Factors Associated with the Retention in Care After Delivery among Thai Mothers with HIV

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Abstract: The objectives of this retrospective cross-sectional study were to investigate the prevalence and predictive factors in retention of care during the first year after delivery among Thai mothers with HIV. The sample consisted of 185 mothers with HIV infection who gave birth at a public hospital from January 2010 to December 2012. Recruitment and enrollment took place from March - July 2014. Data were collected through self-administered questionnaires and telephone interviews by using 5 questionnaires: the Personal Information, Access to Health Care, Receiving HIV Care, Attitudes toward Health Care Providers, and Short Form-HIV Stigma Scale. Data were analyzed using descriptive statistics and logistic regression analyses.

Results showed that 77.3% of the participants were retained in care at the HIV clinics with 46.5% at obstetric and gynecology clinics. The results of logistic regression analysis revealed that the predictive factors of retention in care at HIV clinics explained 80% of the variance. The factors predictive of retention in care at obsetetric and gynecology clinics were official referral and disclosure of HIV status. These factors explained 14% of the variance of retention in care at these clinics.

The results suggest that health care providers should have an effective system to refer patients to their registered hospital and improve benefits of health coverage to be relevant to patients' need. In addition, the management of HIV care should address the individual patient's self-disclosure.

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Introduction

In Thailand, the prevalence of newly-identified HIV cases is approximately 1% of all individuals screened.[1] Recent data suggest that the greatest number of HIV detections is in pregnant women when compared with other populations with HIV screening. From 2011 to 2013, the average nationwide prevalence rates for HIV infection among pregnant women stabilized at about 0.57 percent,

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while the prevalence rates in Bangkok ranged from a low of 0.61% in 2008 to a high of 0.94% in 2012.[1] Previous studies have shown that CD4 counts decrease during the postpartum period. Low immunity level is a strong risk factor for morbidity or opportunistic infections and frequent hospitalizations. As such, the compromised health of postpartum mothers HIV positive (HIV+) has important consequences for the long-term health of both mothers and babies. Further, targeting the needs of women HIV+ in the postpartum period has important implications for containing health care costs by improving HIV-specific health outcomes and reducing emergency department visits and hospitalizations. As such, the postpartum period represents a critical time frame for engaging or retaining mothers in HIV treatment.

To date, the majority of research among pregnant women HIV+ has been aimed at reducing the rate of mother-to-child transmission. Comparatively fewer studies have focused on engaging and retaining women HIV+ in the postpartum period in HIV-related care. For postpartum mothers with HIV, referral between obstetric and gynecology (OB & GYN) and HIV care clinics is an important opportunity to engage these mothers in care for continued monitoring of their health. Engagement in HIV-specific health care includes both treatment initiation and long-term follow-up and monitoring and is critical the management of this chronic illness. For example, among women without antiretroviral therapy (ART) indications, continuous monitoring every 6 months is needed to detect changes in viral load, CD4 counts and the development of opportunistic infections.[2] For mothers on ART, engagement in health care services is needed to prevent medication interruptions, maintain immunologic levels,[3] prevent HIV drug resistance, and monitor the effects of therapy.[4]

To date, there have been only two studies that report specifically on postnatal check-ups to assess the health status of Thai mothers with HIV. Chalermpichai and colleagues[5] studied the prevalence of loss to postpartum follow-up in mothers with HIV. They found that approximately 61% of mothers who delivered at a large public hospital in Bangkok returned to the postpartum clinic at 6 weeks after giving birth. A second study conducted by Kongyu[6] focused on provinces outside of Bangkok and reported that only 38.5% of the mothers with HIV had regular interval check-ups during the two years after delivery. Therefore, this study was launched to study the prevalence and predictive factors of retention in care at the first year after delivery among Thai mothers with HIV.

Literature Review and Conceptual Framework

Based on the extant literature, retention in care has been shown or hypothesized to be influenced by factors associated with the health service system[7] and personal-level factors.[8] Health service system factors include health coverage, access to health care, receiving HIV care, and referral.

