and anxious about the

risk during the pregnancy. She fears the pain from the medication, medical treatment and abnormalities that may occur to her child during the delivery period. These may cause the pregnant woman to excessively pay attention to, fear and worried about her loved ones. Being unable to work or do house hold chores normally causes low self-esteem and were a burden to others, loose self worthiness. Besides, changes of body image also affect the depression as well. She may not appropriately take care of herself and surroundings and isolated. If loved ones accept the fact that pregnant woman need more attention than she usually do, it can prevent depression and other side effect that may occur during the pregnancy. Due to the risk during pregnancy in high-risk pregnant women must be treated and prevented the danger. Medical professionals and concerning organization will be giving advication and suggestions regarding proper healthcare. Sometimes high-risk pregnant women are tired of the treatment and limitation may worsen the conditions. If the pregnant woman received information needed and followed the suggestions given by the experts, she may recover from the illness and finally, will live a healthier and happier life.

From what has mentioned above, we can see that pregnant woman received social support which comprises of 1) confirmation of self-esteem 2) to be acknowledged in a community 3) loved and cared for 4) opportunity to take care of others 5) assistance regarding information and suggestion from the experts or professionals (Brandt & Weinert, 1981:177)

The high-risk pregnant women could be the receiver and the giver which help managing the problems and respond to her need during the pregnancy. (Albrecht & Rankin, 1989: 51) Lacks social support may obstruct the healthy personality and behaviors and cause frustration, self-esteem, fearful, hopeless, and self-degraded that directly cause depression and certainly affect pregnancy and healthiness of the pregnant woman. Therefore, social support is the stimulant that influenced depression in the high-risk pregnant women. Besides the self-esteem and the social support, there are still some basic factors that influenced the depression in pregnancy of a woman.

These factors are detailed such as age, education, occupation, family income, gravidity, number of children, marital status, family planning, physical health history and mental health history.

Age is the changes in body images such as pregnancy induced hypertension caused swollen of the body, multiparity caused extra large abdomen, teenage pregnancy has difficulty accepting her pregnancy and changes vice versa an elderly pregnancy has difficulty managing their emotion abnormality due to worries about the deformity of the child and other abnormality during the pregnancy such as diabetes mellitus, pregnancy induced hypertension, antepartum hemorrhage, death fetus in utero (Berkonitz, et al.,1990 cited by Edwards ,1999 :468). There are reports show that pregnancy in an older woman tends to have difficulty recovering from the ailments (Edward, 1999:468) and other illness, which certainly affect emotional health and feeling of low self-esteem.

Education – education help individual to develop intellectually and capability to learn. Changing of role will affect the acknowledgment and social support resources. A well-educated pregnant woman will seek information by means of questions asking, reading book, and more brave to ask for assistance and can understand easier regarding information received. While in poor-educated pregnant woman often found uninformed, misunderstood the myths and the facts, not brave enough to ask question from the experts and professional. From the study by Russel (Russel, 1974:294-302) has found that mother who was well-educated feel less in crisis and well-adjusted than poor-educated mother. (Ralph. 1977 cited by Mercer, 1981; 75) Besides that, the education attainment of the pregnant woman related to the postnatal stage. (Campbell & Cohn ,1991:597; Gotlib, et al. ,1991:125 ; Whiffen & Gotlib,1989:276)

Occupation – a high-risk in pregnancy affect daily lifestyle directly. The pregnant woman may feel that she is burden to others. The incapability of doing daily life activities and limitations of the life style correlate to the low self-esteem (Norris & Kunes – Connel, 1985: 746 referred in Pannee Choonpradap, 1995:32) Therefore, pregnant woman who lost the normal ability of occupation performance is a great risk of depression.

Family Income – is one of the important factors in living daily life, a basic need and for the better living. (Oram, 1985:175) The poverty is another crucial factor of motherhood role model. (Davidson, 1972:662) In family which has enough income, the mother can play role effectively and productively. She needs to prepare the expenses for the baby and herself. But in the poor family, the mother is unable to play and effective mother role, due to the lacking of money.

Gravidity – the pregnant woman who had had child or children tends to know the skills able to solve problem which may occur. The study of Punnee Choonpradap (1995:68) has found that the ranking of the birth relates to the depression behaviors in the pregnant woman.

Number of children – the factor regarding number of the child are widely agued, that is, Le Masyer (Le masyer, 1957:352) found that 83% of the married couple and postnatal mother with a first child, often found experienced with crisis. Curry (Curry, 1983:115) has found that 25% of mother who has a first baby tends to be anxious and experienced difficulty adjusting herself, this is consistent with many other studies that has discovered that experience mothers do not have difficulty in carrying the baby, feeding the baby and management when child is ill due to the experiences she had had.

Marital status – Thai society nowadays has changed a lot from a big family ties into a smaller family which is only the husband, the wife and the child. This reasoned from the migration of the family member. By moving into the nearer place to their work place such as, industrial estate and factory result the easier life style. Having a smaller family ties causes closer relationship, and trusting, especially in the pregnant woman, she need acceptance and a lot of attention due to her worries and anxiety (Richardson, 1983 cited by Williams, 1995: 112). She also wanted attention and care from her husband, and when her husband pays enough attention to her, she tends to be less depressed and more relaxed. (Wayland & Tate,1993:198) The joyfulness and acceptance of the pregnancy effectively relates to the baby (Wayland & Tate, 1993a: 37-44; Cohen, Kenner & Hollings, 1991: 408) therefore, if the pregnant

woman will need to separate with her husband, divorced, widowed these caused emotion problem and may caused depression.

Family planning – from the theory of Chick & Meleis (1986:239) the factor which support the adjustment of the individual is the effective and productive planning. Mother who is well-planned for the family will adjust herself with the changes effectively. The plan considered are such as, physical, mental, place of child delivery or a hospital, how to raise the child, expenses and ability to acknowledge the role played in both the mother and the father. If the mother has not planned for the needs and adjustment plus lacks of support, she may experiences the greatest depression in life and caused more difficulties of the pregnancy.

Physical health history – the pregnant woman whom diagnosed had depressed had more risk and more stressful than the normal pregnancy. This may be the reason of the side effects and the illness that occurred during the pregnancy or the limitation to the pregnancy. Some mother may feel guilty of the illness and some may feel that she is the burden to other people. (Moor, 1983:226). This result the pregnant woman to be risky to the sadness and uncomforting. She may see pregnancy as the reason to the difficulties (Siriporn Chatpothing, 1993:132-3) Devorce (Devorce, 1990-15-17 referred in Wattanee Saenghiran, 1993:49) has reported that the pregnant woman who is high risk tends to fear of delivery of the child and the dangerousness of the child birth more than the normal pregnancy. This research is the study in the pregnant woman who is high risk of illness during the pregnancy and illness prior to the pregnancy.

Mental health history – from what has mentioned that high-risk pregnancy is the frustration that a pregnant woman faces. Mother who has had mental illness before pregnant will experience the great frustration and depression due to the new status and changes. Mother will tends to feel too pressured and stress to be able to adjust herself to the depression (Watsonm 1984:453-62) this is consistent with the study by Duangjai Kasantikul (1999:7-8) and Sompob Ruengtrakul (1999:94 ; 2000:3) which says that

the risk factor to the depression is that the individual has discovered to have depression disease before.

The relation among personal factors, self-esteem and social support with depression in high-risk pregnant women

Generally, ailments in any individuals at any period of life affect the self-esteem in a person such as diabetes mellitus, heart disease, and pregnancy induced hypertension cause the changes of a life style and more limitation than the usual life the persons used to have. (Pilai Thong-urai, 1998:39-40). Just as same as the high-risk pregnancy in a woman tends to loose self-degrading and feels degraded than the normal woman (Kemp & Pager, 1987:195). Due to the beliefs that the result of the pregnancy is incomplete and changes in all aspects in the daily life style, these affect physical health, mental health and social interaction. The pregnant woman treated the depression inappropriately may cause the self-degraded, lacks supportive resources and lead to unhappiness and depression

The research that shows the relationship between personal factors, self-esteem, social support and depression in the pregnancy is as follow:

Cohen (Cohen, 1979:15) stated that the ability of the mother to adjust the role she needs to play related with the balance between the frustration and the social support in the past and also in the present. If there is more frustration than social support if will cause the physical health problem of the mother. For instance, the study by Barrera (Barrera, 1981: 69) in the teenage pregnant woman, has found that the social support where the mother received related to the negative mental and physical health of the young mothers. She also found that frustration in life together with the social support can predict the depression of the young mothers by 13%.

