

ORIGINAL ARTICLE

Factors affecting the utilization of quality antenatal care services among Myanmar migrants in Thai health care facilities: Tak and Samut Sakhon Province

Linn Zaw Myo¹, Sariyamon Tiraphat² and Nate Hongkraile²

¹ M.P.H.M., ASEAN Institute for Health Development, Mahidol University, Thailand

² Ph.D., ASEAN Institute for Health Development, Mahidol University, Thailand

Corresponding Author: Sariyamon Tiraphat Email: sariyamon.tir@mahidol.ac.th

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Abstract

Myo LZ, Tiraphat S and Hongkraile N.

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This cross-sectional study was conducted to investigate the factors affecting the utilization of quality antenatal care services among Myanmar migrant women in Thai health care facilities at Tak and Samut Sakhon. The sample size was 402 Myanmar migrant women selected by purposive sampling from Mae Tao clinic and Samut Sakhon hospital. The data were collected through face to face interview using structured questionnaires. Descriptive statistics were used to describe the characteristics of the sample. Chi-square test and multiple logistic regressions were used to determine the association between independent variables and utilization of quality antenatal care.

The finding showed that 53% of the women utilized quality antenatal care services with 2 criteria; whereas 62.4% had early visit of antenatal care within the first trimester of pregnancy and 73.9% utilized antenatal care services at least 5 times or more. Utilization of quality antenatal care services was significantly associated with the place of residency, women's age, women's education, number of pregnancy, number of children, intention to pregnancy, staying in Thailand in first 3 months of pregnancy, knowledge level, attitude, legal status, presence or absence of health insurance, family's income, social support, satisfaction, accessibility and availability of antenatal care services. After adjusting with other variables, multiple logistic regression revealed that urban women were 3.5 times more likely to utilize early and regular antenatal care services than rural counterparts. Women who did not have plan to go back to Myanmar, with higher knowledge, higher social support, and higher satisfaction to antenatal care services were more likely to utilize quality antenatal care services antenatal care services than those who planned to go back to Myanmar, had lower knowledge, lower social support and lower satisfaction level to antenatal care services with OR 3.35, 2.82, 2.63 and 1.73 respectively

From the result of this study, interventions such as public health education and health promotion concerning antenatal care should be undertaken especially in the rural area. Moreover, policies to encourage utilization of ANC by migrant women should be implemented in order to increase the rate of utilization of quality antenatal care services.

Keywords: utilization, quality antenatal care services, Myanmar migrants, Tak and Samut Sakhon Province

ปัจจัยที่มีผลต่อการรับบริการฝากครรภ์คุณภาพของกลุ่มแรงงานข้ามชาติพม่าในโรงพยาบาลไทย: จังหวัดตากและสมุทรสาคร

ลินน ซอ เหมียว¹, ศริยานน ติรพัฒน์² และ เนตร หงษ์ไกรเลิศ²

¹ M.P.H.M. สถาบันพัฒนาสุขภาพอาชีวิน มหาวิทยาลัยมหิดล ประเทศไทย

² Ph.D. สถาบันพัฒนาสุขภาพอาชีวิน มหาวิทยาลัยมหิดล ประเทศไทย

บทคัดย่อ

ลินน ซอ เหมียว, ศริยานน ติรพัฒน์ และเนตร หงษ์ไกรเลิศ

ปัจจัยที่มีผลต่อการรับบริการฝากครรภ์คุณภาพของกลุ่มแรงงานข้ามชาติพม่าในโรงพยาบาลไทย:

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การศึกษาแบบตัดขวางในโรงพยาบาลนี้ทำเพื่อศึกษาปัจจัยที่มีความสัมพันธ์กับการรับบริการฝากครรภ์คุณภาพของกลุ่มแรงงานหญิงข้ามชาติพม่าในโรงพยาบาลที่อยู่ในจังหวัดตากและสมุทรสาคร ประชากรตัวอย่างคือ แรงงานหญิงข้ามชาติพม่า 402 ราย การสุ่มตัวอย่างเป็นแบบเฉพาะเจาะจงจากคลินิกแม่ดาวและโรงพยาบาลสมุทรสาคร เก็บรวบรวมข้อมูลโดยใช้แบบสอบถาม สถิติเชิงพรรณนาถูกนำมาใช้เพื่อเชิงลักษณะของประชากรตัวอย่าง การทดสอบไฮสแควร์และการทดสอบโลจิสติกพหุคุณนำมาใช้เพื่อหาความสัมพันธ์ระหว่างตัวแปรและเพื่อทำนายปัจจัยที่มีผลต่อการฝากครรภ์คุณภาพ

