

ปัจจัยที่มีอิทธิพลต่อความตั้งใจในการผ่าตัดคลอดทางหน้าท้องแบบวางแผนของหญิงตั้งครรภ์
ในจังหวัดหัวหงส์ ประเทศไทย

**Factors influencing intention of elective cesarean
section among pregnant women in Quang Ngai province, Vietnam**

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาระดับความตั้งใจในการผ่าตัดคลอดทางหน้าท้องแบบวางแผน และปัจจัยที่มีอิทธิพลต่อระดับความตั้งใจในการผ่าตัดคลอดทางหน้าท้องแบบวางแผนของหญิงตั้งครรภ์ เวียดนาม กลุ่มตัวอย่างเป็นหญิงตั้งครรภ์ จำนวน 107 คน ที่มาฝากครรภ์ ณ คลินิกรับฝากครรภ์ โรงพยาบาลหัวหงส์ ประเทศไทย เวียดนาม เลือกกลุ่มตัวอย่างโดยการสุ่มอย่างง่าย เก็บข้อมูลในช่วงเดือนกุมภาพันธ์-มีนาคม 2558 โดย ให้กับกลุ่มตัวอย่างตอบแบบสอบถามด้วยตนเอง วิเคราะห์ข้อมูลด้วยสถิติพารณนา สัมประสิทธิ์สหสมพันธ์เพียร์สัน และการวิเคราะห์การทดสอบพหุคุณ ผลการวิจัยพบว่าหญิงตั้งครรภ์มีความตั้งใจในการผ่าตัดคลอดทางหน้าท้อง แบบวางแผน ในระดับปานกลาง ทัศนคติต่อการผ่าตัดคลอดทางหน้าท้อง บรรทัดฐานของกลุ่มอ้างอิงเกี่ยวกับการ ผ่าตัดคลอดทางหน้าท้องและความกลัวการคลอดมีความสัมพันธ์กับระดับความตั้งใจในการผ่าตัดคลอดทางหน้า ท้องอย่างมีนัยสำคัญทางสถิติ ($r = .825, p < .001; r = .843, p < .001$; and $r = .522, p < .001$, ตามลำดับ) โดย ทั้งสามปัจจัยร่วมกันทำนายความแปรปรวนของระดับความตั้งใจในการผ่าตัดคลอดทางหน้าท้องร้อยละ 79 ($F_{3,103} = 125.44, p < .001$) บรรทัดฐานของกลุ่มอ้างอิงเกี่ยวกับการผ่าตัดคลอดทางหน้าท้องมีอิทธิพลมาก ที่สุด ($\beta = .43, p < .001$) รองลงมาคือทัศนคติต่อการผ่าตัดคลอดทางหน้าท้อง ($\beta = .39, p < .001$) และความ กลัวการคลอดของหญิงตั้งครรภ์ ($\beta = .19, p < .001$) ผลการวิจัยเสนอแนะว่าพยาบาลผดุงครรภ์สามารถลดระดับ ความตั้งใจในการผ่าตัดคลอดทางหน้าท้องแบบวางแผนได้โดยการปรับทัศนคติและบรรทัดฐานของกลุ่มอ้างอิง ต่อการผ่าตัดคลอดทางหน้าท้อง รวมทั้งการพยาบาลเพื่อลดความกลัวการคลอดของหญิงตั้งครรภ์

คำสำคัญ: ความตั้งใจ การผ่าตัดคลอดทางหน้าท้องแบบวางแผน ทัศนคติ บรรทัดฐานของกลุ่มอ้างอิง ความกลัวการคลอด

Abstract

The aims of this study were to examine intention of elective cesarean section and to determine factors influencing intention of elective cesarean section among pregnant women. A simple random sampling technique was used to recruit 107 pregnant women to participate in this study. Data were collected from

