

# Happiness and Related Factors in Pregnant Women

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**Background and Objectives:** Pregnancy is a crisis in the human life cycle as an important turning point in aspects of anatomical, physiological and psychosocial changes. An unhappy pregnant woman could influence the fetal growth and development and sense of maternal competence as well as bonding with the fetus which profoundly affect the nurture of the infant after delivery. The authors' purposes were to study happiness and related factors in pregnant women having antenatal care at King Chulalongkorn Memorial Hospital.

**Material and Method:** Four hundred and thirty-eight pregnant women from the antenatal clinic at King Chulalongkorn Memorial Hospital were randomly selected to complete a set of questionnaires that consisted of personal information, pregnant information, The Oxford Happiness Questionnaire (OHQ), The Maudsley Personality Inventory (MPI) and The Marital Satisfaction Scale (MSS). Prevalence of happiness level was classified by descriptive analysis. Unpaired t-test, ANOVA and Pearson's Product Moment Correlation analyzed related factors to happiness in pregnant woman. Also Stepwise Multiple Regression Analysis was used to define predictive factors for happiness in pregnant women.

**Results:** The sample had a high level of happiness of 57.3%. Significant related factors to happiness were age between 31-35 years, high education level, high individual and family income, having saving deposition, no drug abuse, improved marital relationship, no conflict with relatives, extrovert and stable personality types and no concerns about post-partum body image. Four predictive factors for happiness in pregnant women were extrovert personality, stable personality, high family income and improved marital relationship.

**Conclusion:** Level of happiness in pregnant women could be predicted by type of personality, family income and marital relationship.

**Keywords:** Happiness, Pregnant women

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The transition to parenting for women and men is usually a normal biological task, but women frequently spend a great deal of time involved in caregiving and hence experience many biological and psychosocial changes during this period of time. A woman's experience of pregnancy and childbirth will most likely affect her role as a mother, her perceptions of the child and herself, and her relationship with her partner<sup>(1)</sup>. The correlation among these factors actually affect quality of pregnancy, intervention of delivery (increased rate of Cesarean Section)<sup>(2)</sup> and bonding with the fetus until infancy. In a healthy psychological response, pregnant women would adjust to the multiple bodily and psychological changes and develop

effective coping strategies and attitudes<sup>(3)</sup>. In contrast, unhappy pregnant women may have negative experiences such as irritable mood, anxiety which correlated to fetal adverse effect<sup>(4)</sup>, for example, fetal bradycardia<sup>(5)</sup>, low birth weight<sup>(6)</sup>, poor fetal growth and development<sup>(4,7)</sup>, increased rate of Cesarean section<sup>(2)</sup> and neurobehavioral problems after birth<sup>(4,8)</sup>. Certainly, unhappy pregnant women tend to be unhappy mothers and, consequently, lead to inadequacy in the way of child rearing. Therefore, the authors were interested in studying the prevalence and related factors of happiness in pregnant women having antenatal care at King Chulalongkorn Memorial Hospital.

## Material and Method

Following Institutional Ethics Committee approval and written informed patient consent, the

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sample of 438 pregnant women from the antenatal clinic at King Chulalongkorn Memorial Hospital were randomly selected by simple random sampling. After clarification and patient agreement, data was collected by a set of questionnaires that consisted of 5 parts. The first part included questions about demographic background and their relationship to others. The second part was to assess pregnant factors. The third part :“The Oxford Happiness Questionnaire” (OHQ ) was used to determine level of happiness. This 29 item-scale composed 3 domains: life satisfaction, positive affects and negative affects. It had content validity proven by 5 experts valued between 0.83-1.00 and reliability (Cronbach’s alpha) 0.91<sup>(9)</sup>. The fourth part defined their personality type by The Maudsley Personality Inventory (MPI), 48 item-scale, which was to divided into 2 major scales, extrovert/introvert scale (Cronbach’s alpha 0.91-0.97)<sup>(10,11)</sup> and neurotic/stable scale (Cronbach’s alpha 0.90-0.98)<sup>(10,11)</sup>. Finally, the last part of the questionnaire was The Marital Satisfaction Scale (MSS) which included 46 items to identify if they were satisfied with their marriage life. Its validity and reliability were 0.78 and 0.95 consecutively.