Tilden (Tilden, 1983:167) has studied the 141 pregnant women to find the relationship between the life frustrations, marital status, social support and unstable of emotion (observed from the anxiousness, worries, depression and self-esteem). The study has found that self-esteem correlates negatively with the depression during pregnancy. Marital status has no influenced to the unstable emotion of the pregnant

woman. Life frustrations can explain the agitated of instability in a pregnant woman by statistically equivalent to 29.7% and social support 3.11%. Tilden's research result is similar to that of Norbeck & Anderson (1989:281) which has found that the pregnant woman who has low family income tends to be more frustrated and least received social support from the husband. The pregnant woman tends to be more worried. Norbeck & Tilden (Norbeck&Tilden, 1982:30) suggested the similar research but the further of the relationship of life frustration, social support, instability emotion (evaluate from the anxiety, and the self-esteem, ailments during pregnancy) by studied the 117 pregnant woman who is at risk of ailments. The study has found that self-esteem relates negatively with the depression and anxiousness. Frustration in life relates positively with the worries. The explanation of the agitated emotion were equivalent to 21.4%. The social emotion support relates negatively with the anxiety, depression and low self-esteem with agitated emotional 6.5%. Frustration in daily life and the number of child delivery related to the side effect illness or symptoms of the pregnancy. The agitated emotion has measure to be 4.9%. The social support does not related to the complication during the pregnancy.

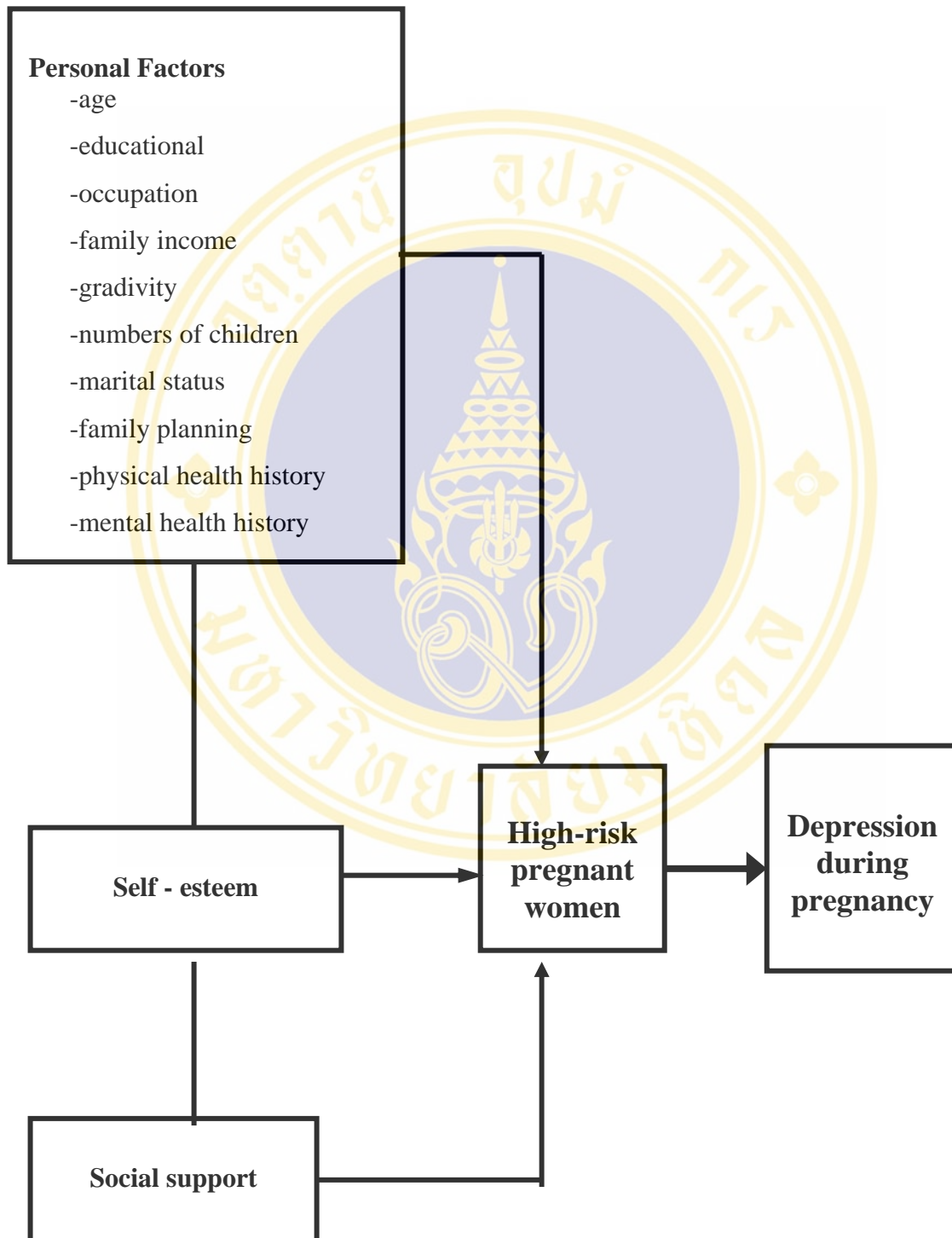


Diagram shows the relationship of the studied factors

CHAPTER 3

MATERIALS AND METHODS

The studies of the relationship of personal factors, self-esteem and social support to depression in high-risk pregnant women were studies as descriptive research, the main study procedures as following.

Population and Sample

Population is pregnant women whom are in high-risk from pregnancy underlying such as diabetes mellitus, pregnancy induced hypertension, and multiparity or pregnant with physical critical situation such as hearth disease, kidney disease, or surgeons critical situation such as appendicitis, who admit at Siriraj hospital's Out Patient Department

Inclusion criteria

1. Assign by Obstetrician for one or more high-risk pregnancy criteria.
2. In week 29 of pregnancy or more.
3. Please to join the studies.

Exclusion criteria

High-risk pregnancy by HIV infection or narcotic addicted.

Sample selecting

Sample selecting by Simple Random Sampling method from whom that admit at Siriraj hospital's Out Patient Department, collect name list and Out Patient Department card of the patient and selecting to be sample 15 person per time.

Sample size

The researcher had count the population, which in inclusion criteria back for 3 month, found the population are around 200 peoples (prenatal care department, Siriraj Hospital, August to October 2003) For become N value in sampling size calculating formula as follow (Sucheera Phattharayuttawat, 1999:57)

$$np_m = \frac{NZ^2}{4NE^2 + Z^2}$$

When

- np_m is the enough size of sample for estimate P value by relativity $(1 - \alpha)$
- N is count of all members of the population group (N = 200)
- Z is normal curve value at position that under curve length = $\alpha/2$ and Z value will limit area in the center of curve at $(1 - \alpha)$, So that $Z = 1.96 \approx 2$
- E is size of maximum inconsistent value (fix at E=. 05)

Place all Value in the formula :

$$np_m = \frac{NZ^2}{4NE^2 + Z^2}$$

$$= 200 (2)^2 / 4(200)(0.05)^2 + (2)^2$$

$$= 133.33$$

Thus that, this research must have minimum sample 134 peoples.

Materials of the study

Materials used in this study are 4 set of self answering questionnaire, as following :

1. **Simple information questionnaire** made by researcher contain open and close list of question, consist of personal information of high-risk pregnancy,obstetric information (age, education level, occupational, family income, gravidity, number of children, marital status, family planning, physical health history and mental health history, total 13 variables.

2. **Self-esteem test** found by Rosenberg in 1965 (Rosenberg,1989 : 325 – 7) The questionnaire set up for assess self-esteem in adolescence but able to use and suitable in adult and mature (Breytreak & Ferketich,1988 ; 1994;1995; Mercer ,et al.,1993 sic on Porntip Wongwisetsirikul,1997:74 – 5) the test's accurate are between 0.84 – 0.90 when using high-risk pregnancy group and when using in normal pregnancy the accurate are 0.87 – 0.90(Mercer & Ferketich,1994 ; 38-43) and when using in working woman found the accurate at 0.95 ,mean the test is very realizable (Meisenhelder,1986:8 – 14) In Thailand there are translation issue of these test and using adult and found that the Bach Alfa coefficient is between 0.70and 0.91 (Supanee Sumlek,1996; Pongsri Srimorrakot,1993; Youwaluk Mahasittiwat,1992; Samorjan Anatep,1992; Souwapa Wichitwatee,1997) The test contain 10 question positive and negative 5 each in 4 ratio question (1 = none , 2 = not often , 3 = often and 4 = always) total score will be from 10 to 40 high score means high self-esteem (Questionnaire's sample at the appendix A)

3. **Social support test** is the part of Personal resource questionnaire by Brant and Weinert (Brant and Weinert, 1981) synthesize form social support theory by Weiss (Weiss 1974)for evaluate perception of receiving social support .The Test contain 2 part,1st part is personal advantage and 2nd part is relation between person and social which 5 aspect of questions, perception of self value, being part of the group, love and bind, helping each other information objective and emotion supporting. The test translate into Thai by Jirapa Hongtrakone (1989) and using in 205 early postpartum by Supanee Sumlek (1989) Afterward Youwaluk Sereesatean (1991) had use this test in group of adolescence pregnancy the Bach Alfa coefficient are the same (0.9). For this research, the researcher choose this test because the sample

is familiar to the previous research, The Test contain 21 questions in 5 ratio question (not at all – actual) (Questionnaire's sample at the appendix A)