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February to March, 2015 in Quang Ngai General Hospital, Vietnam. Participants were asked to complete self-report questionnaires. Descriptive statistics, Pearson's correlations and standard multiple regressions were computed for data analysis. This finding showed that participants had moderate level of intention of elective cesarean section. Attitude, subjective norms and fear of childbirth were significantly and positively associated with intention of elective cesarean section from high to moderate correlation ($r = .825, p < .001$; $r = .843, p < .001$; and $r = .522, p < .001$, respectively). Result of multiple regressions showed that all three independent variables explained approximately 79% of intention of elective cesarean section ($F_{3,103} = 125.44, p < .001$). Subjective norms toward elective cesarean section explained the most variance of intention of elective cesarean section ($\beta = .43, p < .001$), followed by attitude toward elective cesarean section ($\beta = .39, p < .001$), and fear of childbirth ($\beta = .19, p < .001$). These findings suggest that midwives should change attitude, subjective norms of pregnant women and their relatives preferring to cesarean section and reduce fear of childbirth among pregnant women.

keywords: intention, elective cesarean section, attitude, subjective norms, fear of childbirth.

Introduction

In recent years, the cesarean section (CS) rate has increased in different parts of the world, both in developed and in developing countries.¹ Vietnam has a similar trend with the world that rate of CS has increased 2.5 times compared with the average rate recommended by the World Health Organization in 1985.² Specifically, the statistic rate of cesarean section in Quang Ngai general hospital has increased each year from 2008 to 2012, it was estimated 20% – 35% rise in CS rate. Besides, incidence of elective CS worldwide has contributed to the overall increase in the CS rate.³ In Vietnam approximately 19 % pregnant women was elective CS.²

Cesarean section in developing countries is associated with significant increases in maternal morbidity⁴ and in infant morbidity⁵. Many studies have shown that the consequences of CS to mother included hemorrhaging, anesthetic complications,⁶ and infectious morbidity.⁷ Potential surgical complications and risks to future pregnancies

included abnormal placenta and uterine rupture,⁸ hysterectomy and anemia in pregnancy.⁹ The influenced to infant is increased risk of neonatal respiratory morbidity.⁹ Besides, few studies showed that the risks of severe maternal morbidity with planned cesarean section were higher than with planned vaginal delivery.^{6,10} In addition, increased CS rates may be an indicator for excess maternal mortality as an elective CS with no emergency presents was 2.84 times greater chance of maternal death than a vaginal birth.^{11,12} In a study of Betrán and colleagues¹¹ suggested that, when population CS rates rose beyond medically necessary levels, risks may be more than benefits.

Intention of elective cesarean section refers to women's preference and plan regarding to elective cesarean section.¹³ A study conducted in Asia shows that 3.7% pregnant women opt a planned cesarean section.¹⁴ Especially, In Thailand, the proportion of pregnant women who prefer and have an elective cesarean delivery was 1.5 – 3 times higher than that

from other countries, for instance in an Italian, a Scottish and a Swedish this proportion was 4%, 7%, and 8.2% respectively.¹⁵ Another study based on theory of planned behavior which was conducted in Taiwan showed that attitude and subjective norms were a significantly and strong predictor intention of elective cesarean section.¹³

There are three important factors influenced to intention of elective CS, including attitude, subjective norms and fear of childbirth. Some women explained their positive attitude to CS as safe and less pain than vaginal birth.^{2,16,17} Especially, women's preference for a cesarean section relate to family members and influenced by Chinese culture where the couple plans to choose auspicious time and date to give birth^{2,18,19}. Avoiding delivery pain and worrying about the influence of vaginal delivery on sex life are associated to elective cesarean section.^{15,20,21} Moreover, women feel and imagine that a vaginal birth may give more pain and more traumas than a cesarean section.^{16,22} Elective cesarean section is associated with fear of childbirth, consist of fears of labor pain^{2,14,15,23} and fear of morbidity for the baby and mother.^{24,25} Another evidence why women intend to be elective cesarean section is that the cost of CS in Viet Nam is not expensive. Actually, in Quang Ngai General Hospital, the cost for a cesarean section is about VND 800,000 in comparisons with about VND 500,000 of a vaginal birth (with a health insurance). These problems may lead to increase elective cesarean section among pregnant women. Therefore, in the future, it may contribute to a higher rate of complications in both mother and infant.²⁶

In 2011, complications of obstetric for mother and infant in Quang Ngai province was 30 cases higher than others province in Vietnam.²⁷ In 2012, basing on data from the Quang Ngai General Hospital, the statistic rate of cesarean section at this hospital in 2012 – the year of dragon was 35%, increased 1.5 times from previous year. The main reason is that people believed this year was very good and would bring good luck for babies who were born in this year. In addition, there are many studies about elective CS which were done worldwide. From the Vietnamese literature review, some big cities in Vietnam already did researches about elective CS, however, no studies about intention of elective CS have been carried out yet in Quang Ngai province. Therefore, the main purposes of this study are to examine intention of elective cesarean section and to determine factors influencing intention of elective CS among pregnant women in Quang Ngai province, Vietnam.