ผลการวิจัยแสดงให้เห็นว่าสัดส่วนของผู้หญิงที่มาใช้บริการฝากครรภ์คุณภาพคิดเป็น 53% ในขณะที่ 62.4% มาฝาก ครรภ์ครั้งแรกภายในไตรมาสแรกของการตั้งครรภ์ และ 73.9% ใช้บริการฝากครรภ์อย่างน้อย 5 ครั้ง การใช้บริการฝากครรภ์คุณภาพมีความสัมพันธ์อย่างมีนัยสำคัญกับ สถานที่อยู่อาศัย อายุ ระดับการศึกษา จำนวนของการตั้งครรภ์ จำนวนบุตร ความตั้งใจที่จะตั้งครรภ์ แผนคลอด ระดับความรู้ ทัศนคติ สถานะทางกฎหมาย ประภันสุขภาพ รายได้ของครอบครัว การสนับสนุนทางสังคม ความพึงพอใจที่มีต่อการใช้บริการ และการเข้าถึงและความพร้อมในการรับบริการฝากครรภ์ ผลของการวิเคราะห์การทดสอบโลจิสติกพหุคุณ ชี้ให้เห็นว่าผู้หญิงในเมืองมีแนวโน้มที่จะใช้บริการฝากครรภ์คุณภาพสูงกว่าผู้หญิงในชนบทคิดเป็น 3.5 เท่า ผู้หญิงที่ไม่ได้มีการวางแผนที่จะกลับไปยังประเทศไทย ผู้หญิงที่มีความรู้สูงกว่า มีการสนับสนุนทางสังคมที่มากกว่า และมีความพึงพอใจในการรับบริการฝากครรภ์ที่สูงกว่ามีแนวโน้มที่จะใช้บริการฝากครรภ์คุณภาพสูงกว่าผู้ที่วางแผนที่จะกลับไปยังประเทศไทย มีความรู้ต่ำกว่า ได้รับการสนับสนุนทางสังคมที่น้อยกว่า และมีระดับความพึงพอใจของบริการที่ต่ำคิดเป็น 3.35, 2.82, 2.63 และ 1.73 เท่า ตามลำดับ

ผลการศึกษาครั้งนี้สามารถชี้ให้เห็นว่า การให้กิจกรรมในชุมชน เช่น การให้การศึกษาด้านสาธารณสุข และการส่งเสริมสุขภาพเกี่ยวกับการฝากครรภ์ควรจะได้รับการดำเนินการโดยเฉพาะอย่างยิ่งในพื้นที่ชนบท นอกจากนี้นโยบายที่ส่งเสริมการใช้บริการฝากครรภ์ ในกลุ่มผู้หญิงข้ามชาติควรจะได้รับการสนับสนุนเพื่อเพิ่มอัตราการรับบริการฝากครรภ์ที่มีคุณภาพ

คำสำคัญ: การรับบริการ การบริการฝากครรภ์คุณภาพ แรงงานข้ามชาติพม่า จังหวัดตากและสมุทรสาคร

Introduction

Nowadays, migration becomes one of the most significant constituents of globalization around the world. Globally, there are 232 million of international migrants in 2013, with the largest numbers residing in Europe accounting for 72 million and in Asia for 71 million¹. Thailand is one of the leading economy countries in Southeast Asia region and it is also a global and regional migration hub for incoming, outgoing and transiting migrants. According to Thailand Migration Report 2014, it was estimated that 3.6 million of foreigners are residing and working in Thailand, and 2.7 million of them are from Myanmar, Cambodia and Lao PDR. Approximately 85% of these workers come from Myanmar².

Numerous international studies proved that migrants are vulnerable population and they faced many difficulties to utilize health care services in their host countries³⁻⁵. Migrant population may be prone to have more health risks than non-migrant residents because of many barriers. They may lack knowledge about available health care services and sometimes, they cannot access for these services due to their illegal status⁴. Moreover, they are not familiar with existing health care programs and may have difficulty in communication such as language barrier⁶. Generally, the mortality and morbidity rate among migrant mother is higher than host populations⁷. There may be many disparities between Thais and migrants in many aspects associating to livelihoods and the social determinants of health⁸.