Positive question score 5 to 1 for answering “Actual” to “Not at all” for negative question is reverse. Total score are 21 – 105 and divide by percentage in to 4 sections

Score 80 and above = Received high social support

Score between 60 to 79.9 = Received rater high social support

Score between 40 to 59.9 = Received medium social support

Score less than 40 = Received less social support

4. **Depression test** found by Radloff (Radloff, 1977:386) had search content validity by psychiatrist, psychology expert and in group of normal people (Asian and Mexican refugees) by split-half, the result of validity is 0.87 .The test was very popular (Bette, 1988;Collera, 1983; Frank & Faux,1990; Logsdog, et al.,1944; Hall , et al .,1995) Wilai Kupnirattisai and Panom Ketman (1997;442 – 7) had develop the test to be fundamental depression testing by testing in 69 Thai people by randomization at Siriraj Hospital and assess by psychiatrist with DSM-IV standard for normal mental health rank then compare with Mental illness patient whom assess by DSM-IV either. The research found that CES-D score is very difference by statistic significance .001 and normal score for depress in Thai people is 19, sensitivity is 93.33 % specificity is 94.20% with 0.9 of validity, After that Sailom Kerdprasert (1999: 52) had use this test in postnatal and found the validity at 0.75. CES-D is the measure test for sample to shown their emotion and behavior in the past week. It's contain 20 question in 4 Likert Scale question (Questionnaire's sample at the appendix A)

Not at all: The sentences not match with subject's emotion and behavior

Not Often: The sentence occur with subject's emotion and behavior 1 – 2 days a week

Rater Often: The sentence occur with subject's emotion and behavior at least 3 – 4 days a week

Always: The sentence occur with subject's emotion and behavior 5 – 7 days a week

This test contains 16 negative questions and 4 positive questions. In negative questions if answer is **not at all** score is 0, answer **always** score is 3. On the other hand, in positive questions (No 4, 8, 12, 16) the score is invert. If total score more than 19 points show that subject is depression.

Instrument Quality Testing

The researcher testing instruments reliability by using the instrument in the sample group in same criteria of the research group. Those are high-risk pregnancy more than 29 weeks of gestation who join prenatal care at high-risk pregnancy clinic at Siriraj Hospital. Thirty people were tester about language clarified and problem among using. After calculating all test for Cronbach's coefficient, high coefficient were found (as theory of Fish & Corcoran (1994)). The reliability of each test shown as follows.

1. Self value Test's reliability = 0.83
2. Social Support Test's reliability = 0.80
3. Depression Test's reliability = 0.88

High-risk pregnant women right for participated the research

In this studies, the researcher realize in human right, so the researcher let high-risk pregnant women to decided for participated the research by themselves. After selecting sample the researcher will introduce oneself and asking for participate, purpose of studies, advantage of studies, information keeping and right to refuse or to join the research or abandon without effect with treatment (all high-risk pregnant women right for participated the research shown in the appendix B)

The Process of Data Collecting

The researcher will collect data by oneself after get the introducing letter from graduated faculty Mahidol University to Dean of Medical faculty Siriraj Hospital Mahidol University for permission to collect the data

After receiving permission, Researcher will meet head of antenatal care unit for introduction and insipid method of data collection then begin the following process.

1. The researcher will collect data in Monday at high-risk pregnancy clinic on 12.00–15.00 till collect all sample by count the population and Out Patient Department card of patient who participated at high-risk pregnancy clinic then selection sample by inclusion criteria.
2. The researcher will introduce oneself and making relation while the subject waiting for the doctor, asking for participate the studies, and answering the questionnaire.
3. After subject accepts to participate, researcher will explain how to answer the question in 4 tests. If the subject got a reading problem the researcher will read and help to answer.
4. When all question done, the researcher will check and remind for missing information.
5. Take all data to calculate and analyze.

Data Analysis

In this studies data analysis by SPSS/FW (Statistic Package for the Social Science /For Windows) was used to analyze data by propose of studies as following

1. Analyzed demographics data by frequency and percentage.
2. Analyzed score data of self-esteem test, social support test and CES-D test of Mean, Median, Mode and Standard Deviation.
3. Analyzed of relation of the personal factors, self-esteem, social support and depression in high-risk pregnant women by t-test and Chi-square test.

CHAPTER 4

RESULTS

This research proved the hypothesis that there are relations among personal factor, self-esteem and social support to depression in high-risk pregnant women. The subjects were patients who attended high-risk pregnancy clinic (166 cases). At the end of the research 4 uncompleted questionnaires were found, so total subjects were 162 cases (97.6% of all subjects). The result will shown as follow, characteristic of subject, self esteem, social support, depression in high-risk pregnant women, and factor that effect depression in high-risk pregnant women.

1. Characteristics of subject

1.1 Personal, social and economic characteristic

There were 162 high-risk pregnancies will mean age 29 years old (SD= 6.8). Most of there were 30 years old (8.4 %), married and living with couple (87 %), single family (65.7%), graduated in primary and high school level (32.1% and 43.8% respectively). 59.9% were unemployed (housewife and students). 48.2% of subject decreased working ability during pregnancy. Only 10.5% of subjects income had dept. (Table 1)

Table 1 Frequency and percentage of subject by age, marital status, family type, education level, occupation, working ability and family income (N=162)

Characteristics	Frequency	Percentage
Age (years)		
15 – 25	47	29.0
26 – 35	85	52.5
> 35	30	18.5
Age 29 years old, SD = 6.8		
Marital Status		
Living with couple	141	87.0
Depart	21	13.0
Family Type		
Single Family	109	67.3
Extend Family	53	32.7
Education Level		
Not Educated	6	3.7
Primary school	52	32.1
High school	71	43.8
Higher than high school	33	20.4
Occupation		
Employed	65	40.1
Unemployed	97	59.9
Working Ability		
Able to work normally	66	40.7
Working ability decreasing	78	48.2
Unable to work	18	11.1
Family income per month		
Enough	145	89.5
Not enough	17	10.5

1.2 Pregnancy histories, physical health history, mental health history, family planning, pregnancy information receiving and other problem beyond health problem.

Ninety-nine subjects (61.1%) were diagnosed to be high-risk pregnant women from physical illness before pregnant. All of them (100%) were normal. Only 17.3% facing other problem exceed health problem such as quarrel with family members, lost of relatives, property confiscation, termination of employment and infidelity as shown in table 2.

Most of subjects were primigravida pregnant. More than half of the subjects (53.1%) planned for current pregnancy. 90.7% received pregnancy information from several sources such as medical personals (doctor, nurse) (73.5%), media (65.1%), husband and closed persons (59.6%) as shown in table 3.

Table 2 Frequency and percentage of subject by physical health history, mental health history, and other problem beyond health problem. (N=162)

Characteristics	Frequency	Percentage
History of physical health		
Underlying disease	99	61.1
Disease during pregnancy	50	30.9
Both	13	8.0
History of mental health		
No	162	100
Yes	-	-
Other problem beyond health problem		
No	134	82.7
Yes	28	17.3

Table 3 Frequency and percentage of subject by pregnancy histories, pregnancy information receiving and other problem beyond health problem. (N=162)

Characteristics	Frequency	Percentage
Gravidity		
Primigravidarum	82	50.6
Multiparity	80	49.6
Number of the children		
No child	83	51.2
1 child	51	31.5
>1 child	28	17.3
Pregnancy Plan		
Yes	86	53.1
No	76	46.9
Pregnancy information receiving		
Yes	147	90.7
No	15	9.3
Source of information*		
Medical personals (doctor, nurse)	122	73.5
Media (T.V., radio, magazine)	108	65.1
Closed person (relation, colleagues)	99	59.6
Other (internet, other media, etc.)	8	4.8

* Subjects can answer more than 1 answer

2. Self – Esteem data

Only 159 cases answered complete questionnaire. Self-esteem score of these subjects were high level score range between 16 to 40 points (possible range is 10 to 40 points), mean 29.65, standard deviation 4.55 as shown in table 4. Comparing their

self-esteem before and after pregnancy, 97 subjects (61.0 %) felt were their self esteem was increased, only 10 subjects (6.3%) their self-esteem were decrease and 52 subjects (32.7%) had no change as shown in table 5.

Table 4 Possible range, Mode, Mean and Standard deviation of subject by self-esteem score (N=159)

Data	Possible range	Mode	Mean	Standard deviation
self-esteem score	10-40	16-40	29.65	4.55

Table 5 Frequency and percentage of subject by comparing their self-esteem before and after pregnancy (N=159)

Comparing their self-esteem before and after pregnancy	Frequency	Percentage
Increase	97	61.0
Decrease	10	6.3
No change	52	32.7

3. Social Support data

There were only 160 copies of social support test. After consider all social support score 4 subjects (2.5%) are less than 42 scores (receiving low social support). 43 subjects (27.0%) have 42–62 scores (medium social support), 93subjects (58.0%) have 63–83 score (rather high social support) and 20 subjects (12.5%) have 84 scores or over (high social support).