#### Data Analyses

Percentage, mean and SD descriptively analyzed the level of happiness in pregnant women. Factors correlated to level of happiness were identified by unpaired t-test, ANOVA ( with Scheffe’s method) and Pearson’s product moment correlation coefficient. Significant factors according to literature review and statistic analyses were added to perform stepwise Multiple Regression Analysis in order to identify predictive factors for happiness in pregnant women. A p-value of less than 0.05 was considered statistical significant.

#### Results

The sample of 438 pregnant women had a mean age of 27.89+/-5.4. Most has graduated from high school (37%) and worked as employees (34.2%). 44.3% earned an individual income between 5,000-10,000 baht per month and 61.8% had a family income less than 15,000 baht per month. Only 20.1% had a saving deposit. 97.3% of the pregnant women lived together with their spouse. About 13.5% had a previous marital life. Duration of marriage was less than 4 years in about 44.5%. Living as a nuclear family was 66.4%, another 33.6% was an extended family.

Regarding pregnant data, most of the samples were primigravida 54.2% and being in the third trimester

stage 57.5%. Among 200 pregnant women having previous labor, 77.5% had no previous pregnant complication, 73.5% had prior normal vaginal delivery and 85.5% achieved full term labor. Even 84.3% of the total samples had never had an underlying physical illness, most of them (79.2%) had some symptoms or problems during pregnancy, for example, frequent urination, morning sickness, anemia, edema and vaginal bleeding. Almost 97% had not used a substance. 35.2% revealed their expectation for fetal gender while 32% were concerned about their changes of bodily images. Following anxiety during pregnancy stage, the authors found 91.8% were worried about fetal health and development and 97.5% were worried about the process and safety of labor.

Information concerning relationships showed that quality of marital relationship during pregnancy was equal to having a better relationship and being as usual, (48% both). Most of the samples (94.7%) had no relationship problems with their relatives.

Table 1 demonstrates the level of happiness in pregnant women, the authors found that most had a high level of happiness, followed by average level of happiness. Interestingly, no unhappy pregnant woman was seen in this sample.

Many possible factors assuming related to happiness in pregnant women are illustrated in Table 2. The statistically significant factors at p-value <0.05 analyzing by unpaired t-test and ANOVA included higher age ( highest happiness scores in the group of 31-35 years old), high educational level, high personal income, high family income, having a saving deposit, no concern about bodily image , good relationship with spouse and relatives and personality type extrovert and stable. While many factors did not show their correlation such as duration of marriage, family type, marital status ,having a previous marriage, rank of pregnancy, gestational age, complaint of pregnancy, underlying physical disease, drug abuse, expectation to fetal gender, anxiety regarding the fetus and delivery and marital satisfaction.

Table 3 revealed data of predictive factors after analyzing by stepwise multiple regression. In this stage, some related factors of happiness from the univariate analysis (in Table 2) disappeared. The remaining 4 important predictive factors were stable personality, marital relationship , extrovert personality and high family income.

#### Discussion

Pregnant women undergo marked psycho-



**Table 1.** Level of Happiness in Pregnant Women

Level of Happiness	n	percentage
Low (<77 scores)	0	0
Average (77-125 scores)	187	42.7
High (126-174 scores)	251	57.3
Mean 127.76 scores, SD 14.7		

**Table 2.** Related factors to happiness in Pregnant women

	F/t*	p-value
Personal data		
Age	4.30	0.002
Educational level	6.30	0.000
Personal income	5.80	0.000
Family income	5.80	0.000
Saving	10.20	0.000
Duration of marriage	0.30	NS
Family type	1.36	NS
Marital status	1.60	NS
Having previous marriage	1.00	NS
Pregnant data		
Rank of pregnant	1.49	NS
Gestational age	0.38	NS
Complication of pregnancy	6.38	NS
Physical disease	1.62	NS
Substance use	3.63	NS
Expectation to fetal gender	0.47	NS
Concerning to body image	2.17	0.030
Anxiety regarding fetus	1.30	NS
Anxiety regarding delivery	0.12	NS
Relationship		
Marital relationship	25.70	0.000
Marital satisfaction	0.16 <sup>r**</sup>	NS
Relationship with relatives	4.26	0.000
Personality		
Extrovert/Introvert	0.248 <sup>r**</sup>	0.000
Neurotic/Stable	-0.420 <sup>r**</sup>	0.000

