A STUDY ON ACCESS BARRIER TO PRENATAL CARE AMONG PREGNANT WOMEN [1]

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Abstract

Prenatal care at prenatal clinic that accessible and meet with expectation of pregnant women is important. This descriptive study aimed to determine barrier to access prenatal care among pregnant women. Samples were purposive samplings from pregnant women who visit prenatal clinic at the tertiary care hospital. Questionnaire was translated and back-translated from Access Barrier to Care Index which was developed by Rosama Torres (2015). Descriptive statistic including frequency, mean and standard deviations were utilized to describe the findings.

The results were as followed. Participants were age between 14-42 years (M= 23.08, SD= 7.17) in which teenage pregnant women were 16.67% , and elderly pregnant women were 12.87% . Moreover, 97.5% were Buddhist, and half were marry without marriage identification. One-third completed primary school and has no job. Family income were 1,000 – 45,000 Baht/month (M = 9,047.52 Baht/month ,$Median$ = 9,000 Baht/month). Two-fifth has enough income but no saving and used universal health care scheme.

Regarding to the prenatal service, 39.5% were primigravida, 12.6% experience abortion and 11.8% ever used prenatal care at this hospital. Access barrier to prenatal care were fatigue (72.4%), has to wait very long at the clinic (57.1%), lots of pregnant women who wait for the service (47.9%), and prenatal service was closed at the weekend (23.6%).

In order to make client more satisfaction on the health care service, midwifery should develop health teaching during their waiting for the service. Moreover, friendly environment may be another way to make stakeholder want to visit the clinic; useful entertainment can be adding. Further study is a research and development in developing the friendly prenatal clinic aiming for enhancing the visit of prenatal clinic; especially before 12 weeks of gestation.

Keywords: Access Barrier, Pregnancy, Prenatal Care

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Significance of the study

Despite much efforts from Ministry of Public Health to improve access to prenatal care, pregnant women continue to seek prenatal care late in their pregnancies which lead to underutilize these services. Prenatal care at one tertiary care hospital doesn't meet with target, pregnant women who have first visit at prenatal clinic before their 12 week of gestation was below the expectation. Delay of obtaining prenatal care affect the complications during pregnancy; especially pregnant women who have high risk may be develop severity if they postpone access prenatal care.

Previous study shown that there were several factors influence them to avoid prenatal care. Mayukhachot and Howharn (2015) found that pregnant women did not attend prenatal clinic at health promotion hospital because two main reasons which were individual reason and health care service reason. For the individual reason, they stated the significant reason was the transportation and the long period being spent at the clinic. Other significant reasons were their health statuses such as this time of pregnancy were high risk pregnancy, and severe complications were found. Srisuk (2016) found that history of high risk pregnancy, attitude toward antenatal care, family support for antenatal care, knowledge of antenatal care, and having moderate level and high level of family income were found to be significant influencing factors of initiation of antenatal care within the first 12 weeks. Findings from Srisuk were similarly from the results of Silpa-anan (2014) in which personal factors and support from family were factors that motivate pregnant women to utilize antenatal service.

Thus, it is significant to determine barriers that caused difficulty in obtaining prenatal care among pregnant women who access care at tertiary care hospital. The findings will be useful for hospital to improve the prenatal care for pregnant women.

Aims

The aim of this descriptive study were as followed.

1. To determine access barrier to prenatal care among pregnant women and

2. To determine the difference of score on access barrier to prenatal care among pregnant women who have different on marital status, educational level, occupation, and experience on service from tertiary care hospital.

Methodology

Samples were purposive samplings from pregnant women who visit prenatal clinic at one tertiary care hospital. G*Power was used to determine the sample size, with the moderate effect

size (0.5), power at .80, α =.05, total sample sizes was 108 cases, 10% was added; therefore, total sample size in this study was 118 cases. Inclusion criteria were having no complications or high risk group and didn't refer from other hospital.

Questionnaire was translated and back-translated from Access Barrier to Care Index (ABCI) which was developed by Torres (2016). ABCI was used to determine barrier caused difficulty in obtaining prenatal care. A Thai version of Access Barrier to Care Index has been tried with 30 pregnant women who have the same criteria with samples. There were two items that samples could not answer; therefore, these two items were modified to make this index appropriate with Thais. Cronbach's alpha was .82. ABCI was composed of 28 items. This was a self-administered questionnaire and participant were asked to rate each item from not at all difficult (0) to extremely difficult (5). Therefore, the total score was ranged from 0-140, the high score means they have high barrier to access to prenatal care.

Descriptive statistic including frequency, mean and standard deviations were utilized to describe the findings.