Research questions: (1) What is the level of intention of elective cesarean section among pregnant women in Quang Ngai hospital, Quang Ngai province, Vietnam?; (2) What is the relationship between attitude toward elective cesarean section, subjective norms toward elective cesarean section, fear of childbirth and intention of elective cesarean section in Quang Ngai hospital, Quang Ngai province, Vietnam?; and (3) Do attitude toward elective cesarean section, subjective norms toward elective cesarean section, and fear of childbirth predict intention of elective cesarean section among pregnant women in Quang Ngai hospital, Quang Ngai province, Vietnam?

Conceptual framework of the study

This study is based on Theory of Planned Behavior (TPB) and literature review. TPB was developed by Ajzen in 1988.²⁸ This model was developed from Theory Reasoned of Action (TRA) by Fishbein and Ajzen in 1975.²⁹ According to the TPB, the most important determinant of person's behavior is intention to behavior. The individual's intention to performing a behavior is combination of attitude toward performing the behavior, subjective norms and perceived behavioral control.³⁰ The attitude toward the behavior reflects the individual's positive or negative evaluations of performing a particular behavior. It is determined by the strength of these associations and by the beliefs that are salient at the time.³¹ Subjective norms are determined by beliefs about the extent to how important others want them to perform a behavior multiplied by one's

motivation to comply with those people's views.³² An individual will intend to perform a certain behavior when she perceives that it is important and others think she should. Important to others may be a person's, a spouse's, close friends' and a physician's.³¹ Perceived behavioral control refers to people's perception of the ease or difficulty of performing the behavior of interest.³¹

This study focuses only on relationship between intention of elective CS and attitude, subjective norms and fear of childbirth. Previous studies found that attitude is associated with elective cesarean section^{15,16, 33} and subjective norms are associated with elective cesarean section.^{15,20,21} Moreover, there are several studies have determined that there was strongly significant relationship between fear of childbirth and elective cesarean section.^{24, 34-36}

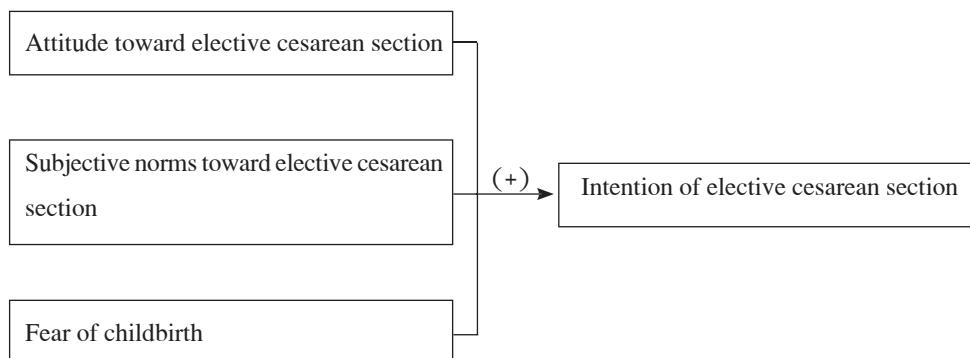


Figure 1 Conceptual framework for the study

Material and methods

Design and study setting

This study was a cross-sectional descriptive correlational design. The data collection conducted from February to March, 2015 at ANC clinic in Quang Ngai general hospital, Quang Ngai province, Viet Nam.

Population and sample

A simple random sampling technique was used to recruit the pregnant women whom met the following criteria (1) nulliparous pregnancy, (2) age (≥ 18 years), (3) singleton pregnancy, (4) not accompany diseases and/or no have indications by

doctor (5) ability to communicate, read, and write in Vietnamese, (6) willing to participate in the study.