\* F = One way ANOVA

t = Unpaired t -test

\*\*r = Pearson's Product Moment Correlation Coefficient

NS = Not significant ( p&gt;0.05)

logical changes. Pregnancy might be seen as a maturational event that allows consolidation of gender identity and provides an opportunity to nurture the next generation. Pregnant women may be more inclined to adjust their lifestyle behaviors to create a healthy environment for their fetus and newborn<sup>(12)</sup>. The psychological energy required to deal with the issue of identification or differentiation in conjunction with profound metabolic and hormonal changes may lead to emotional lability, introspection and anxiety<sup>(13)</sup>. Their attitudes toward pregnancy reflect deeply, similar to other circumstances of pregnancy such as relationship with the infant's father, the age of life stage, sense of competence, even planned or unplanned pregnancy<sup>(14)</sup>.

Generally, women often find pregnancy a mean of self-realization. Many women report that being pregnant is a creative act gratifying a fundamental need, which is compatible with the sample in the present study that found that they mainly had a high level of happiness during pregnancy. The rest of the samples reported a moderate level of happiness. Pregnant state reassures themselves about femininity and ability to function as women in the most basic sense. Although pregnancy and parenting can be satisfying and deeply rewarding, it is a big responsibility. There are several factors which influence happiness of pregnant women to the new coming infant. Similar to the finding in the present study, age of the pregnant women was reported as an essential factor for maturity. Teenage pregnancy is always one of high risk for fetal development as well as the method of child rearing later because they lack preparation. Moreover, adolescence is a group that tends to have unintended pregnancy, unemployed and might be abused by their spouse<sup>(15)</sup>. With a difficult social situation that provides little or no support leads to severe concerns about their adequacy during gestation and delivery and as a caretaker<sup>(13)</sup>. The authors found that the pregnant women aged 30-35 years old had the highest level of happiness. This event could be derived from increasing sense of maternal competency, more stable emotion and personality and financial security. From the univariate analyses, the authors revealed that all types of income (personal income,

**Table 3.** Predictive factors for level of happiness in pregnant women ( Stepwise multiple regression analysis)

	R	R <sup>2</sup>	B	T	p-value
Personality neurotic / stable	0.420	0.176	-0.449	-7.11	0.000
Impaired marital relationship	0.496	0.246	-26.90	-6.65	0.000
Personality extrovert / introvert	0.525	0.275	0.40	3.96	0.000
Family income	0.538	0.289	1.08	2.86	0.004



family income and savings) played a significant role in happiness that confirmed the meaning of financial security for this period. After multivariate analysis was performed, however, family income became the topmost influence among financial factors.

The relationship with the husband profoundly affected pregnant women. Under ideal conditions, the decision to become a parent and have a child should be agreed on by both partners<sup>(14)</sup>. They faced readjustment together in their new experience. Some couples had a feeling of unity and fulfilled familial perfection. A husband may compliment his wife on her ever-changing physical body as a means of reassuring both her and himself that the child and parenthood are welcome, that the dyadic relationship is intact, and that he is sharing in the process<sup>(13)</sup>. Data from the present study showed that marital relationship is essentially affected and predicted happiness in pregnant women

Another type of relationship that is very important for Thai culture is the relationship with relatives (included parents, siblings). A good relationship with relatives reflected a good support system as well as the pregnancy being accepted. Following the psychological stage of pregnancy, pregnant women usually desire increased contact with their parents, especially mothers<sup>(13)</sup>. Support from relatives who were experienced assisted them to reduce anxiety and had better adjusted behaviors to prepare for childbirth<sup>(15)</sup>. Similar to the authors finding that the relationship with relatives is one of the factors related to happiness in pregnant women.

Individual characters or personalities could be a major influence to human happiness for life long, not only during the pregnant stage of life. The authors found that sample who had a more stable and more extrovert (high verbal and feeling expression) personality would be happier. Pregnant stage actually creates emotional lability due to hormonal and other physiological changes as well as big transitional psychological changes. This expression would be more magnificent in people who were sensitive to anxiety or called "neurotic trait" (contrary to stable trait). Moreover, pregnant women that were supposed to have many concerns could not communicate or ventilate appropriately to others, like those with an introvert personality. The pressure increasing would result in a low level of happiness. Many studies<sup>(16-18)</sup> demonstrated outcome agreement regarding positive correlation between happiness level and extrovert personality as well as negative correlation between happiness level and neurotic personality. Both stable and extrovert personality

types were determined as related factors, and also, predictive factors for happiness in pregnant women in the present analyses.