One-way Analysis of Variance was used to test the significant of score on access barrier to prenatal care among pregnant women who have different on marital status, educational level, occupation, and experience on service from tertiary care hospital. Assumption of One-way ANOVA was test, and if homogeneity of variance was not equal, Dunnet T3 was used for post-hoc test, if homogeneity of variance was assuming, Bonferroni was used for post-hoc test. In case of normal distribution was not assume, Kruskal, Wallis Test was used.

Independent t-test was used to determine the difference of score on access barrier to prenatal care among pregnant women who have different experience at tertiary care hospital.

Results

The results were as followed. Participants were age between 14-42 years (*M*= 23.08, *SD*= 7.17) in which teenage pregnant women were 16.67% and elderly pregnant women were 12.87%. Moreover, 97.5% were Buddhist and half were marry without marriage identification. One-third completed primary school and has no job. Family income were 1,000 – 45,000 Baht/month (*M* = 9,047.52 Baht/month ,*Median* = 9,000 Baht/month). Two-fifth has enough income but no saving and used universal health care scheme.

Regarding to the prenatal service, 39.5% were primigravida, 12.6% experience abortion and 11.8% ever used prenatal care at this hospital. Moreover, only 5.9% who could not follow the appointment.

Overall, there were only 8.8% who didn't have any barrier to obtaining prenatal care. Among these, they were married, housewife, ever used the service at this hospital before, and only few cases didn't have enough money. Considering who stated that the have experienced barriers to obtain prenatal service, total scores of ABCI was ranged from 1-58. Access barrier to prenatal care were fatigue (72.4%), has to wait very long at the clinic (57.1%), lots of pregnant women who wait for the service (47.9%), and prenatal service was closed at the weekend (23.6%). These finding were similarly to finding from Mayukhachot and Howharn (2015) in which pregnant women did not want to go to the prenatal clinic because of the time spending at the clinic. In another way, the findings were similarly to the findings from Srisuk (2016) in which family support was influencing pregnant women to access prenatal care. However, the conclusions of this study were different than the finding from Silpa-anan (2014) who found that barriers to antenatal care services include transportation, migration, costs, and workloads.

Table 1 Frequency and Percentage of Extent Barrier to Obtain Prenatal Care

Items	Not at all difficult	Very low difficult	Slightly difficult	Somewhat difficult	Moderate difficult	Extremely difficult
1.Embarrassed about pregnancy	105 (88.2%)	8 (6.7%)	3 (2.5%	2 (1.7%)		
2.Didn't want people to know was pregnant	109 (91.6%)	5 (4.2%)	2 (1.7%)	2 (1.7%)		
3. Not sure wanted this baby	109 (91.6%)	6 (5.0%)				1 (.8%)
4.Depressed or unhappy about pregnancy	78 (65.5%)	30 (25.2%)	3 (2.5%)	2 (1.7%)	3 (2.5%)	
5.Own personal problems	87 (73.1%)	16 (13.4%)	10 (8.4%)	3 (2.5%)		1 (.8%)
6.Own alcohol or drug use	106 (89.1%)	5 (4.2%)	1 (.8%)	2 (1.7%)		
7.Too tired	34 (28.6%)	35 (29.4%)	34 (28.6%)	6 (5.0%)	5 (4.2%)	2 (1.7%)
8.Afraid something wrong with baby	38 (31.9%)	29 (24.4%)	30 (25.2%)	10 (8.4%)	7 (5.9%)	3 (2.5%)
9.Didn't need care because felt fine	107 (89.9%)	4 (3.4%)	1 (.8%)	1 (.8%)	1 (.8%)	
10.Personal problems of family or friends	88 (73.9%)	20 (16.8%)	6 (5.0%)	1 (.8%)		

Table 1 (cont.)

Items	Not at all difficult	Very low difficult	Slightly difficult	Somewhat difficult	Moderate difficult	Extremely difficult
11.People in personal life stopped from going to clinic	112 (94.1%)	3 (2.5%)	1 (.8%)			
12.People in personal life wouldn't help get to clinic	104 (87.4%)	8 (6.7%)	4 (3.4%)	1 (.8%)		
13.Has no own Transportation	87 (73.1%)	19 (16.0%)	7 (5.9%)	3 (2.5%)	1 (.8%)	
14.has a problem with the cost of transportation	86 (72.3%)	18 (15.1%)	9 (7.6%)	1 (.8%)		2 (1.7%)
15.No child care	92 (77.3%)	12 (10.1%)	9 (7.6%)	3 (2.5%)	1 (.8%)	
16.No place to live	108 (90.8%)	4 (3.4%)	2 (1.7%)	2 (1.7%)		
17.Heard bad things about clinic	76 (63.9%)	26 (21.8%)	14 (11.8%)	2 (1.7%)		
18.Didn't like care received at clinic	87 (73.1%)	17 (14.3%)	6 (5.0%)	5 (4.2%)	2 (1.7%)	
19.Didn't trust health care system	101 (84.9%)	14 (11.8%)	1 (.8%)	1 (.8%)		
20.Didn't think prenatal care was important	106 (89.1%)	6 (5.0%)	1 (.8%)	1 (.8%)	2 (1.7%)	
21.Clinic had no evening or weekend hours	79 (66.4%)	17 (14.3%)	12 (10.01%)	1 (.8%)	4 (3.4%)	
22.Long waiting time at clinic	51 (42.9%)	25 (21.0%)	24 (20.2%)	6 (5.0%)	4 (3.4%)	7 (5.9%)
23.Clinic too crowded	62 (52.1%)	21 (17.6%)	16 (13.4%)	4 (3.4%)	7 (5.9%)	6 (5.0%)
24.Couldn't schedule timely appointments	108 (90.8%)	5 (4.2%)	4 (3.4%)			