Sample size was calculated by Tabachnick & Fidell³⁷ as: $N \geq 104 + m$, with N was estimated sample size and m was the number of independence variables (3 IVs). Therefore, the sample size was at least 107 subjects.

Instruments

There were 5 self-reported questionnaires used for data collection in this study.

Demographics characteristic

This instrument included the questions about personal background of the participants consist 8 items including age, ethnicity, marital status, living area, education level, occupation, family structure, and family income.

Intention of elective cesarean section

Intention of elective cesarean section refers to pregnant women's cognitive preference and readiness to plan regarding to elective cesarean section. It was measured by using 2 items of Childbirth Delivery Options Questionnaire (CDOQ) which was developed by Tai.¹³ The questionnaire was a 7 point-Likert scale with 1 (strongly disagree) to 7 (strongly agree). The possible range of score was from 2 to 14. According to Federick³⁸ described to divide score as possible max score – possible min score)/3. Scores were categorized into three groups as low level (2–6 scores), moderate level (7–10 scores), and high level (11–14 scores).

Attitude toward elective cesarean section

Attitude toward elective cesarean section refers to pregnant women's emotional appraisal of preferring cesarean section including baby's safety, herself and conveniences of elective cesarean section.

It was measured by using 6 items of Childbirth Delivery Options Questionnaire (CDOQ) which was developed by Tai.¹³ The questionnaire was a 7 point-Likert scale with 1 (strongly disagree) to 7 (strongly agree). Total score was calculated by sum of all items score. It ranged from 6 to 42, with higher score represented having positive attitude toward elective cesarean section.

Subjective norms toward elective cesarean section

Subjective norms toward elective cesarean section refer to the pregnant women's beliefs regarding what significant others feel about the elective cesarean section. It includes the influence of cultural, husband, mother and mother in law on the individual's intention to perform elective cesarean section. It was measured by using 14 items from Childbirth Delivery Options Questionnaire (CDOQ) which was developed by Tai.¹³ The questionnaire was a 7 point-Likert scale with 1 (strongly disagree) to 7 (strongly agree). The range of score was from 14 to 98 with higher score presented having positive subjective norms toward elective cesarean section.

Fear of childbirth

Fear of childbirth refers to feelings and thoughts of pregnant women about facing childbirth including labor pain, giving birth and traumas. It was measured by using a 33 items which was developed by Wijma, Wijma, & Zar³⁹ – Wijma Delivery Expectancy/ Experience Questionnaire (W-DEQ) version A – It was self-assessment questionnaire with a five-point graphic rating scale. The response ranged from 0 “extremely” to 5 “not at all”. Total score was calculated by sum of all items score. It ranged from 0 to 165 scores that women with a sum score of 85

have severe fear of childbirth, and women above a sum score of 100 have clinical fear of childbirth³⁹

Content validity

All questionnaires were developed in English. They were translated into Vietnamese by the back translation process to ensure content validity and culture.⁴⁰ Translation was performed by three bilingual translators who were fluent in both English and Vietnamese language. The translation procedures followed three steps:

1. The original questionnaires in English version were translated into the target language Vietnamese by a bilingual native translator that used simple and relevant with Vietnamese culture and maintain the meaning of the original version in English.

2. Then, another translator who was not only Vietnamese native speaker but also expert in English language translated the Vietnamese versions back into English.

3. Lastly, both the original English version and the backward translated version were compared by another translator who was fluent in English, about linguistic congruence that achieved the equivalent meaningfulness.

Test reliability

In this study, the Vietnamese versions of the questionnaires were tested for internal consistency with 30 pregnant women who had similar characteristics to the sample of this study in Quang Ngai General Hospital. Cronbach's alpha coefficients of intention of elective cesarean section questionnaire, attitude toward elective cesarean section questionnaire, subjective norms toward elective cesarean section questionnaire and fear of childbirth questionnaire were .86, .83, .96 and .86 respectively.