In contrast to the literatures that the present finding did not show a relation between marital satisfaction and happiness in pregnancy but marital relationship did. The major explanation may be due to the questionnaire of marital satisfaction that illustrated a general image of marital satisfaction by coverage of the total duration of marriage. While questions about marital relationship exactly specified the current period during pregnancy, it's more likely to provide better correlation. In addition, some important factors that even the authors expected their significance, such as underlying physical disease, substance use, anxiety regarding fetus and delivery, resulted in no correlation shown. From the retrospective review, the authors have very few data of women who had underlying disease, drug abuse and no anxiety that we could not examine the significantly different happiness level in pregnant women.

#### Conclusion

Generally, pregnant women had a rather high level of happiness. There were many factors which correlated to their happiness. Four factors that could predict happiness in pregnant women were personality type stable and extrovert, good marital relationship and high family income.

#### References

1. Csoboth CT. Women's health. In : Cohen LM, Mcchague DE, Collins FL, eds. The Health Psychology Handbook. London: Sage Publication, 2003:469-84.
2. Dimatteo MR, Morton S, Lepper HS. Cesarean childbirth and psychosocial outcome: A meta-analysis. *Health Psychology* 1996; 15: 230-41.
3. Parry BI, Rausch JL. Psychiatry and reproductive medicine. In : Kaplan HI, Sadock BJ, eds. The comprehensive textbook of psychiatry. 6<sup>th</sup> edition. Baltimore: Williams & Wilkins, 1995: 1693-706.
4. Moses-Kolko EI, Roth EK. Antepartum and postpartum depression : healthy mom, healthy baby. *J Am Med Women Assoc* 2004; 59: 181-91.
5. Kroger SW. Psychosomatic obstetrics gynecology and endocrinology. Illinois: Charles C Thomas, 1962.
6. Sable MR, Wilkinson DS. Impact of perceived stress, major life events and pregnancy attitudes on low birth weight. *Fam Plann Perspect* 2000; 32:



- 288-94.
7. Austin MP. Psychosocial assessment and management of depression and anxiety in pregnancy. Key aspects of antenatal care for general practice. *Aust Fam Physician* 2003; 32: 119-26.
  8. Misri S, Oberlander Tf, Fairbrother N. Relation between prenatal maternal mood and anxiety and neonatal health. *Can J Psychiatry* 2004; 49: 684-9.
  9. Hills P, Argyle M. The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well being. *Pers Individ Dif* 2002; 33: 1073-82.
  10. Emmom RA. Personal strivings: an approach to personality and subjective well-being. *J Pers Soc Psychol* 1986 ; 51: 1058-68.
  11. Hills P, Argyle M. Emotional stability as a major dimension of happiness. *Pers Individ Dif* 2001; 31: 1357-64.
  12. Rising S. Centering Pregnancy: An interdisciplinary model of empowerment. *J Nurse-Midwifery* 1998; 43; 46-54.
  13. Hostetter H, Andolsek KM. Psychosocial issue in pregnancy. In : Kathryn MA, ed. *Obstetric care: standard of prenatal, intrapartum and postpartum management*. Philadelphia: Lea & Febiger, 1990: 53740.
  14. Sadock BJ, Sadock VA. Psychiatry and Reproductive Medicine. In: Sadock BJ, Sadock VA, eds. *Synopsis of Psychiatry*. 9<sup>th</sup> edition. Philadelphia: Lippicott Williams & Wilkins, 2003: 868-78.
  15. Carrie SK. Centering Pregnancy : A model for pregnant adolescents. *J Midwifery Women's Health* 2003; 48: 220-5.
  16. Brebner J, Donaldson J, Kirby N. Relationship between happiness and personality. *Pers Individ Dif* 1995; 19: 251-8.
  17. Cheng H, Furnham A. Personality, self-esteem and demographic predictions of happiness and depression. *Pers Individ Dif* 2002; 33: 1050-6.
  18. DeNeve KM, Cooper H. The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychol Bull* 1998; 124: 197-229.



