

**International Academic Multidisciplinary Research Conference 2017**

**Conference Proceedings**

**INTERNATIONAL BUSINESS ECONOMIC TOURISM SCIENCES TECHNOLOGY  
HUMANITIES SOCIAL SCIENCES AND EDUCATION RESEARCH CONFERENCE**

*London, United Kingdom  
5 – 7 April, 2017*

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*The International Education Social Sciences and Humanities Research Conference*

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# Conference Proceedings

INTERNATIONAL BUSINESS ECONOMIC TOURISM SCIENCES TECHNOLOGY  
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## INTRODUCTION

We would like to welcome our colleagues to the International Business Tourism Transport Technology Social Sciences Humanities Education Research Conference. It is the seven series in 2016 of Conference on Business Tourism and Apply Sciences was held in Amsterdam. As always many members of the ICBTS 2016 community look forward to meeting, sharing and exchanging their research ideas and results in both a formal and informal setting which the conference provides. Likewise, the concept of alternating the international conference every one month on April to November between Europe and the rest of the world is now well established. This year's event in London (UK) Paris (France) Munich (Germany) Amsterdam (Netherlands) Boston (USA) Toronto (Canada) London (United Kingdom) Zurich (Switzerland) Berlin (Germany) Tokyo (Japan) and another continues with the cultural following the very successful and productive event held in London-Zurich in August 2016 in the field of various types for international academic research conference on Business Economics Social Sciences Humanities Education and Apply Sciences. As usual The ICBTS 2016 brings together leading academics, researchers and practitioners to exchange ideas, views and the latest research in the field of Business Tourism and Apply Sciences.

The theme of this event The 2016 ICBTS International Business Tourism Social Sciences Humanities and Education Research Conference is "Opportunities and Development of Global Business Economics Social Sciences Humanities and Education" It is also represents an emerging and highly challenging area of research and practice for both academics and practitioners a like, The current industrial context is characterized by increasing global competition, decreasing product life cycles, Global Business, Tourism Development, Social Sciences Humanities Education Apply Sciences and Technology collaborative networked organizations, higher levels of uncertainties and, above all, and customers. In our view holding this event in Tokyo represents a timely opportunity for academics and researchers to explore pertinent issues surrounding Business Economics Tourism Social Sciences Humanities Education Sciences and Technology.

Potential authors were invited to submit an abstract to the International Conference Session Chairs. All abstracts were reviewed by two experts from the International review committee and final papers were further reviewed by this volume with 30 contributing authors coming from 18 countries. This book of proceedings has been organized according to following categories:

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# EDUCATION PROGRAM ON PROMOTING PERCEIVED SELF-EFFICACY IN PREGNANCY WOMEN FOR DIABETES MELLITUS PREVENTION

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## ABSTRACT

This study aimed to investigate the effect of educates the pregnant women to prevent diabetes. Sample was 60 pregnant women who attend the antenatal care services at Sunandha clinic, during November 21, 2015 to January 30, 2016. Questionnaire was the instrument of this study. Statistics to be used were percentage, average, standard deviation.

Results showed that most of the pregnant women were 15-18 years old (25 persons, or 41.67 percent), followed by 19-22 years old (18 persons, or 30 percent), and the least were over 30 years old (1 person, or 1.67 percent). Most of the pregnant women were finished in High school/ Occupational Certificate (83 persons, or 63.33 percent), but the least were finished in primary school (1 person, or 1.67 percent). Most pregnant women did not engage in any occupation (25 persons, or 41.67 percent), followed by work as employee (23 persons, or 38.33 percent), and the least were self-business (1 person, or 1.67 percent)

This study organized into 2 phases, before and after educating the pregnant women on the knowledge of the exercise. Results from the first phase showed that the majority (26 persons, or 43.33 percent) were answered 5 questions (out of 9 questions) correctly, followed by answered 6 questions correctly (12 persons, or 20 percent), and the least were answered 1 and 8 question correctly (2 person each, or 3.33 percent).

The second phase was took place after educating the pregnant women on the knowledge of the exercise. Results revealed that 4 participants, or 6.67 percent, were answered all correctly (9 items), the majority (19 persons, or 31.67 percent) were answered 6 questions correctly, followed by answered 5 questions correctly (15 persons, or 25 percent), and the least were answered 3 questions correctly (1 person, or 1.67 percent).