Data collection procedures

After receiving the permission to collect the data from the Director of Quang Ngai general hospital, researcher was present by herself at ANC clinic from 7 am to 5 pm every day from Monday to Friday. Researcher screened and identified pregnant women in the third trimester whom met the inclusion criteria and selected the participants by using a simple random technique and randomly selected only 6 participants each day. Researcher stated purpose of the study to participants. The consent form and questionnaires were given to the pregnant women in the third trimester. Then, guided the participant to complete the questionnaires included information about personal background, obstetric history, intention of elective cesarean section, attitude elective cesarean section, subjective norms elective cesarean section and fear of childbirth. Questionnaires were self-completed by participants and which took about 30 – 35 minutes. After collecting data, the questionnaires were immediately checked for their completeness and accuracy. The questionnaires were stored and kept in secret, no one can access, except the researcher. At the end of data collection procedure, the researcher said thanks to participants for the cooperation.

Data analyses

The SPSS version 17 was used to analyze data for this study. Descriptive statistics including frequency, percentage were used to describe demographics characteristics and study variables. Pearson correlation was used to examine correlations between factors and intention of elective cesarean section. Standard multiple regressions was performed to determine whether the factors can predict on intention

of elective cesarean section. The alpha level was set at .05.

Results

Demographic characteristics of the study sample

There were 107 pregnant women who participated in this study. Age of respondents in year ranged from 20 to 42, mean of age was 30.03 ($S.D = 5.43$). Most of the respondents were of Kinh ethnicity (99.1%). 57.9% live in rural area and all of women (100%) were married. In addition most of women had a higher high school education (77.6%). Approximately 24% of respondents were

farmers and government employees. Almost of respondents (93.6%) had family income/month over VND 2,000,000 (> USD 100).

Description of study variables

The range of score of intention of elective cesarean section was from 2 to 14. The mean score of intention of elective cesarean section was 8.42 which reflected a moderate level ($S.D = 3.99$). Attitude toward elective cesarean section has mean score at 25.92 ($S.D = 9.73$, range 6–42). The mean score of subjective norms toward elective cesarean section were 58.86 ($S.D = 29.13$, range = 14–98). In addition, the mean score of fear of childbirth was 69.20 ($S.D = 34.03$, range = 14–151).

Table 1 Description of study variables (n = 107)

Variables	Possible range	Actual range	Means	SD	Level
1. Intention of elective cesarean section	2–14	2–14	8.42	3.99	Moderate
2. Attitude toward elective cesarean section	6–42	6–42	25.92	9.73	
3. Subjective norms toward elective cesarean section	14–98	14–98	58.86	29.13	
4. Fear of childbirth	0–165	14–151	69.20	34.03	

Result of Pearson's correlation analysis examining factors associated with intention of elective cesarean section.

Table 2 showed that intention of elective CS was significantly and positively related with subjective norms toward elective CS ($r = .843$, $p < .001$), attitude toward elective CS ($r = .825$, $p < .001$), and fear of childbirth ($r = .522$, $p < .001$).

Table 2 Correlations among variables (n = 107)

Variables	1	2	3	4
1. Attitude toward elective cesarean section	1.00			
2. Subjective norms toward elective cesarean section	.839**	-		
3. Fear of childbirth	.369**	.445**	-	
4. Intention of elective cesarean section	.825**	.843**	.522**	-

** = $p < .001$

Results of standard multiple regressions analysis examining factors predicting intention of elective cesarean section

In this study, the results of standard MR showed that all three independent variables included attitude toward intention of elective cesarean section, subjective norms toward elective cesarean section and fear of childbirth included in the model explained 79% of the variance in intention of elective cesarean

section ($F_{3,103} = 125.44, p < .001$). Particularly, each of three predictor variables were statistically significant, with subjective norms toward elective cesarean section explained the most variance of intention of elective cesarean section ($\beta = .43, p < .001$), followed by attitude toward elective cesarean section ($\beta = .39, p < .001$), and fear of childbirth ($\beta = .19, p < .001$). Details were in table 3.

Table 3 Summary of standard MR analyses (n = 107)

Predicting variables	B	SE	β	t	p-value
1. Attitude toward elective cesarean section	.163	.034	.398	4.741	.000
2. Subjective norms toward elective cesarean section	.060	.012	.427	4.898	.000
3. Fear of childbirth	.022	.006	.186	3.642	.000

$R^2 = .785$

$F(3,103) = 125.44**$

** = $p < .001$

Discussion

1. Intention of elective cesarean section among pregnant women

In this study, the result showed that mean score of intention of elective cesarean section was 8.42 which was considered as a moderate level.