From the evaluations, subject received high level of social support (69.18 scores) with standard deviation 12.9, as shown in table 6.

Table 6 Frequency, percentage, mean and standard deviation of subject classified by social support score (N=160)

Social support score	Frequency	Percentage
High *	20	12.5
Rather-High **	93	58.0
Medium ***	43	27.0
Low ****	4	2.5
(X = 69.18, SD = 12.9)		
* ≥ 84 scores		
** 63-83 scores		
*** 42-62 scores		
**** < 42 scores		

4. Depression in High-risk pregnancy

From depression test, there were only 162 completed data. 103 subjects (63.6%) had score 19 or higher (depression state) with mean at 22.5 and standard deviation 10.12, as shown in Table 7.

Table 7 Frequency, percentage, mean and standard deviation of subject classified by depression (N=162)

Depression	Frequency	Percentage
No	59	36.4
Yes	103	63.6
(X = 22.5, SD = 10.12)		

5. Result

The hypothesis showed that there were relationship among personal factors, self-esteem and social support to depression in high-risk pregnant women.

As the result of this study personal factor that related to depression with statistical significance ($P < .05$) were family income and number of the children ,that meant that the high-risk pregnant women who got not enough family income and got more than 1 children may depress during this period. On the other hand, age, education level, occupation, gravidity, marital status, planning for pregnancy, history of mental and physical health were not related to depression. Social support and self-esteem were also related to depression with clinical significant. Other factors that also related to depression in high risk pregnant women ($P < .05$) were working ability, other problem beyond health, as shown in table 8, 9 and 10.

Table 8 The relation of depression in high-risk pregnant women with personal, social and characteristic. (N = 162)

Characteristics	Non – Depression (N = 59)	Depression (N = 103)	P-value*
	N (Percentage)	N (Percentage)	
Age(years)			
15 –25	15 (25.4)	32 (31.1)	0.729
26 – 35	32 (54.2)	53 (51.4)	
> 35	12 (20.3)	18 (17.5)	
Education Level			
No Education	1 (1.7)	5 (4.9)	0.328
Primary School	17 (28.8)	35 (34.0)	
Secondary School	25 (42.4)	46 (44.7)	
Higher than secondary	16 (27.1)	17 (16.4)	
Marital Status			
Living with couple	54 (91.5)	87 (84.5)	0.198
Separate	5 (8.5)	16 (15.5)	
Family Type			
Single Family	45 (76.3)	64 (62.1)	0.065
Extend Family	14 (23.7)	39 (37.9)	
Occupation			
Employed	27 (45.8)	38 (36.9)	0.268
Unemployed	32 (54.2)	5 (63.1)	
Working ability			
Able to work normally	36 (61.0)	30 (29.1)	< 0.001
Working ability decreasing	21 (35.6)	57 (55.4)	
Unable to work	2 (3.4)	16 (15.5)	

Table 8 The relation of depression in high-risk pregnant women with personal, social and characteristic. (N = 162) (continue)

Characteristics	Non – Depression (N = 59)	Depression (N = 103)	P-value*
	N (Percentage)	N (Percentage)	
Family Income			
Enough	58 (98.3)	87 (84.5)	0.006
Not Enough	1 (1.17)	16 (15.5)	
Gravidity			
Primigravidarum	27 (45.8)	55 (53.4)	0.350
Multiparity	32 (54.2)	48 (46.6)	
Number of the Children			
No child	25 (42.4)	58 (56.3)	0.011
1 Child	27 (45.8)	24 (23.3)	
More than 1 children	7 (11.8)	21 (20.4)	
Pregnancy Planning			
Yes	31 (52.5)	55 (53.4)	0.916
NO	28 (47.5)	48 (46.6)	
Information received			
Yes	54 (91.5)	93 (90.3)	0.794
No	5 (5.8)	10 (9.7)	
Physical health history			
Underlying disease	37 (62.7)	62 (60.2)	0.597
Disease during pregnancy	19 (32.2)	31 (30.1)	
Both			
Mental health history			
With History	59 (100)	103 (100)	-
No History	-	-	

Table 8 The relation of depression in high-risk pregnant women with personal, social and characteristic. (N = 162) (continue)

Characteristics	Non – Depression (N = 59)	Depression (N = 103)	P-value*
	N (Percentage)	N (Percentage)	
Other problem exceed health problem			
Yes	2 (3.4)	26 (25.2)	< 0.001
No	57 (96.6)	77 (74.8)	

* Chi-square test

Table 9 The relation of depression in high-risk pregnant women with self-esteem (N = 159)

Characteristics	Non – Depression (N = 57)	Depression (N = 102)	P-value*
	X ± SD	X ± SD	
Self-esteem score	32.63 ± 3.73	27.99 ± 4.10	< 0.001

* t-test

Table 10 The relation of depression in high-risk pregnant women with social support (N = 160)

Characteristics	Non – Depression (N = 58)	Depression (N = 102)	P-value*
	N (Percentage)	N (Percentage)	
High	17 (29.3)	3 (2.9)	0.045
Rather high	34 (58.6)	59 (57.9)	
Medium or Low	7 (12.1)	40 (39.2)	

* Chi-square test

CHAPTER 5

DISCUSSION

The purpose of this research is to study the relationship of personal factors, self-esteem and social support to depression in high-risk pregnant women. The researcher has summarized the characteristics of the subject, self-esteem, social support, depression, related factors and limitation of the research as follows.

Characteristic of Subject

The mean age in high-risk pregnant women in this study was 29 years. The age range between 26 – 35 years is the time that physical, mental, social is in a condition (SriTham Thanabhum, 1992:84). This is the stage that able to adjust to the new role. Most of the subjects are in first pregnancy, which planned and well educated, (a high school level), which is higher than the compulsory education. (Primary Grade 6). Adequate economic status, without debt and mostly single family were also found in this study. The subjects in this research were similar to that of Nuanyong (1992) Pornthip Wongwisetsirikul (1997) Piyanate Kanjanajaroen (1998) Sailom Kerdprasert (1999) Boonlert Wiriyapak (2003) and Atehraporn Kitjaidure (2000) except the aspect of career; most of these subjects are housewife, student and unemployed.

Self-esteem

This research has discovered that the entire subjects were 162 persons; 159 persons answered the questionnaire completely and found that the test score shows highly of self-worthiness (mean score = 29.7, S.D. = 4.55), 74.25% of the total score. The result was similar to that of Supanee Sumlek (1995:69) and Pornthip (1997:88) which show mean score 30.59. Comparing their emotions in their prenatal and

postnatal stages by using the same self-esteem tests, found that 97 cases (61.0%) have a higher self-esteem level, only 10 cases (6.3%) lost self-esteem, another 52 cases (32.7%) accepted that they feel self-esteem is the same (Table 5). Thus, explained that most of the cases feel proud of themselves that they are able to get pregnant and feel truly happy (Female Identity). This normally found in married woman, because her spouse and relative of both sides often proud of the ability of the woman to bare an heir by showing felicitation. For the subjects who lost their self-esteem often found in potentially depressed pregnant women founding themselves in different stage such as excessive weight gained, stretch marks, edema in some part of the body. Individual's reputation is partially perspective as same as the self-esteem, when one's boy has transformed it reduce the self-esteem (Stuart & Sunden, 1987:399). Besides that, the studied subjects were found suffer from other sickness consistent with their pregnancies. These result the decrement of self-esteem as well. The sickness potentially changes life styles. The more the sickness affects the life style, the more the decrement of self-esteem as Riffie (1981:94) shows that self-esteem is variable by studying the feeling of self-esteem in adolescent age range 9 – 12 years in 3 groups. The first groups were operated patients (26 persons), second group were patients do not need operation (25 persons) and the last group were healthy (28 persons). By using the Cooper Smith Questionnaire, it is discovered that the test score of self-esteem in operated patients were reduced, the test score of the patients who do not need operation were still less than the healthy kids. Higgins (et al., 1995: 75) and colleagues studied the self-esteem of 31 drug abused in pregnant women by using the self-esteem test of Rosenberg, it is found that the score in the drug abused group was 22.4 which is lower than the woman who had uterus operation (32.3 scores) from the study by Black (1993), lower than 6 weeks postpartum delivery cesarean section (35.38 scores) from the study of Fawcett and colleagues (1993:49).