## ภาวะความสุขและปัจจัยที่เกี่ยวข้องกับความสุขในหญิงตั้งครรภ์

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**บทนำ:** การตั้งครรภ์ถือเป็นช่วงหัวเลี้ยวหัวต่อที่สำคัญในชีวิตมนุษย์เพราะเกิดการเปลี่ยนแปลงอย่างมากต่อร่างกายและจิตใจ หญิงตั้งครรภ์ที่มีปัญหาสุขภาพจิต จะส่งผลทั้งการเจริญเติบโตและการพัฒนาการของทารกในครรภ์ รวมถึงผลด้านจิตใจในแง่ความเชื่อมั่นในการเป็นมารดาและความรักความผูกพันต่อทารกซึ่งส่งผลกระทบต่อการเลี้ยงดูหลังคลอด ดังนั้นผู้วิจัยจึงต้องการศึกษาภาวะความสุขและปัจจัยที่เกี่ยวข้องกับความสุขในหญิงตั้งครรภ์ซึ่งมาฝากครรภ์ที่โรงพยาบาลจุฬาลงกรณ์

**วัตถุประสงค์และวิธีการ:** ศึกษาในหญิงตั้งครรภ์จำนวน 438 คน ที่มาฝากครรภ์ที่โรงพยาบาลจุฬาลงกรณ์ โดยการคัดเลือกแบบสุ่มอย่างง่าย เครื่องมือที่ใช้ในการวิจัยมี 5 ส่วน ประกอบด้วย 1. แบบสอบถามข้อมูลส่วนบุคคล 2. แบบสอบถามข้อมูลตั้งครรภ์ 3. แบบวัดภาวะความสุข The Oxford Happiness Questionnaire (OHQ) 4. แบบทดสอบบุคลิกภาพ The Maudsley Personality Inventory (MPI) 5. แบบวัดความพึงพอใจในชีวิตสมรส Marital Satisfaction Scale (MSS) สถิติที่ใช้คือ ร้อยละ, ค่าเฉลี่ย, ส่วนเบี่ยงเบนมาตรฐาน, unpaired t-test, ANOVA with Scheffé's method, Pearson's Product Moment Correlation Coefficient และ Stepwise Multiple Regression Analysis กำหนดนัยสำคัญที่ระดับน้อยกว่า 0.05

**ผลการศึกษา:** ภาวะความสุขของหญิงตั้งครรภ์ ที่มาฝากครรภ์ ณ โรงพยาบาลจุฬาลงกรณ์ ร้อยละ 57.3 มีภาวะความสุขอยู่ในระดับสูง เมื่อเปรียบเทียบค่าเฉลี่ยภาวะความสุขกับปัจจัยที่ศึกษา พบว่า ปัจจัยที่มีความสัมพันธ์กับภาวะความสุขในหญิงตั้งครรภ์ คือ อายุในช่วง 31-35 ปี, การศึกษาระดับปริญญาตรีขึ้นไป, รายได้สัมพันธ์เฉลี่ยส่วนบุคคลและรายได้เฉลี่ยของครอบครัวค่อนข้างสูง, การมีเงินออม, การไม่ใช้ยาหรือสารเสพติด, การมีสัมพันธภาพระหว่างคู่สมรสที่ดีขึ้น, การไม่มีปัญหาความสัมพันธ์ระหว่างเครือญาติ, ลักษณะบุคลิกภาพแบบเปิดเผยและแบบมีความมั่นคงทางอารมณ์ และการไม่มีความวิตกกังวลเกี่ยวกับรูปร่างหลังคลอด ปัจจัยที่ทำนายภาวะความสุขของหญิงตั้งครรภ์มีทั้งหมด 4 ตัวแปร คือ การมีลักษณะบุคลิกภาพแบบแสดงตัวและแบบมีความมั่นคงทางอารมณ์, การมีรายได้ของครอบครัวสูง และการมีปัญหาสัมพันธภาพระหว่างคู่สมรสน้อยลง

**สรุป:** ปัจจัยที่ทำนายภาวะความสุขของหญิงตั้งครรภ์ คือ การมีลักษณะบุคลิกภาพแบบเปิดเผยและแบบมีความมั่นคงทางอารมณ์, การมีรายได้ของครอบครัวสูง และการมีสัมพันธภาพที่ดีระหว่างคู่สมรส