This finding reflected the increasing rate of elective cesarean section in Quang Ngai province, Vietnam. The explanation of increasing rate of intention of elective cesarean section might come from cultural background of Vietnam and characteristics of the study sample. Firstly, Vietnamese people believe that

choice of “auspicious time and date” is good for the baby delivery. Secondly, the mean age of participants was 30.03. In general, this is age of childbearing of women; however they may think that it is not easily for childbirth at the aged of 30 and above. In addition, 24.3% women at age of over 35 would have higher risk of obstetrics. Lastly, cesarean section is not really expensive in comparison with Vietnamese people’s income and it is also much convenience. These were reasons of pregnant women had intention of elective cesarean section. However, there were 10% of women did not choose cesarean section. The reason could be women believed that the year 2015 is not a good year as the year of dragon.

According to TPB, intentions are assumed to capture the motivational factors that influence a behavior. They indicate how hard people were willing to try, how much effort they are planning to exert in order to perform the behavior.³⁰ Supporting this finding, based on theory of planned behavior which was conducted in Taiwan showed that a significant strong predictor intention regarding childbirth delivery options (elective cesarean section and vaginal delivery) with 61%.¹³ A study of Shahraki-Sanavi and colleague⁴¹ showed that intention of elective cesarean section among pregnant women was based on mothers’, and husbands’ decisions (36.7%). In addition, Faisal-Cury and Menezes⁴² found that approximately a half proportion of pregnant women said that they preferred to have a cesarean section. Another study showed also that over a half of pregnant women wanted to plan a cesarean section.⁴³ On the other hand, a study in the South of Vietnam consistent this finding was described

pregnant women at the age of 30 wanted to elective cesarean section.² Moreover, some studies showed that significant predictor for women’ preference for cesarean section were an advanced maternal age over 35.^{15,44} The results revealed this finding that husband’s higher income level was significantly associated with an increase in requests for a cesarean section.^{42,45} Yusamran⁴⁶ found that majority of Thai pregnant women (69.8%) who decided to have cesarean section had monthly high family income and positive associate between income and elective cesarean section.

2. Factors predicting intention of elective cesarean section

Attitude toward elective cesarean section

The result revealed to attitude toward elective cesarean section has mean score at 25.92. This finding could explain that respondent’s attitude toward elective cesarean section preferred a “safety” and “convenience”. Regarding to the result of Pearson’s correlation showed that attitude toward elective cesarean section was significantly positive associated with intention of elective cesarean section with high correlation. The result of MR found a significantly strong predictor of intention of elective cesarean section.

According to the TPB, attitude toward the behavior reflects the individual’s global positive or negative evaluations of performing a particular behavior. In general, the more favorable the attitude toward the behavior, the stronger should be the individual’s intention to perform it.³⁰ Supporting this finding by Gallagher and colleague¹⁶ showed that pregnant women prefer a cesarean section were

related to a positive attitude toward cesarean delivery on maternal request. Additionally, another study found that majority of Trinidadian women preference for cesarean section was significantly associated with the perception of safety, complications and pain.³³ Another result revealed that the majority of women believed they should have the right to demand a cesarean section.^{14,47} Furthermore, a study in Thailand showed that participants who wished to deliver by elective cesarean section, within significant predictors for women's preference for cesarean delivery, was the belief that cesarean delivery was safer for the baby than vaginal delivery, convenience for controlling agendas and career planning and belief that cesarean delivery was safer for the mother.¹⁵

This finding reflected to more prefer a safety and convenience of cesarean section among pregnant women. Therefore, nurses and midwives should be fully informed and educated about the different modes of delivery, especially expressed disadvantages and advantages of elective cesarean section to change attitude toward elective cesarean section among pregnant women.

Subjective norms toward elective cesarean section

The mean score of subjective norms toward elective cesarean section was 58.86. It could be explained that perception of women and feelings of family members and culture preferred for a cesarean section were choice of "auspicious time and date" for delivering baby and thought about "a convenience" of cesarean section. Additionally, the result of Pearson's correlation showed that subjective norms toward elective cesarean section were

significantly positive associated with intention of elective cesarean section with high correlation. Regarding to result of standard MR found that subjective norms were the significantly strongest predictor of intention of elective cesarean section.