Social support

This research reveals that 160 subjects answered the social support test completely out of 162 persons. The average of social support scores were rather high ($X = 69.18$, $S.D. = 12.90$) (65.86% of total scores) This is consistent with the study of

Aomjai Sithjamlong (1999) and Yaowalak Serisatien (2000). It reveals that most of the subjects had a single family, lived with spouses and unemployed, being a housewife, decreasing working ability (Table 1). Thus, it is discovered that the spouse of the potentially risk in pregnant woman was joyful and happy about their first child. Normally in Thai society the male spouse are to responsible for the household expenses and to protect the wife, child and take care of every member in the family (Supatcha Supab, 1994:60-6) therefore, the potentially risk in the pregnant woman indeed want the encouragement from her husband to fight against the sickness, for instance, pay attention to the pregnant woman by giving her money or gift. This would increase their self-esteem, feel loved, cared for, self-importance and self-reliance. Moreover, sometimes by calling the Obstetrician hotline service by Siriraj Hospital was rather convenient. Therefore, when the pregnant woman knows that she was acknowledged, taken care of and loved were crucial factors to the adjustment with pregnancy, ailments, mother role and appropriate health behaviors (Cohen et al., 1991: 408). This is consistent with the study by Ankana Nuanyong (1992) and Orathai Thamkanma (1997) who studied the social support and the potentially high risk in high blood pressure pregnancy-woman. Pannee Chunpradap (1995) studied the social support during stress in high-risk pregnant women. Aomjai Sithjamlong (1999) study about acceptance of HIV positive pregnant woman. Yaowalak Serisatien (2000) studied the social support and adjustment of motherhood in a young pregnant woman. Rungthip Changsila (2001) studied the productiveness of activity in the high-risk pregnant women.

Depression in high-risk pregnant women

This research reveals that 103 out of 162 samplers or 63.6% were depressed, which higher than the rate that Wattanee Saenghiran (1993) studied 338 pregnant women in Ratchawithee Hospital, discovered that 35.84% were frequently depressed in the first trimester of pregnancy; when followed up the same cases during the second and the third trimester, discovered to be depressed 42.9% and 35.2% consecutively, which is higher than the study by Pinkeaw Choteamnuay (2001) who studied 100 pregnant women from Ramathibodi Hospital reveals 5% of pregnant women were

depressed, thus, may be caused from different sample. This research study in high-risk pregnant women who is potentially at risk due to associated ailments or diseases that may affect the mother and child or may be endangered to both. This causes insecurity and unsafety for both. It is a menace pregnancy. Some pregnant women blame themselves for having pregnancy, which causes more tension and depression. (Siriporn Chatpothong, 1993:132-3)

Most of the cases suggested that lacking ability to perform normal tasks to the family, career and society, losing these roles caused the pregnant woman to feel that they have lost proficiency; this is consistent with self-unworthiness. Norris & Kuncs – Connel (1985: 746 cited by Pannee Chunpradab, 1990: 26) the same as, Mercer & Ferketich, 1988:26, discovered that frustration and self-worthiness could predict the depression syndrome in pregnant women in 7.64 –19.37%. Wattanee used CES-D (Center for Epidemiological Studies Depression Scale) to evaluate mental health referred to the standard of DSM-III (Desk Reference to the diagnostic of Mental Disorder 3rd edition) Thai edition (Dungjai Kasantikul, et al., 1986:177-87). Where Pinkeaw Choteamnuay used HADS (Hospital Anxiety Depression Scale), this method is used to evaluate the depression and anxiety. This research used CES-D method, which is used to determine only depression and considered a screening test for depression (Wilai Kuptanirattakul and Panom Kateman, 1997:446), the sensitivity rate may be found higher.

Factors related to the depression in high-risk pregnant women

Family Income – related to the depression in high-risk pregnant women with clinical significance ($P < .05$). These, who have low salary and not enough for the household expenses tend to be depressed. This explains that, nowadays, Thailand is experiencing an economic crisis, which affects the entire social classes, it affects the reduction of each individual's salary while the product prices continually increase together with a reduction of demand. Subjects who are mostly unemployed, caused a reduction of family income and not enough for the extra expenses during pregnancy. Nowadays, an expense of childbirth is highly increased caused the pregnant woman to have additional expenses. Therefore, low salary earners may indicate poor

economical status, which lead to depression. This is consistent with the studies of Mercer (1981:76) who found that the family income effects the adjustment of motherhood. The postnatal mothers who suffer a poor economic status may think that the child is the family menace and may abandon the child. (Zuravin, 1989: 377)

Numbers of children – number of child related to the depression in high-risk pregnant women statistically equivalent to $P < .05$; especially in whom had more than one child, tending to be more depressed. This can be explained that, the more the pregnant woman has children, the more depressed she will be. Because she is to take care of the unborn child, other living children who need her attention, including ailments of the pregnant woman that obstruct her capability to respond to all attention needed. These caused a great depression, self-unworthiness and guilty.

Self-esteem – related to the depression in high-risk pregnant women statistically equivalent to $P < .001$, this shows that the pregnant woman who feels self-esteem tends to be less depressed than the pregnant woman who lost self-esteem. Thus, it can be explained that pregnant woman who feel highly self-worthy tends to realized self-importance, capable, self-satisfaction, self-reliance and socially accepted (Coopersmith, 1981:5; 1984:5). When pregnant woman realized self-worthy, she will be confident, encouraged, motivated to study the ailments suffering, may be by reading, talking, exchanging ideas, and brave enough to ask the doctors and nurses. This kind of pregnant women had motivation to follow instructions of a proper suggestion. Edwards (et al., 1994:1006) found that a pregnant woman who realized self-worthy tends to deliver normal childbirth than those who lost self-esteem. Suffering from economic problems, she is brave enough to help or seek advice with close relatives such as spouse, parents, relatives, and friends. Besides, those who realized self-worthy tends to be open minded, unaffected with criticisms, optimistic, and good problem solving skill. If the pregnant woman lost self-esteem, incapable, unaccepted from family and society; she will lost self-confident, narrow minded, weak, inferior and sorrowful (Brundage, 1980:49; Branden, 1981:109; Maslow, 1970:45 referred in Pannee Chunpradab, 1995:71-2) which may lead to depression. This is consistent with the studies of Mercer & Ferketich (1988:26) studying in the

high and low potential of depression risk in a pregnant woman. They discovered that frustration and self-worth could indicate depression in the subjects. The realization of self-esteem could explain the fluctuations of depression in 7.64% - 19.37%.

Social support – related to the depression in high-risk pregnant women statistically equivalent to $P < .05$. Social support is the way to the individual to believe that she is loved, worthy, and capable to help each other (Cobb, 1976:300). The network or group of individuals in a social supportiveness comprises of important persons to the individual such as husband, wife, parents, relatives, neighbors, co-workers including professionals who serve the community. To realize that the individual has enough social support especially from husband, wife, parents, relatives, siblings, and friends will help encourage doing normal activities (Rungthip Changsila, 2001). Have an assistant to help while suffer from ailments, receiving money, presents, help, information, advice or knowledge in order to solve problems occurring during pregnancy will effect adjustment behavior. For instance, accepted pregnancy, create relationship with the fetus. While the pregnant woman who receive less social support lacks helper, adviser and unaccepted from the other important people and may cause depression.

This research found additional factors which related to depression in high-risk pregnant women (statistically equivalent to $P < .05$) such as ability to perform tasks delegate, and other problems besides from health concerns and can be explained as follow.

Working ability - That is pregnant woman who unable to perform normal task tends to be more depressed due to the high-risk pregnancy will affect normal life and always need help from someone. Not able to completely perform normal activities could make the individual lost self-reliance and self-esteem. (Norvis & Kunes – Connel, 1985; 746 referred in Pannee Chunpradab, 1995:32) Thence, the pregnant woman who unable to perform normal activities will be asked to terminate the employment, which caused great depression as well.

Other problem beyond health problem – The subjects who suffer from health problem, pregnancy and yet more problems such as quarrel with family members, lost of relatives, property confiscation, termination of employment and infidelity, this consider a stressful life event. Therefore, high-risk pregnant women who suffer from mentioned problems tends to be severely depressed and this is consistent with the study by Barry Zuckerman and colleagues (1989:1107-11). They has studied the depression during pregnancy by using CES-D found that frustration from the bad incident in life related to increasingly depression. When considered the stressful events, the entire samplers were totally lost social support and caused great depression. O' Hara (et al., 1983:336) studied and found that the depression in postnatal stage is higher but receive less emotional help than those who do not suffer depression.

Other personal factors which related to depression in high-risk pregnant women without clinical significant ($P > .05$) such as age, educational, occupation, gravidity, marital status, family planning, physical health history and mental health history. This can be explained as follow.

Age – Age is not related to the depression in high-risk pregnant women. This may due to most of the subjects are at age range of 26 – 35 years, which considered an adulthood who capable of problem solving, capable of learning and complete intellectual, able to face normal and critical situation by learning from the past experiences to adjust ones' selves effectively. (Sritham Thanabhum, 1991:84). Besides, it may results from the questionnaire, which could not distinguish the maturity of subjects. This caused the unknown statistics. Yet, differ from the study of Gotlib (et al., 1982:272) who discovered that age range, educational attainment, family income and number of child related to depression in the prenatal stage.