Access to health coverage has been shown to facilitate engagement in HIV care and treatment.[9] Many kinds of Thai health coverage cover the different costs of HIV care and the receipt of health services varies according to that health coverage.[10] Access to health care means a person's personal care experiences with medical care services (affordability, availability, convenience, and access to specialists)[11] such as costs of HIV treatment, distance between home and the health care setting, a lack of HIV specialists, and substandard health service provision.[12] Therefore, access to health care factors is associated with retention in care. Regarding receiving HIV care meant that people received holistic care, especially health education and consultation, antiretroviral (ARV) drug provision, and medical appointment by coordinating nurse.[13] Referral means a healthcare process that results in the transfer of patient care from

a referring provider to a secondary service or provider, and transfer back when and if appropriate.[14]

Several patient factors have been identified as facilitators of and barriers to retention in care in mothers with HIV including attitudes toward HCPs, stigma, disclosure of HIV status, and perceived health status. Attitudes toward HCPs are the assessment and interpretation of patients on their environment and on their interactions with their HCPs.[15] These concepts include professionalism and emotional support that are influenced by personal beliefs and experiences from prior health service utilization. Negative attitudes are considered as a barrier to the use of health services while positive attitudes have been significantly related to greater out-patient appointment attendance at HIV clinics.[16]

Stigma refers to individual perceptions about societal attitudes toward people with HIV and their self-awareness of being infected with HIV. Stigma has been accepted widely as a serious obstacle to the success of HIV/AIDS prevention programs such as the prevention of mother-to-child transmission (PMTCT) service. It is associated with violations and deprivations of several rights including the right to health and treatment.[17] Although studies in Nigeria[18] and Zimbabwe,[19] show trends toward more accepting attitudes towards people living with HIV/AIDS (PLHA), in Thailand stigma is still a barrier to retention in care because of fear of exposure and personal or family humiliation.[20] Therefore, stigma might be associated with retention in care of mothers with HIV.

Disclosure of HIV status is sharing information about patients' HIV status to partner, parents, or relatives. Disclosure of HIV status might bring more difficulties to the patients' lives and to their infants because they fear rejection and discrimination. On the other hand, disclosure may be helpful to get HIV treatment and retention in care.[21] Perceived health status is an individual patient's assessment of her general health. Most Thai mothers with HIV have asymptomatic infection, and perceive themselves to be in good health, thus decreasing the likelihood of engaging in care after delivery.[22] In summary, the literature review was synthesized into a conceptual framework, which depicted the relationships among the health service system, personal-level factors, and retention in care as shown in Figure 1.

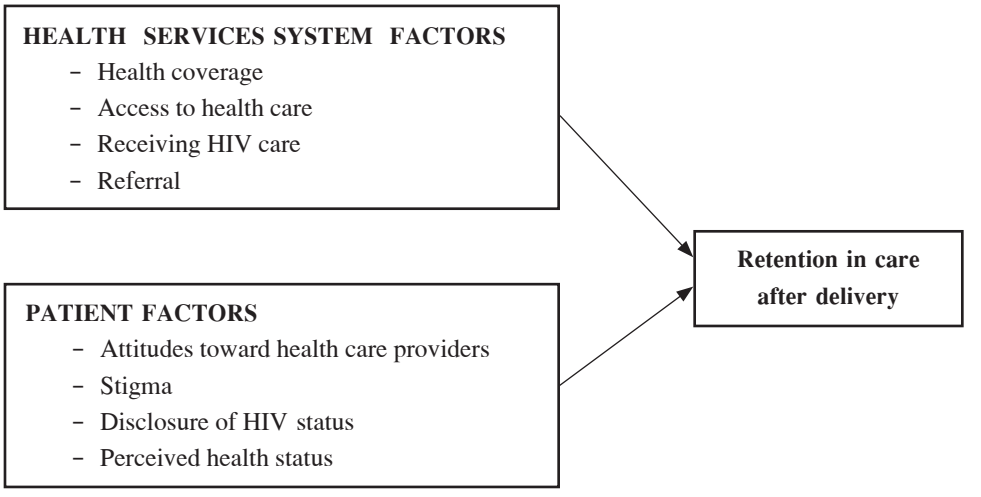

Figure 1. Research framework of the study

Study Aim

Retention in care among Thai mothers with HIV infection is an important public health issue. However, little is known about the predictors of retention in care among this vulnerable and underserved population. To address this gap in the literature, the aim of the current study were to examine rates and predictors (health service system and patient factors) of retention in HIV-specific treatment among Thai mothers during the first year following delivery.

Methods

Study Design: This was a retrospective cross-sectional study.

Setting: The study was conducted at a Thai tertiary care university hospital which has implemented a PMTCT program according to the National Guidelines on the Care and Treatment.[23] Service provision for pregnant women with HIV is provided by collaboration between the OB & GYN and HIV out-patient clinics. The OB & GYN clinic provides fetal health monitoring and sexually transmitted disease screening. At the HIV clinic, the physician specialized in infectious disease provides HIV physical examination, health monitoring, and ARV drugs prescription. After delivery, the mothers are referred to a HIV clinic according to their health coverage or registered hospital–primary or secondary care, public or private hospital in central and regional province–to continue health follow-up. The OB & GYN staff passed mothers' personal and medical history to the HIV clinic, if the patients were referred within this hospital.