Among migrants in Thailand, there are many reproductive health concerns such as family planning, unwanted pregnancy, and high prevalence of sexu-

ally transmitted diseases and poor maternal and child health⁹⁻¹⁰. Although the number of pregnancies among migrant women was relatively high with majority of them (70-80 percent) from Myanmar, during 2010-2012 the rate of pregnancies are ranged within 15,000 to 20,000 per year. However, only half of delivery cases were making antenatal care (ANC) visits at the health center in Thailand². Some common constraints to access to maternal health services may be inadequate health knowledge, legal status, insurance status, living in border provinces and sociocultural factors including language barriers .etc.

Antenatal care is an essential reproductive health care which ensure women for healthy pregnancies and safe deliveries. According to WHO, antenatal care can reduce maternal mortality and morbidity rates directly through the early detection and treatment of pregnancy related illnesses, and indirectly by the identification of pregnant women at increased risk of delivery complications and ensuring safe delivery¹¹. In order to obtain the quality of antenatal care in Thailand, two domains that needed to be considered include timing of visit at early registration within first 12 weeks of pregnancy and regular visits of 5 times or more for ANC services. Although the quality of antenatal care is important to women and child health, the prevalence and associated factors of quality ANC among migrant women is still unknown. The understanding of underlying factors associated with utilization of quality ANC will fulfill the goals of maternal and child health. This study aimed to determine the factors associated with quality antenatal care utilization among Myanmar migrant in Thailand.

Methods

A cross-sectional study was conducted in 2 different places: Mae Sot and Samut Sakhon in Thailand. The data collection was performed in health care facility based setting during 15th May 2016 to 15th June 2016.

The data were collected through face to face interview using structured questionnaires from Myanmar migrant women who delivered the baby within previous 6 months in Thailand regardless of their ethnicity. The participants were well explained about the procedure and benefit of the thesis, and informed consent was obtained from each respondent before starting the interview process. The sample size was calculated by using the 95% confidence interval with 5% error and 60% utilization rate of antenatal care for Myanmar migrant in Thailand from the pilot study in Krathum Baen Hospital. By using the purposive sampling with the above inclusion criteria, the participants were selected from the women who came to the Mae Tao Clinic and Samut Sakhon Hospital. Mae Tao Clinic is a community clinic in Mae Sot and located in Tak province which is also a borderline province with Myanmar. Samut Sakhon Hospital is a governmental Hospital and located in the Samut Sakhon province, inner province of Thailand. Based on the Andersen's behavioral model of health care utilization, the determining factors in this study included predisposing factors, enabling factors, need factors and utilization of quality antenatal care. Under the predisposing factors, place of residence, education, occupation, number of pregnancy, number of children, intention and planning to pregnancy, knowledge and attitude about antenatal care are included. As enabling

factors, legal status, insurance status, family's income, husband's education, husband's occupation, social support, satisfaction to services, accessibility and availability of services were included. Need factors included underlying medical condition, outcome of last pregnancy, obstetric complication of previous and current pregnancies. The dependent variable, utilization of quality antenatal care services, comprised of 2 criteria whether women took early antenatal care visit of within first trimester and regular visit of at least five times. For this information, the answer was counterchecked with maternal and child health record book.

A pilot survey was conducted to test the validity and reliability of the survey. For the reliability, the scale of knowledge and attitude level have Cronbach's Alpha value of 0.605 and 0.634, indicating the scale is reliability. Moreover, the study was approved by the Institutional Review Board of Social Sciences from Mahidol University (MU-SSIRB No: 2016/133.0504). Collected data was analyzed by using Statistical Package for the Social Sciences (SPSS version 21). Descriptive statistics such as mean, frequency, standard deviation, percentage, minimum and maximum were used to describe the general characteristics of the variables. Pearson's Chi-square test, simple logistic and multiple logistic regression tests were used to examine the association between independent variables and dependent variable (quality antenatal care services utilizations). In logistic regression, CODE 1 for quality antenatal care services utilizations (early and regular ANC visits) and CODE 0 for no quality antenatal care services utilizations (late and irregular ANC visits).