According to the theory of planned behavior, subjective norms are individual's perceptions of general social pressure to perform or not to perform the behavior. It focuses on the individual's beliefs regarding what significant others think about the behaviors.³⁰ Supporting and explaining for this finding was subjective norms from cultures in the Eastern countries. A study by Lo¹⁹ showed that the weekend effect in Taiwan for cesarean sections also prevails; days deemed auspicious in the Chinese lunar calendar were associated with a significant positive impact on the probability of a cesarean section being performed, while those days seen as inauspicious were associated with a significant negative impact. Furthermore, a study consistent with this finding by Yamasmit & Chaithongwong watthana,¹⁵ a significant predictor for women's preference for cesarean section was belief that cesarean section scheduling a particular birth date and time was great for the baby. In a study of Lee and colleague¹⁸ finding revealed that almost women followed suggestion from husband, mother-in-law and other family members, and chose a 'lucky day' as the date of operation. In addition, some studies in the Western countries showed that fathers preferred a cesarean section was wish to plan the date of the baby's birth were associated with elective cesarean section.²¹

This finding highlight that the strongest influenced to intention of elective cesarean section

comes from her partner, mother in law, mother and culture. Therefore, nurses and midwives should be informed about women's perception about decision making choice mode of delivery right.

Fear of childbirth

The result of mean score fear of childbirth was 69.20. According to Wijma and colleague³⁹ a sum score of 85 have severe fear of childbirth, and women above a sum score of 100 have clinically fear of childbirth. With regard to a result of Pearson's correlation found that fear of childbirth was significantly positive associated with intention of elective cesarean section with moderate correlation and significantly predictor of intention of elective cesarean section.

Supporting this finding by Adams et al.⁴⁸ found that mean W-DEQ sum score was 56.66 and explained that they had fear of childbirth. Some studies found that fear of childbirth were associated with elective cesarean section.^{24,34-36,49} Some another studies consist with this finding. For example, fear of childbirth was associated with preferred cesarean section, within, fear of labor pain was the most frequent reason of the women who preferred cesarean section,^{14,15,23} fear of labor complications.³⁴ In addition, a result from previous study on women's request for a cesarean section was fear of childbirth, perceived risks of vaginal birth, a wish to avoid maternal trauma and optimizing fetal well-being.⁵⁰ Furthermore, fear of childbirth was a significant predictors of preferences for cesarean section.⁴⁴

This finding described respondents having score of fear of childbirth but not high. However, comparison with those results, the finding of this study is a little higher because this study

focuses on nulliparous pregnant women. Thus, the finding suggests that nurses and midwives should be reduced fear of childbirth among nulliparous pregnant, while fear of pain in labor and fear of complications and increased satisfaction client' in a normal vaginal delivery are necessary.

Conclusion

The findings of this study found that there was a moderate level of intention of elective cesarean section. Attitude, subjective norms and fear of childbirth were significantly positive associated with intention of elective cesarean. These results reflected reality about factors influencing intention of elective cesarean section among pregnant women in Quang Ngai province, Vietnam.

Implication for nursing practice

Based on the findings of this study, there are some implications for nursing practice which should be provided. Firstly, nurses and midwives should explain carefully about benefits and adversities of vaginal delivery and cesarean section. With such a close relationship and knowledge base, nurses and midwives can empower woman to make an individual choice which is most suitable to her. Additionally, counseling for women and their relatives about knowledge of childbirth could be performed via ANC clinic, magazine, internet, television and handout. Moreover, nurses and midwives should reduce fear for women before childbirth. Finally, nurses and midwives who work in labor and delivery rooms should assess and respond to their patient's feelings and concerns about childbirth routinely. By doing those suggestions,

intention, attitude and perception of pregnant women and their relatives toward elective cesarean section might be changed and improved.

Limitation in this study

This study was conducted using data at only one hospital in one province in Vietnam. Thus, results of this study are not representation for Vietnamese women.

Recommendation for further research

Based on the result of study, will be recommended below:

1. The research should be conducted more than one hospital.
2. An intervention research about attitude and subjective norms toward elective cesarean section should be carried out for further studies.
3. Nursing interventions to improvement of attitude, subjective norm and fear of childbirth about intention of elective cesarean section should be conducted.

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