Sample Size Estimation: The sample size was calculated by an epidemiological formula[24] using the proportion of retention in care in postpartum mothers with HIV from a prior study, 38.5%.[5] The actual probability of a Type I error is expected to fall between .03 and .07 at the nominal level of α of .05. The significance level (1-a or Type I error) equal to .07 and power of testing (1-b or Type II error) equal to .70 was determined. Therefore, 185 mothers with HIV were needed to participate in the study.

Populations & Sample: 283 mothers with HIV who had given birth in a large university hospital in Bangkok from January 1, 2010 to December 31, 2012 were eligible for the study. Ninety-eight eligible mothers did not participate in this study: 90 mothers were not able to be approached due to an unavailable phone number, 5 refused to participate, and 3 had died. Study inclusion criteria were: 1) aged 18 years and older, 2) knew their HIV+ status, 3) able to listen, speak, read, and write Thai language, and 4) agreed to participate voluntarily. Finally 185 mothers with HIV were recruited to the study.

Measures:

Demographic and background characteristics of study participants were obtained including age, marital status, educational level, occupation, family income, a number of family members, health coverage, average cost spent per each visit, disclosure of HIV status, referral, and retention in care.

Access to health care was measured with the *Access to Health Care Questionnaire* (AHCQ).[25] It has subjective ratings of affordability (1 item), availability (3 items), convenience (1 item), and access to specialists (1 item). Each item is rated on a 5-point Likert scale ranging from 1 (strongly agree) to 6 (strongly disagree). Scores range between 6-30 points with higher scores indicating better access to care. An example of access to health care is "Places where I can get medical care are very conveniently located." The AHCQ was back translated to investigate the equivalence of meaning between English and Thai languages. Three HIV experts validated content of the Thai language version using a 4-point rating scale: (1) not relevant, (2) somewhat relevant, (3) quite relevant, and (4) very relevant.[26] Any discrepant items were discussed and revised until at least 2 of the 3 HIV experts agreed on the content. In this study, the Cronbach's alpha was 0.62.

Receiving HIV care was measured with the *Receiving HIV Care Questionnaire* (RHCQ) developed by the researcher based on a literature review, observation, and interviews with two nurses; one at OB & GYN and the other at HIV out-patient clinics. The instrument has 2 sets of questions including 5 items for assessment mothers' receipt of services provided by HIV nurses working at OB & GYN clinics and 5 items HIV nurses working at HIV clinics. The questionnaire assesses receiving HIV care including assessment of health problems, provision of individual counseling and health education, management of medical appointments, and coordination between clinics and other health units. A sample item is "Nurse contacted you to inquire about the reasons for missing an appointment and reschedule for the new appointment." Each item consists of yes or no response (Answer: Yes = 1, No = 0). A higher score indicates more services received from the HIV nurse. In this study, the Kuder-Richardson method obtained for the measure was 0.92.

Attitudes toward health care providers was measured with the 19-item *Attitudes toward HCPs* (AHHCP) developed by Bodenlos and colleagues.[15] The extent of agreement with different attitudes toward the medical team is assessed with a 6-point Likert scale that have both positive and negative questions. For positive items, rating scores were ranged from 1 (strongly disagree) to 6 (strongly agree); conversely, the scale is arranged from 1 (strongly agree) to 6 (strongly disgree) for negative items. Scores range between 19-114 points with the higher scores indicating more positive attitudes. The AHHCP was back translated according to Maneesriwongul's guideline[26] by 3 HIV experts. An item example is "My medical team puts an effort into my treatment." In this study, the Cronbach's alpha was 0.95.

Stigma was measured with the *Short Form-HIV Stigma Scale* (SF-HIVSS) of Maneesriwongul.[27] It has 8-items that measure an individual's perception of society toward people with HIV and personal knowledge of being infected with HIV. A sample item is "I am very careful whom I tell that I have HIV." Each item is measured on a 4-point Likert scale ranging from 1 strongly disagree to 4 strongly agree. The total scores range from 8 to 32 with a higher score representing a higher level of perceived stigma. Cronbach's alpha in this study was 0.86.