Results

Out of 402 respondents, 58% of participants lived in the urban area and 42% came from rural area. Most of them were within normal age group (20-35 years), and having formal education from primary level to tertiary level. Nearly half of the participants were

housewives and 84% of respondents got pregnancy for 2 times and 87% of them had 2 children. Majority of the Myanmar migrant women intended to have baby before they got pregnant and also stayed in Thailand during 1st trimester of pregnancy without having a plan to go back and give birth in Myanmar.

Table 1 Distribution of participants by socio-demographic characteristics

Socio-demographic Characteristics (n=402)	Number	Percentage
Place of residency		
Rural	169	42.0
Urban	233	58.0
Age groups (years)		
High risk group (<20 & >35yrs)	47	11.7
Normal group (20-35yrs)	355	88.3
Mean=27.30, SD= 5.557, Min=17, Max=46		
Education groups		
No education	74	18.4
With formal education	328	81.6
Occupation groups		
No job/ Housewife	189	47.0
Currently working	213	53.0
Number of pregnancy		
≤ 2	338	84.1
> 2	64	15.9
Number of children		
≤ 2	351	87.3
> 2	51	12.7
Intention to pregnancy		
Yes	298	74.1
No	104	25.9
Staying in Thailand during 1st Trimester		
Yes	354	88.1
No	48	11.9
Plan to back Myanmar		
Yes	67	16.7
No	335	83.3

Table 2 shows that 63.2% of women had good knowledge and 53.7% had positive attitude about ANC services. More than 60% of them had legal documents and had some kinds of health insurance. About half of the participants had monthly family's income of more than 12,000 Baht. With regard to need factors, majority have neither underlying medical disease nor

obstetrics complications during pregnancy. Most of the participants got high social support during their pregnancy, and 54.7% had high satisfaction towards ANC services. More than 80% of women had neither underlying medical diseases nor obstetrics complications during their pregnancies.

Table 2 Distribution of participants by independent variables

Independent variables	Number	Percentage
Knowledge levels of ANC services		
High	254	63.2
Low	148	36.8
Attitude levels of ANC services		
Positive	216	53.7
Negative	186	46.3
Legal status		
Yes	277	68.9
No	125	31.1
Insurance status		
Yes	251	62.4
No	151	37.6
Family's Income (Thai Baht/ month)		
High ($\geq 12,000$)	209	52.0
Low ($< 12,000$)	193	48.0
Social support to get antenatal care services		
High social support	348	86.6
Low social support	54	13.4
Satisfaction to ANC services		
High satisfaction	220	54.7
Low satisfaction	182	45.3
Accessibility and availability to get antenatal care services		
High accessibility and availability	243	60.4
Low accessibility and availability	159	39.6
Underlying medical diseases		
Yes	73	18.2
No	329	81.8
Obstetrics complication in last pregnancy		
Yes	49	12.2
No	353	87.8

Table 3 shows that almost every participating woman took antenatal care service at least once during their pregnancy. However, only 62.4% came for early visits within 12 weeks of pregnancy and 73.9% had

regular visits of 5times or more for antenatal care. Overall, 53% utilized quality ANC services in both early and regular pattern of quality antenatal care visit.

Table 3 Distribution of participants by ANC utilization during the last pregnancy

Variables (n=402)	Number	Percentage
Getting ANC at least once during last pregnancy		
Yes	294	98.0
No	8	2.0
Early ANC within 1st trimester		
Yes	251	62.4
No	151	37.6
Number of ANC visits		
Regular (\geq 5times)	297	73.9
Irregular ($<$ 5times)	105	26.1
Utilization of Quality ANC		
Yes	213	53.0
No	189	47.0

Table 4 shows the significant associated factors for utilization of quality antenatal care services. From this study, place of residence, women's education, number of pregnancy, number of children, intention to pregnancy, staying in Thailand in first 3 months, plan to back to Myanmar, knowledge and attitude

level towards antenatal care services, legal status, insurance status, family's income, social support to get antenatal care services, satisfaction about antenatal care services, accessibility and availability of antenatal care services are associated with utilization of quality antenatal care services.