Education – Education is not related to depression in pregnant woman. This can be explained that, education is a tool to help improving individual's intellectual and ability to learn and adjust different roles. Thence, affects the acknowledgment of social support. Most of the subjects in this research were from high school onwards

that enable them to be able to seek information and knowledge by asking questions or read book of proper healthcare in pregnant woman. Therefore, they after diagnosed to be high-risk pregnancy, will be able to seek information, ask questions, understand the ailments, treatment and enable them to accept pregnancy and adjust to motherhood and not depressed. Besides, most of them who consult Obstetrician since their first trimester at Siriraj Hospital would receive advice, knowledge of proper healthcare of a pregnant woman, health conditions, and ailments and how to take good care of a baby. This makes the subjects no matter how well educated they are, they would be giving knowledge equally. Thus, different educational attainment may be learned and sought for information and social support equally and may not cause depression yet.

Even educational attainment wasn't related with depression in high-risk pregnant women. But the research found large amount (40 subjects, 38.9% of depress object) of the subject shown that subject with low education level (lower than government determine level or under high school level) have depress very high amount. So the health care staff should pay more attention on this group.

Occupation – occupation responsible by pregnant woman does not relate to depression. This may be explained that, Thai society, spouse is to be responsible for household expenses also to protect wife and child and members of the family (Supatra Supab, 1994:60-6). Although, most subjects were unemployed, their husbands are responsible to all expenses, assisting, encouraging and make pregnant woman realized self-importance, loved and cared.

Unemployed group is a sub-group on career that should take much care because 63.1% of depress subject was unemployed.

Gravidity – rank of pregnancy does not related to occurrence of depression. This may be explained that, pregnancy is natural process of all female to feel stressed and worries on every pregnancy as stated by Aumporn Otrakul and colleagues (1990:34-5) surveyed and discovered that stress in first pregnancy and the last pregnancy has no different. When potentially risk, pregnant woman will adjust to the conditions and seek information and knowledge and depression would subside.

Marital Status – marital status does not relate to the depression in high-risk pregnant women. This may be explained that, although the samplers were separated with her husband but still living in a family where there are parents, relatives, siblings and friends, will still receive assistance in money, belongings, and advices on proper healthcare in pregnant woman which prevent depression. This is consistent with the study of Tilden (1983: 167) who studied the 141 normal pregnant women to find out the relationship between life frustration, marital status, social support and mood disorder (evaluated from anxiety, depression and self-unworthiness) discovered that marital status is not influencing mood disorder of a pregnant woman.

Family Planning – it is found that family planning related to depression in high-risk pregnant woman but statistically unknown. This shows that family planning does not relate to depression condition. This may be explained that although the samplers have planned the pregnancy and preparation to have a child yet if found a risk of obstruction of pregnancy which may endanger both mother and child will certainly affect emotionally, mentally and society. Due to the changes such as frequently pay a visit at the hospital, limitation in normal activities, and sickness from ailments which may need to terminate the pregnancy, thus, the pregnant woman tends to be more anxious, worried about the unexpected event that may happen.

Physical health history – the physical health history does not relate to the depression in high-risk pregnant woman. This may be explained that, as most samplers (61.1%) used to be sick from ailments prior to the pregnancy, which enable them to know the condition of the sickness and able to predict the situation and solve the problems from the past experiences. Besides, when an individuals who have history of physical health want a pregnancy or know that she is pregnant will be diagnosed and carefully examined the condition of the pregnant woman whether to terminate the pregnancy or not. Then, when the physician considered safe pregnancy, she must follow the instruction or a proper healthcare. For the pregnant woman who needs to consult he obstetrician more often, she will receive advice, information about the ailments or condition every time she visits the physician. Therefore, when pregnant woman were clearly informed of what to expect, she tends to relief anxiety, fear and

understand and accept the condition or ailment during the pregnancy, which prevent depression.

Mental health history – this research does not find samplers who have mental health problem history, which unable to study the relationship with depression in high-risk pregnant women.

As the explanation above. The research shown that high-risk pregnancy woman has high social support and high self-esteem but also depression. This result may occur by Hormones or biological change, during pregnant the mood change from an abnormal ratio of hormones rather than from any absolutes level or mood changes may result from abnormal sensitivity to normal level of hormone (Hendrick & Altshuler, 1999). Or during data collecting process the researcher had collects further data from the questionnaire by interview subject directly and uses this data along discussion.

Limitations of the research

1. Limitation of Internal Validity of this research comprises of

1.1 The researcher unable to control bias from the researcher herself when explain questions which samplers do not comprehend. The researcher was not equally explained which affects the answers of the samplers.

1.2 Selecting samplers according to the qualification the researcher established might affect the selection of samplers that differ in social economical difference and cause incorrect answers from incorrect understanding of the questions.

1.3 The researcher unable to control the time taken during answering the questionnaire. Depending on the time divided by medical profession and nurse can be served. And also depending on the clients who came in each day. Therefore, to carefully answer the questions may vary and result inaccurate score.

2. Limitation of External Validity of the research.

2.1 This research is the study specifically in the potentially risk pregnant woman who paid a visit at a prenatal clinic of Siriraj Hospital only, and might not be able to conclude that this research is a representative of the entire pregnant woman but may study the result as guidance in servicing mental health of a pregnant woman effectively.

2.2 Some items in the questionnaire about self-esteem test, social support test and CES-D may not clearly be understood by the subjects that they answered them incorrectly from the truth. This should be improved for future studies.

2.3 In this study, the researcher chose high-risk pregnant women who were more than 29 weeks of gestation that all subjects can answer every questions in the questionnaire. Actually, there are changes in any period of pregnant on physical, mental and social. The results of this study cannot be applied to high-risk pregnant women an difference period.

2.4 Research's questionnaire may not fit with some of the subject group because any questionnaire base on difference theory then the researcher should clarified all questionnaire and enplaning all result in the same theory.

2.5 There is unable to measure length of illness. That may effect to coping ability of the subject.

CHAPTER 6

CONCLUSION

Summary of the Study

The study of the relationship of personal factors, self-esteem and social support to depression in high-risk pregnant women was studied as descriptive research. The study was performed in high-risk pregnant women who are 29 weeks gestation or more (third trimester) without HIV infected or narcotic addicted. The total numbers of subjects of this study were 166 pregnant women who attended high-risk pregnancy clinic at Siriraj Hospital. Data was collected between May to July 2004 by simple random sampling.

The research instruments were the simple information questionnaire, Self-Esteem Test, Social Support Test and Depression Test (CES-D) with reliability of each test 0.83, 0.80 and 0.88. The data was analyzed by using SPSS/FW (Statistic Package for the Social Science/For Windows) and presented in the form of frequency, percentage, mean and standard deviation of characteristics of high-risk pregnant women, self-esteem score, social support score and CES-D. Analyzed of relation of the personal factors, self-esteem, social support and depression in high-risk pregnant women by t-test and Chi-square test. In summary, results of this study as follows:

1. Most of the subject, age between 26 – 35 years old, first pregnancy, educated in High-school level, working as a housewife, working ability decrease after pregnancy, family income is fair enough, living with husband, plan for pregnancy, no mental illness and have physical illness before pregnancy.
2. From total subject 162 people found 103 high-risk pregnant women with depression (63.6 %).
3. Self-esteem and Social support of the subject is in high level.

4. Self-esteem and Social support were related with depression in high risk pregnancy with a statistical significant ($P < .05$).

5. Family income, number of the children, working ability and other problem beyond health problem were related to depression in high-risk pregnancy with a statistical significant ($P < .05$). Ages, education level, pregnancy plan, marital status, physical and mental health history was related to depression in high-risk pregnancy without statistical significant ($P > .05$).

Implications and Recommendations

Implications and Application of Research Findings

As the studies of “Relation among of personal factors, self-esteem, and social support with depression in high-risk pregnant women” result, the researchers have suggestion as follow.

1. The result of studies found 63.6% of high-risk pregnancy has depression. Self-Esteem and Social support have relation to depression in high-risk pregnancy with a statistical significance ($P < .05$). Due to the result, we should arrange the seminar for health care staff for understanding mental situation of high-risk pregnant women by focus on using social support, self-esteem and other factor to evaluated and plan for mental health support.

2. Should have early detection for depression in high-risk pregnancy by using CES-D in first trimester and follow up in 2nd and 3rd trimester (whenever detecting severe sign should pass to the doctor or transfer or data to puerperium ward and follow up at postnatal).

3. Contact with discharge planner or communication healt to follow up high-risk pregnancy that assign as depressed pregnancy by telephone follow up or by 24 hours hotline number for pregnant women.

4. Arrange seminar for husband, family and relation to realize how social support important with depression in high-risk pregnancy.

5. Providing support groups for high-risk pregnant women, who had low economic, too many children, unemployed and working ability decreasing, may be helpful in providing with opportunities for communicating their feeling. It is essential that all women experiencing a high-risk pregnancy be given a clear explanation of the reasons for their group, making certain that they do not blame themselves for the situations and events beyond their control.