Recommendation there was no practical measurement on the activities for educating the pregnant women about the exercise to prevent diabetes. Moreover, they also lack of monitoring of the actual exercise. Therefore, the medical staff should be grouped the pregnant women, in the similar gestational age, for helping each other in an exercise, in order to help prevent diabetes.

**Keywords**-Pregnant women with diabetes, Exercise

## INTRODUCTION

When Pregnant, women's body will change the anatomy, physiology, and biochemistry, to support the growth and development of infants. Such changes have been taken place since fertilization until birth. Pregnant women need to take care themselves to support change and prevent complications, which possibly occurs during pregnancy, particularly diabetes during pregnancy (gestational diabetes mellitus [GDM]). This disease came from the abnormal metabolism, first detect during pregnancy, which always happen all around the world (Cunningham, Levono, Bloom, Hauth, Gilstrap, & Wenstrom, 2010). In the United State, there were pregnant women with GDM about 7 percent, or more than 200,000 cases per year (American Diabetes

Association [ADA], 2004). Meanwhile, this incident in Thailand was 3.7-7.0 percent (Piyapun Limruangrong, et.al., 2011). Moreover, the research found that the more elderly pregnancy the more risk of GDM.

GDM possibly affects health of pregnant women and fetus. Pregnant women with GDM faces some more changes in the body and mentality than a normal pregnancy such as high blood pressure, increased cesarean rates, easily to infection, and uncontrollable blood sugar level (hypoglycemia or hyperglycemia). They also face some complications in infants such as giant baby, increased morbidity rate, and perinatal mortality. Moreover, research showed that women with diabetes before pregnancy would result in more severe than those with diabetes after pregnancy. This may cause in the creation of organs of the fetus abnormalities and miscarriages. In case of giant baby issue, it may cause the baby's birth to the hard shoulder and the near-term birth abortion. Therefore, pregnant women with GDM would suggest to take more various tests than normal pregnancy such as the Ultrasonography, the health of the fetus at every antenatal care, Oral Glucose Tolerance Test (OGTT), and so on. According to severity of the disease, pregnant women with GDM would suggest to modify their activities to control and prevent the complications of themselves and their infant (Cunningham et al., 2010). In case of women with diabetes before pregnancy, if they were poorly controlled diabetes, then, it may harm both the babies and pregnant women. In case of babies, it may effect on congenital abnormalities such as no kidney, heart disease, cerebral palsy, no limbs, and cause of miscarriages in the end. In case of the pregnant women, it may cause of preterm about eight times that of people without diabetes. This incident may come from the toxicity in pregnant women and other risks which may cause the baby died in the womb or died shortly after birth from respiratory disorders.

The exercise plays the key role of DM treatment. It can activate insulin sensitivity and glycogen synthesis, which drops the blood sugar level. Moreover, the exercise also helps to reduce resistance to insulin which could reduce demand for insulin to control sugar. The appropriate exercise was part of care course for women with GDM. The patients, who exercise regularly, reported low blood sugar levels while fasting and after eating. They also reduced to use of insulin for the treatment. Moreover, the level of Hemoglobin A1C (HbA1c) also decreased. Thus, the research was interested in educating pregnant women on the knowledge of exercise to prevent diabetes which could reduce the risk of complications of pregnancy and fetal consequences.

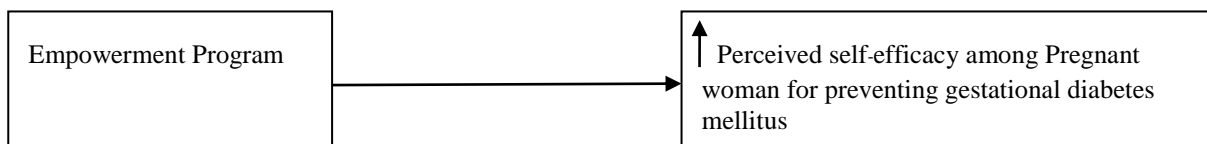
### RESEARCH OBJECTIVES

To investigate the effect of education on self-care of pregnant women to prevent diabetes.

### SCOPE OF RESEARCH

Sample was the pregnant women who attend the antenatal care service at the Sunandha clinic during November 21, 2015 to January 30, 2016.