Table 4 Association between independent variables and utilization of quality antenatal care services

Socio- demographic Factors	Utilization of quality ANC			Crude OR (95% CI)	P-value
	n	No (%)	Yes (%)		
Place of residency					
Urban	233	29.6	70.4	5.82 (3.76-8.99)	<0.001
Rural	169	71.0	29.0	1	
Education group for women					
With education	328	44.5	55.5	1.72 (1.03-2.88)	0.036
No education	74	58.1	41.9	1	
Number of pregnancy					
≤ 2	338	43.2	56.8	2.69 (1.53-4.73)	0.001
> 2	64	67.2	32.8	1	
Number of children					
≤ 2	351	44.2	55.8	2.52 (1.36-4.69)	0.003
> 2	51	66.7	33.3	1	
Intention to pregnancy					
Yes	298	41.3	58.7	2.47 (1.55-3.91)	<0.001
No/ Don't know	104	63.5	36.5	1	
Staying in Thailand during 1st Trimester					
Yes	354	42.9	57.1	4.47 (2.20-9.04)	<0.001
No/ Don't know	48	77.1	22.9	1	
Plan to back to Myanmar					
No/ Don't know	335	41.2	58.8	4.55 (2.49-8.31)	<0.001*
Yes	67	76.1	23.9		
Knowledge level of ANC services					
High	254	40.9	59.1	1.94 (1.29-2.93)	<0.001
Low	148	57.4	42.6	1	
Attitude level of ANC services					
Positive attitude	216	38.0	62.0	2.21(1.48-3.30)	0.001
Negative attitude	186	57.5	42.5	1	
Legal Status					
Yes	277	35.4	64.6	4.88 (3.07-7.78)	<0.001
No	125	72.8	27.2	1	
Insurance status					
Yes	251	36.7	63.3	3.10(2.03-4.72)	<0.001
No	151	64.2	35.8	1	
Family's Income					
High income ($\geq 12,000$)	209	38.8	61.2	2.00 (1.34-2.98)	0.001
Low income ($<12,000$)	193	56.0	44.0	1	
Social support					
High social support	348	42.8	57.2	3.81 (2.00-7.27)	<0.001
Low social support	54	74.1	25.9	1	
Satisfaction to ANC services					
High satisfaction	220	35.5	64.5	2.84 (1.89-4.27)	<0.001
Low satisfaction	182	61.0	39.0	1	
Accessibility and availability					
High accessibility	243	41.2	58.8	1.81 (1.21-2.72)	0.004
Low accessibility	159	56.0	44.0	1	

Table 5 shows the result of multiple logistic regression where place of residence, planning to back Myanmar, knowledge level, social support and satisfaction to ANC services are the factors affecting utilization of quality ANC services. In conclusion, after adjusting other variables, women in urban area are 3.5 times more likely to utilize quality ANC services than rural women. Women who had plan to go back to Myanmar are 3.35 times more likely to utilize quality ANC services than those who did not

have plan to go back. Women with higher knowledge level of ANC services are 2.82 times more likely to utilize quality ANC services than those who had lower knowledge. Women with higher social support to ANC services are 2.63 times more likely to utilize quality ANC services than those who had lower social support. Women with higher satisfaction to ANC services are 1.73 times more likely to utilize quality ANC services than those who had lower satisfaction to ANC services.

Table 5 Multiple logistic regression for associated factors in utilization of quality antenatal care services

Variables	Adj. OR	95% C.I. for OR		p-value
		Lower	Upper	
Place of residency				
Urban	3.54	1.47	8.49	0.005
Rural	1			
Plan to back to Myanmar				
No/ Don't know	3.35	1.68	6.64	0.001
Yes	1			
Knowledge level of ANC services				
High knowledge	2.82	1.67	4.74	<0.001
Low knowledge	1			
Social support				
High social support	2.63	1.22	5.63	0.013
Low social support	1			
Satisfaction to ANC services				
High satisfaction	1.73	1.03	2.92	0.038
Low satisfaction	1			

Discussion

The result of this study showed that only 53% of Myanmar migrant women had utilized quality antenatal care services in early and regular pattern visits in Thailand. This result is consistent with the finding of Vietnam research indicating that approximately 54% of Vietnamese women utilized antenatal care services more than four times in eight south central coast provinces in Vietnam¹². However, it is a little bit lower than the study from Myanmar which has 57% of women utilized the recommended number of antenatal visit¹³. According to the data from Myanmar Ministry of Health, there was 69.3% coverage for pregnant women with antenatal visits four times or more at any period of gestation¹⁴. Nevertheless, those previous studies had mentioned only on the number of antenatal visits counting 4 times as standard visit and had not described either early visit or early registration before first trimester of gestation period to define quality antenatal care. The countrywide data concerning antenatal care and post natal care by migrant women in Thailand remains limited². There is no significant data about utilization of quality antenatal care for the Myanmar migrant women in Thailand and this study would be very important finding in the future.