6. As the research result, depressions have many causes. So health care staff should be educated about the sign of depression. Pregnant women also should be encouraged to be open about depression during pregnancy, rather than feeling guilty and embarrassed as prevention plan to help high-risk pregnant women to cope with their depression by the following methods seminar, brochure, booklet, video and others.

Implication for Further Studies

1. This research had studied only in high-risk pregnant women who attended at high-risk pregnancy clinic. So should studies in other college to extend the reference data.

2. The subject were pregnancy in 3rd trimester but in every trimester are difference, so should study 1st and 2nd to compare with this current study.

3. Experimental studies group counseling by mental health care staff and access the data should be considered to improve mental health for mother and child.

4. Setting research between normal pregnant women and high-risk one, to compare related factor between normal and high-risk pregnant women.

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หนังสือแสดงเจตนายินยอมเข้าร่วมโครงการวิจัยทางการแพทย์

วันที่.....เดือน.....พ.ศ.

ข้าพเจ้า.....อายุ.....ปี อาศัยอยู่บ้านเลขที่.....

ถนน.....ตำบล.....อำเภอ.....จังหวัด.....

โทรศัพท์.....ขอแสดงเจตนายินยอมเข้าร่วมโครงการวิจัยเรื่อง

ความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล ความรู้สึกมีคุณค่าในตนเอง แรงสนับสนุนทางสังคม กับภาวะซึมเศร้า ในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง โดยนางสาวสิรินทิพย์ สุวรรณนุรักษ์

โดยข้าพเจ้าได้รับทราบเกี่ยวกับรายละเอียดของโครงการ ดังต่อไปนี้

วัตถุประสงค์ของการวิจัย เพื่อศึกษาปัจจัยส่วนบุคคล ความรู้สึกมีคุณค่าในตนเอง แรงสนับสนุนทางสังคม กับภาวะซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง และเพื่อศึกษาความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล ความรู้สึกมีคุณค่าในตนเอง แรงสนับสนุนทางสังคม กับภาวะซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง

โดยผลที่คาดว่าจะได้รับจากการวิจัย คือ ได้ทราบปัจจัยที่มีผลต่อภาวะซึมเศร้าในหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูง และสามารถนำไปเป็นแบบแผนในการดูแลด้านจิตใจเพื่อส่งเสริมการสุขภาพจิตที่ดีและป้องกันการเกิดภาวะซึมเศร้าในหญิงตั้งครรภ์กลุ่มดังกล่าวต่อไป

ซึ่งในการวิจัยครั้งนี้ ผู้วิจัยเก็บข้อมูลโดยใช้แบบสอบถามจำนวน 4 ชุด ทั้งหมด 64 ข้อ ได้แก่ 1)แบบสอบถามข้อมูลพื้นฐาน 13 ข้อ 2)แบบวัดความรู้สึกมีคุณค่าในตนเอง 10 ข้อ 3)แบบวัดแรงสนับสนุนทางสังคม 21 ข้อ และ4)แบบวัดอาการซึมเศร้า 20 ข้อ ให้หญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงที่มารับบริการฝากครรภ์ ณ คลินิกฝากครรภ์สำหรับหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงตอบแบบสอบถามด้วยตนเองในระหว่างที่รอแพทย์ตรวจ ซึ่งใช้เวลาประมาณ 20 นาที ดังนั้นหญิงตั้งครรภ์ที่มีภาวะเสี่ยงสูงจึงได้รับการตรวจตามเวลาที่กำหนด

ในกรณีที่มึปัญหาหรือข้อสงสัยเกี่ยวกับกรวิจัยข้าพเจ้าสามารถติดต่อผู้วิจัยได้ตลอด 24 ชั่วโมง ที่หมายเลขโทรศัพท์ 0-1620-5597

หากผู้วิจัยมีข้อมูลเพิ่มเติมทั้งด้านประโยชน์และโทษที่เกี่ยวข้องกับงานวิจัยนี้ ผู้วิจัยจะแจ้งให้ข้าพเจ้าทราบอย่างรวดเร็วโดยไม่ปิดบัง

ข้าพเจ้ามีสิทธิ์ที่จะขอการเข้าร่วมโครงการวิจัยโดยไม่ต้องแจ้งให้ทราบล่วงหน้า โดยการงดการเข้าร่วมทำการวิจัยนี้จะไม่ผลกระทบต่อการได้รับบริการหรือการรักษาที่ข้าพเจ้าได้รับแต่ประการใด

ข้าพเจ้าได้รับทราบข้อมูลของโครงการข้างต้นตลอดจนข้อดีข้อเสียที่จะได้รับการเข้าร่วมโครงการในครั้งนี้ และข้าพเจ้ายินยอมที่จะเข้าร่วมโครงการดังกล่าว โดยขอให้ผู้วิจัยงดการเปิดเผยชื่อ ประวัติ ตลอดจนข้อมูลที่เกี่ยวข้องกับข้าพเจ้าแก่ผู้อื่นได้รับทราบ

ลงชื่อ.....ผู้ให้ความยินยอม/ผู้แทนโดยชอบธรรม

() (ระบุความเกี่ยวข้อง)

วันที่.....

ลงชื่อ..... พยาน

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ลงชื่อ..... พยาน

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Underlying Disease

Total 99 (60.84%)

1. Asthma	6
2. Asthma c Thyroidism	1
3. Asthma c DM class B	1
4. Chronic hypertension	12
5. CA Thyroidism s/p Throidectomy	1
6. Chronic hypertension c Thyroidism	1
7. Chronic hypertension c Thalassemia	1
8. Chronic hypertension c Nephrotic Syndrome c Thalassemia	1
9. Chronic hypertension c Thyroidism	1
10. DM class B	17
11. DM class B c Thalassemia	1
12. Grave' disease	1
13. Guillance Bullet Syndrome	1
14. Heart Disease	17
15. Heart Disease c Thalassemia	1
16. Heart Disease c Thalassemia c Myoma Uteri	1
17. IgM Nephropathy	1
18. Myoma Uteri	2
19. Nephrotic Syndrome	3
20. Obstructive Uropathy c Chronic Pyelonephritis	1
21. Parkinson's disease	1
22. Rh negative	4
23. Rh negative c Thyroidism	1
24. SLE	5
25. Thyroidism	5
26. Thalassemia	12

Disease During Pregnancy

Total 50 (31.33%)

1. DM class A ₁	12
2. DM class A ₂	25
3. DM class A ₁ c Edema	1
4. DM class A ₂ c Edema	1
5. DM class A ₂ c Gestational hypertension	1
6. DM class A ₂ c Gestational Edema c Habitual Abortion	1
7. Gestational hypertension	4
8. Habitual Abortion	1
9. Twins	4

Underlying Disease and Disease During Pregnancy

Total 13 (10.83%)

1. DM class A ₁ c Heart Disease	2
2. DM class A ₁ c Thalassemia	1
3. DM class A ₁ c Nephrotic Syndrome c Gestational hypertension	1
4. DM class A ₂ c Chronic hypertension	1
5. DM class A ₂ c Heart Disease	1
6. DM class A ₂ c CA Breast	1
7. DM class A ₂ c Rh-negative	1
5. Gestational hypertension c Nephrotic Syndrome	1
6. Myoma Uteri c Placenta previa	1
7. Thalassemia c Placenta previa	1
8. Thalassemia c Pre-eclampsia	1
9. Thalassemia c Twins	1

แบบสอบถามข้อมูลพื้นฐาน

คำชี้แจง ให้เติมเครื่องหมาย ✓ ลงใน O หน้าข้อความที่ตรงกับข้อมูลของท่านมากที่สุด หรือเติมข้อมูลของท่านลงช่องว่างที่กำหนดให้

1. ปัจจุบันท่านอายุ ปี
2. ท่านจบการศึกษาสูงสุดชั้น

<input type="radio"/> 1) ไม่ได้เรียน	<input type="radio"/> 2) ประถมศึกษา
<input type="radio"/> 3) มัธยมศึกษา	<input type="radio"/> 4) อาชีวศึกษา
<input type="radio"/> 5) อุดมศึกษา	<input type="radio"/> 6) กำลังศึกษาในชั้นระดับ ...
<input type="radio"/> 7) ขณะนี้อยู่ระหว่างการพักการศึกษาชั่วคราวในชั้น	
3. อาชีพ

<input type="radio"/> 1) แม่บ้าน	<input type="radio"/> 2) นักเรียน นักศึกษา
<input type="radio"/> 3) เกษตรกร	<input type="radio"/> 4) ข้าราชการ
<input type="radio"/> 5) พนักงานบริษัท	<input type="radio"/> 6) รับจ้าง
<input type="radio"/> 7) อื่นๆ (ระบุ)	