### CONCEPTUAL FRAMEWORK



### EXPECTED BENEFITS

1. Pregnant women improve the knowledge regarding to preventing gestational diabetes mellitus
2. Investigate the correlation among 4 variables are age, educational level, carrier and income

## RESULTS

Data collecting by using questionnaire and individual interview to the participant who's received services from 21<sup>st</sup> NOV 2016 to 30<sup>th</sup> JAN 2017. The data collecting instruments were develop by researcher and the participant returned 100% of questionnaire. After collecting data, the researcher prepares to complete the process by using SPSS software. The researcher collected and analyzed data by using a computer program as follows:

### RESEARCH RESULTS

**Table 1**  
**shows the basic information of pregnant women.**

Item	Frequency (n=60)	Percent
<b>Age</b>		
< 15	2	3.33
15-18	25	41.67
19-22	18	30
23-26	5	8.33
27-30	9	15
>30	1	1.67
<b>Education</b>		
Under/primary school	1	1.67
High school/vocational certificate	38	63.33
Diploma/high vocational certificate	13	21.67
Undergraduate/graduate school	8	13.33
<b>Occupation</b>		
Not work	25	41.67
Student	11	18.33
Employee	23	38.33
Civil servant/state enterprise	0	0
Self-business	1	1.67
<b>Revenue (baht)</b>		
No income	36	60
<10,000	3	5
10,000-11,000	10	16.67
11,001-12,000	2	3.33
12,001-13,000	2	3.33
13,001-14,000	1	1.67
14,001-15,000	5	8.33
>15,000	1	1.67

Table 1 showed that there was 25 pregnant women who aged 15-18 years old (41.67 per cent), followed by 19-22 years old (18 persons, or 30 percent), over 30 years old (1 person, or 1.67 percent), and under 15 years old (2 persons, or 3.33 percent).

Most of the pregnant women were finished in High school/ Occupational certificate (38 persons, or 63.33 percent), followed by Diploma/high vocational certificate (13 persons, or 21.67 percent), and the least were finished in primary school (1 person, or 1.67 percent).

Most pregnant women did not engage in any occupation (25 persons, or 41.67 percent), followed by work as employee (23 persons, or 38.33 percent), and the least were self-business (1 person, or 1.67 percent)

Most pregnant women were no income (36 people, or 60 percent), followed by revenues. 10000-11000 baht (10 persons, or 16.67 percent), 14001-15000 baht (5 persons, or 8.33 percent), and the least were earning more than 15,000 baht and 13,001-14,000 baht (1 person, or 1.67 percent each)

**Table 2**  
**Answering about the exercise of pregnant women, before and after educating.**

Number of right answer	Before		After	
	Frequency (n=60)	Percent	Frequency (n=60)	Percent
1	0	0	0	0
2	2	3.33	0	0
3	5	8.33	1	1.67
4	8	13.33	4	6.67
5	26	43.33	15	25
6	12	20	19	31.67
7	5	8.33	11	18.33
8	2	3.33	6	10
9	0	0	4	6.67
Total	60	100	60	100

The table 2 showed that before educating the pregnant women on the knowledge of the exercise, the majority (26 persons, or 43.33 percent) were answered 5 questions (out of 9 questions) correctly, followed by answered 6 questions correctly (12 persons, or 20 percent), and the least were answered 1 and 8 question correctly (2 person each, or 3.33 percent).

After educating the pregnant women on the knowledge of the exercise, the majority (19 persons, or 31.67 percent) were answered 6 questions correctly, followed by answered 5 questions correctly (15 persons, or 25 percent), 11 participants (or 18.33 percent) were answered 7 questions correctly, 4 participants (or 6.67 percent) were answered all correctly (9 items), and the least were answered 3 questions correctly (1 person, or 1.67 percent).

## DISCUSSIONS

The results from this research revealed that after educating the pregnant women on the knowledge of the exercise, most pregnant women have much more knowledge which consistent with the study of Kanjana Srisawat & Orapin Sikaow (2014). It showed that the surveillance of diabetes during pregnancy at risk and knowledge of how to look after themselves and their children, in order to prevent or delay type 2 diabetes, could reduce the risk of disease. It also reduces the cost of care for diabetes in pregnant women. The pregnant women also combine their new knowledge from training course with the existing knowledge, which could help them for more perceive, understanding, and recognize the process.

## SUGGESTION

There was no practical measurement on the activities for educating the pregnant women about the exercise to prevent diabetes. Moreover, they also lack of monitoring of the actual exercise. Therefore, the medical staff should be grouped the pregnant women, in the similar gestational age, for helping each other in an exercise, in order to help prevent diabetes.

#### **ACKNOWLEDGMENT**

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