The study found that women in urban area are more likely to utilize quality antenatal care services than women in rural areas. There is a strong association between the place of women's residency and the utilization of quality antenatal care services. The result is consistent with one comparative study in Nigeria where more urban women attended antenatal care up to 4 times than rural counterparts¹⁵. Another study in Vietnam stated that adequate use of ante-

natal care was 5 times in the urban than in the rural settings¹⁶. This urban-rural disparity is also applicable for adolescent pregnant women that utilization of maternal health services is more common among urban married adolescent women than women in rural areas in Bangladesh¹⁷. It had been found that place of residency is the important determinants for early and delay antenatal care in urban and rural areas¹⁸.

Furthermore, women who didn't have plan to go back to Myanmar were more likely to utilize quality antenatal care services than those who had plan to go back to Myanmar to deliver the baby. This result is supported by the study in India where migrant women particularly recent migrants are at the risk of not receiving adequate maternal healthcare services⁵. The pattern of utilization of health services among Myanmar (Burmese) migrants in London is comparable with the utilization of maternal healthcare for Myanmar migrant women in Thailand and it can be said that unstable immigration status were the main barriers and hindering migrants from accessing health care services⁶.

There is a significant and strong association between the knowledge levels towards antenatal care services and utilization of these services in this study. Women who had higher knowledge level were more likely to utilize quality ANC services twice than those with lower knowledge level with p-value of 0.001 in this study. One study in Vietnam is closely similar with this finding and women having higher knowledge utilized antenatal care than lower knowledge women⁵. This result was in the same line as the study from Lao PDR that utilization of antenatal care services was very low among the women with limited knowledge in Lao PDR¹⁹. Moreover, the study

in Myanmar highlighted that women's knowledge is one of the significant predictors for quality utilization of antenatal care services¹³

Social support from the husband, relatives or friends is very important for Myanmar migrant women to utilize quality antenatal care in Thailand. It was much higher to utilize quality antenatal care services in women who got high social support than women with low social support. This finding is consistent with the study in Nepal where husband's involvement is crucial to improve maternal health care utilization in Nepal²⁰. In particular, single mother without living with the child's father were more likely to have late and inadequate use of antenatal care among women even in Brazil and England²¹⁻²².

The result of this study showed statistically association between satisfaction to antenatal care services and utilization of quality antenatal care services. Women with high satisfaction to antenatal care services are nearly three times more likely to utilize quality antenatal care services than women with low satisfaction. In Darussalam province of Indonesia, satisfaction to antenatal care services is one of the significant predictors for antenatal care utilization²³. For the communities with rural-urban differences in utilization of antenatal care services, satisfaction received from antenatal services was higher in the urban settings and so higher proportion of urban women utilized prenatal services more than rural women¹⁵.

There are some limitations of this study. Firstly, although this study was conducted to study the association between utilization of quality antenatal care and its associated factors, there would be many other associated factors influencing the utilization of

antenatal care such as difference in the cultural and ethnicity among Myanmar migrant women. Secondly, the opinions and answers of the respondents may be influenced by their partners because some women may come to the hospital with their husbands, relatives or friends. Finally, the study was conducted only in 2 provinces of Thailand. In order to obtain more generalized result, it should expand more in other locations.

Recommendations

Overall, the utilization of quality ANC services among Myanmar migrant women is 73.9% in Thai communities. The factors affecting utilization of quality ANC services are place of residence (urban/ rural), planning to go back to Myanmar, education, social support and satisfaction to ANC services. Public health intervention programs like massive health education should be implemented to address the determinants of these urban-rural differentials especially for rural women. Moreover, policies aimed at equalities to access for the health care services should be enforced in rural community especially along the borderline area of Thailand. Moreover, it is needed to increase the knowledge of migrant women about quality antenatal by health promotion and health education through the mass media via pamphlets, public health talks, radio, television and social internet network in appropriate language to understand the information clearly.

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