ความสามารถในการประกอบอาชีพ

<input type="radio"/> 1) ปฏิบัติงานได้ตามปกติ	
<input type="radio"/> 2) ปฏิบัติงานได้ลดลงบางส่วน	
<input type="radio"/> 3) ไม่สามารถปฏิบัติงานได้	
4. รายได้เฉลี่ยของครอบครัวท่าน

<input type="radio"/> 1) พอใช้	<input type="radio"/> 2) พอใช้ มีเหลือเก็บ
<input type="radio"/> 3) พอใช้ ไม่มีเหลือเก็บ	<input type="radio"/> 4) มีหนี้สิน
5. สถานภาพสมรส

<input type="radio"/> 1) อยู่กับสามี	<input type="radio"/> 2) แยกกันอยู่กับสามี
<input type="radio"/> 3) หย่าร้าง	<input type="radio"/> 4) ม่าย
6. ชนิดของครอบครัวของท่าน

<input type="radio"/> 1) ครอบครัวเดี่ยว	<input type="radio"/> 2) ครอบครัวขยาย
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7. การตั้งครรภ์นี้เป็นครั้งที่
- 1) เคยมีประวัติตั้งครรภ์ที่มีความเสี่ยง
 - 2) ไม่เคยมีประวัติตั้งครรภ์ที่มีความเสี่ยง
8. การตั้งครรภ์ครั้งนี้ท่านได้รับการวินิจฉัยโรคว่าเป็น.....
9. ปัจจุบันท่านมีบุตร คน
10. ท่านได้วางแผนสำหรับการตั้งครรภ์ครั้งนี้หรือไม่
- 1) วางแผน
 - 2) ไม่ได้วางแผน
11. ท่าน หรือ บุคคลในครอบครัวของท่านมีปัญหาสุขภาพจิตหรือไม่
- 1) ไม่มี
 - 2) มี ได้แก่ (ระบุความสัมพันธ์กับท่าน)..... จากโรค
12. ในช่วง 2 สัปดาห์ ที่ผ่านมาท่านมีปัญหาอื่น ๆ นอกเหนือจากปัญหาทางสุขภาพหรือไม่
- 1) ไม่มี
 - 2) มีจากปัญหา (ระบุ).....
13. ท่านเคยได้รับความรู้เกี่ยวกับการปฏิบัติตัวขณะตั้งครรภ์หรือไม่
- 1) ไม่เคย
 - 2) เคยได้รับจาก (ตอบได้มากกว่า 1 ข้อ)
 - 1) สื่อต่างๆเช่นวิทยุ โทรทัศน์ หนังสือ วารสาร
 - 2) บุคลากรทางการแพทย์ เช่น แพทย์ พยาบาล
 - 3) บุคคลใกล้ชิด เช่น มารดา สามี เพื่อนร่วมงาน
 - 4) อื่นๆ (ระบุ).....

แบบวัดความรู้สึกมีคุณค่าในตนเอง

คำชี้แจง แบบสอบถามนี้มีวัตถุประสงค์ที่จะถามความรู้สึกความมีคุณค่าในตนเองของท่าน ในขณะที่ตั้งครรภ์ โปรดอ่านข้อความแต่ละข้อและวงรอบตัวเลขที่ตรงกับความรู้สึกของท่านมากที่สุด คำตอบที่ได้จะไม่มีผิดหรือถูก

ข้อความ	เห็นด้วย อย่างยิ่ง	เห็นด้วย	ไม่เห็นด้วย	ไม่เห็นด้วย อย่างยิ่ง
1.ฉันรู้สึกว่ามีคุณค่าเท่าเทียมกับคนอื่น ๆ	4	3	2	1
2.ฉันรู้สึกว่าตัวฉันยังมีสิ่งที่ดีอยู่อีกหลายประการ	4	3	2	1
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4.ฉันมีความสามารถที่จะทำสิ่งต่างๆได้ดีเท่าเทียมกับคนอื่น ๆ ส่วนใหญ่	4	3	2	1
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6.ฉันมีเจตคติที่ดีต่อตนเอง	4	3	2	1
7.โดยส่วนรวมแล้ว ฉันมีความพึงพอใจในตนเอง	4	3	2	1
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10.หลายครั้งที่ฉันรู้สึกว่าไม่มีอะไรดีเลยในตนเอง	4	3	2	1

โดยรวมแล้วท่านคิดว่าเมื่อมีบุตรแล้ว ความรู้สึกมีคุณค่าในตนเองของท่านแตกต่างจากตอนไม่มีบุตรอย่างไร

ก. เพิ่มขึ้น

ข. ลดลง

ค. เท่าเดิม

แบบสอบถามแรงสนับสนุนทางสังคม

คำชี้แจง ตั้งแต่ท่านตั้งครรถ์ ท่านได้รับการสนับสนุน ช่วยเหลือทางสังคมในเรื่องต่อไปนี้หรือไม่ โปรดอ่านข้อความต่อไปนี้ แล้ววงรอบตัวเลขที่ท่านเห็นว่า เป็นจริงกับท่านมากที่สุด คำตอบไม่มีผิดหรือถูก

- เป็นจริงมากที่สุด หมายถึง ข้อความนั้นตรงกับสภาพความเป็นจริงของท่านทั้งหมด
- เป็นจริงมาก หมายถึง ข้อความนั้นตรงกับสภาพความเป็นจริงของท่านมาก
- เป็นจริงเพียงครึ่ง หมายถึง ข้อความนั้นตรงกับสภาพความเป็นจริงของท่านเพียงครึ่งหนึ่ง
- เป็นจริงน้อย หมายถึง ข้อความนั้นตรงกับสภาพความเป็นจริงของท่านน้อย
- ไม่เป็นจริงเลย หมายถึง ข้อความนั้นไม่ตรงกับสภาพความเป็นจริงของท่านเลย

ลำดับที่	ข้อความ	เป็นจริงมากที่สุด	เป็นจริงมาก	เป็นจริงเพียงครึ่งหนึ่ง	เป็นจริงน้อย	ไม่เป็นจริงเลย
1	ฉันมีคนใกล้ชิดที่ทำให้ฉันรู้สึกอบอุ่นปลอดภัย	5	4	3	2	1
2	ฉันรู้สึกว่า ตนเองมีความสำคัญกับคนรอบข้าง	5	4	3	2	1
3	คนส่วนมากบอกว่า ฉันทำงานหลายอย่างได้ดี	5	4	3	2	1
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19	ถ้าฉันสงสัยอะไร และต้องการคำแนะนำ จะมีคนช่วยฉันได้	5	4	3	2	1
20	ฉันรู้สึกว่าฉันเป็นที่ต้องการของคนอื่น	5	4	3	2	1
21	ถ้าฉันเจ็บป่วยหรือไม่สบายใจจะมีคนมากคอยดูแล และ/หรือให้คำแนะนำ	5	4	3	2	1

แบบวัดภาวะซึมเศร้า CES-D

คำชี้แจง ข้อความในแบบวัดนี้ เป็นความรู้สึกที่อาจจะเกิดขึ้นได้กับคุณ โปรดอ่านแต่ละข้อ ให้ละเอียดและทำเครื่องหมาย ✓ ในช่องที่ตรงกับความรู้สึกของคุณมากที่สุดในระยะ 1 สัปดาห์ที่ผ่านมา ไม่มีคำตอบข้อใดถูกหรือผิดเป็นเพียงความรู้สึกของคุณเท่านั้น

ไม่เลย หมายถึง ความรู้สึกนั้นเกิดน้อยกว่า 1 วันในสัปดาห์ที่ผ่านมา
 นานๆครั้ง หมายถึง ความรู้สึกนั้นเกิด 1 – 2 วันในสัปดาห์ที่ผ่านมา
 ก่อนข้างบ่อยครั้ง หมายถึง ความรู้สึกนั้นเกิด 3 – 4 วันในสัปดาห์ที่ผ่านมา
 บ่อยครั้ง หมายถึง ความรู้สึกนั้นเกิด 5 – 7 วันในสัปดาห์ที่ผ่านมา

ความรู้สึก	ไม่เลย	นานๆครั้ง	ก่อนข้างบ่อย	บ่อยครั้ง
1.ฉันรู้สึกหงุดหงิดง่าย				
2.ฉันรู้สึกเบื่ออาหาร				
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9.ฉันคิดว่าชีวิตฉันมีแต่ความล้มเหลว				
10.ฉันรู้สึกหวาดกลัว				
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18.ฉันรู้สึกไม่มีความสุข				
19.ฉันรู้สึกว่าผู้คนรอบข้างไม่ชอบฉัน				
20.ฉันรู้สึกท้อถอยในชีวิต				

BIOGRAPHY



NAME	Miss Sirintip Suwannurak
DATE OF BIRTH	14 January 1975
PLACE OF BIRTH	Bangkok, Thailand
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POSITION & OFFICE	1996–2004 Siriraj Hospital Position Obstetric nurse Registration nurse 6 Tel. 02-419-7000 Ext. 4673-4