Table 1 (cont.)

Items	Not at all difficult	Very low difficult	Slightly difficult	Somewhat difficult	Moderate difficult	Extremely difficult
25.Clinic too far away	75 (63.0%)	30 (25.2%)	3 (2.5%)	6 (5.0%)		2 (1.7%)
26.Didn't like going to clinic	103 (86.6%)	9 (7.6%)	3 (2.5%)	2 (1.7%)		
27.Didn't want to tell clinic staff that wasn't taking medications	86 (72.3%)	19 (16.0%)	6 (5.0%)	2 (1.7%)	2 (1.7%)	
28.Didn't want to tell clinic staff that wasn't count the fetal movement	86 (72.3%)	19 (16.0%)	6 (5.0%)	2 (1.7%)	2 (1.7%)	1 (.8%)

The testing on the difference of score on access barrier to prenatal care among pregnant women who have different on marital status, educational level, occupation, and experience on service from tertiary care hospital were as followed. Regarding to the marriage status, pregnant women who married with certificate rated the highest score on access barrier to prenatal care (M= 14.89, SD = 4.96) followed by status as couple (M= 12.96, SD = 4.99), and married without certificate (M=10.35, SD = 3.81), in which the less score is separate (M=9.50, SD = 3.53). However, these different were not statistically significant as shown on Table 2.

Regarding to the education level, pregnant women who have bachelor degree rated the highest score on access barrier to prenatal care (M= 20.61, SD = 10.21), followed by pregnant women who have diploma degree (M= 15.75, SD = 6.81), in which the less score is pregnant women who have primary school degree. (M=9.42, SD =3.64). However, just only bachelor group's score that statistically significant different than those of primary school group at p<.05 as shown on Table 2.

Regarding to the occupation, pregnant women who have occupation with certainty income rated the highest score on access barrier to prenatal care (M=19.37, SD = 7.22) followed by pregnant women who have occupation with uncertainty income (M= 11.00, SD = 4.05), and housewife (M= 6.72, SD = 2.38). However, just only uncertainty income group's score that statistically significant different than those of housewife group at p<.05 as shown on Table 2.

Table 2 One-Way Analysis of Variance of Access Barrier Scores by Demographic Data

Source	*df*	*SS*	*MS*	*F*	*p*
Marital Status					
Between groups	3	328.61	109.54	.73	.54
Within groups	96	14369.43	149.68		
Total	99	14698.04			
Educational level					
Between groups	2	1901.89	950.95	6.91	.01
Within groups	91	12526.25	137.65		
Total	93	14428.14			
Occupation					
Between groups	2	2179.05	1089.53	7.43	.001
Within groups	80	11723.34	146.54		
Total	82	13902.39			

Regarding to the previous experience at tertiary care hospital, pregnant women who never access care at the tertiary care hospital rated the higher score of access barrier to prenatal care (*M*=14.78, *SD* = 5.67) than those who ever access care at the tertiary care hospital (*M*=11.14, *SD* = 4.53).; however, there was not statistically significant difference as shown on Table 3. We can explain that pregnant who ever access to health care at the tertiary care hospital may be get use to the service, so they can manage time wisely and then they didn't have to wait at the clinic for long time.

Table 3 t-test of Access Barrier Scores by Previous Experiences at Tertiary Care Hospital

Previous Experience	n	*M*	*SD*	*t*	*p*
Yes	76	11.14	4.53	1.12(92)	.27
No	18	14.78	5.67		

Conclusion

Institution factors were significant barrier for pregnant women to obtain prenatal care; these included crowed clients leading to the long queue at the clinic and made pregnant women tired.

Suggestion

In order to make client more satisfaction on the health care service, midwifery should develop health teaching during their waiting for the service. Moreover, friendly environment may be another way to make stakeholder want to visit the clinic; useful entertainment can be adding.

Future Study

Further study is a research and development in developing the friendly prenatal clinic aiming for enhancing the visit of prenatal clinic; especially before 12 weeks of gestation.

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