Health status was assessed with a 100 millimeter horizontal line (visual analogue scale) with end-point of 100 (healthy) and 0 (unhealthy). Respondents identify a point on the scale at a position which best represents their current perceived health status with a question "How do you feel about your health status for HIV/AIDS?" The visual analogue scale was transformed linearly to a 0 to 10 scores, where 0 represents unhealthy, and 10 represents healthy.

Retention in care referred to continued attendance at any hospital for care and treatment at HIV and/or OB & GYN out-patient clinics during the first year after delivery. In each clinic, retention in care was evaluated per the match between the number of patients' clinic visits and frequency of medical schedule appointment. The participants were categorized as "retention" if they attended the clinic visit within 4 weeks of the scheduled appointment; "non-retention" if they did not come for a scheduled appointment or came later than 4 weeks after appointment.

The content validity index (CVI) of all measures was 0.90. Any discrepant item was discussed and revised till there was agreement with at least 2 of 3 experts.

Ethical Considerations: The study was reviewed by the Ethical Committee of Siriraj Institutional Review Board and approved to waive attainment of written consent (Protocol No. 727/2556). In order to maintain the participants' confidentiality, a staff of each clinic who could access medical data was requested to be research assistants. The research assistants initiated contact with the potential participants to explain the research project, and asked for their voluntary participation in the study and permission to introduce the researcher. The researcher gave the participants the clinic's address and telephone number to call back if they had doubts about the study. Participants' information was kept confidential.

Data Collection Procedures: The participants who attended the clinic could complete the questionnaire at that clinic or made an appointment to conduct a phone interview. For the participants who did not attend, the research assistant first called them to describe the characteristics of project; ask for consent before participation in the study and disclosure of their HIV status to the researcher. All participants who were willing to be contacted by phone were given a secret code for the next contact to increase personal identification accuracy. Data were collected by self-administered questionnaire (71 mothers) and telephone interview (114 mothers) between March 1 and July 31, 2014. It took each participant approximately 18-35 minutes to complete the questionnaires.

Data Analysis: **Data were analyzed using descriptive statistics and logistic regression.** Descriptive statistics including frequencies, percentages, and means used to describe demographic data of the participants. Prior to the univariate logistic regression, the data of four variables (health coverage, referral, disclosure of HIV status, and retention in care) were coded and categorized into 2 groups. Health coverage included self-payment and able to be reimbursed for costs of care and treatment. Referral included official referral and non-referral. Disclosure of HIV status included disclosure and non-disclosure. Retention in care included retention and non-retention. Univariate logistic regression analyses were used to examine the association between the eight potential predictors and retention in care and multivariate logistic regression analyses were used to determine the predictors of retention in care.

Results

Sample Characteristics

The characteristics of study sample (N = 185). The ages of the mothers ranged from 18 to 44 years with the mean age of 31.30 years (SD = 6.07). More than half (52.4%) of the mothers were aged between 31-40 years old. The majority (80%) cohabited with their partners. In terms of educational level, about 34.1% of the mothers completed junior high school, whereas 21.6 percent graduated from senior high school, while 29.7% of the mothers were housewives and a similar number were laborers (27.6%). Twenty-seven percent of the mothers had family income of between 9,001 - 15,000 baht. More than three quarters (77.3%) of the participants had retention in care at HIV clinics while only 46.5% had retention in care at OB & GYN clinics.

The participants who were retained in care at HIV clinics had higher percent of health coverage (96.5%), received official referral (88.8%), and disclosure of their HIV status (86.0%) than those with non-retention in care. On the other hand, at OB & GYN clinics, most participants (92.9%) who had health coverage were not retained in care at a OB & GYN clinic. The percentage of receiving official referral in the participants who were retained in care at OB & GYN clinics had higher than those with non-retention in care. The percentage of disclosure of HIV status in the participants who were retained in care at OB & GYN clinics had slightly higher than those with non-retention in care, as shown in Table 1. At the HIV clinics, the mean scores for access to health care, receiving HIV care, attitudes toward health care providers (AHHCP), and perceived health status were higher among the participants who had retention at the clinic than those with non-retention in care. The mean score for stigma among the participants who were not retained in care at HIV clinics was higher than those with retention in care. At the OB & GYN clinics, the mean scores for access to health care, receiving HIV care, AHHCP, and stigma were similar among the participants who had retention as participants who were retained at the HIV clinics. However, the participants who were retained at the OB & GYN clinics had the same perceived health status scores as those who were not retained in care (Table 2.).

Table 1. Frequency and Percentage of Study Variables (N=185)

Variables	HIV clinics				OB&GYN clinics			
	Retention (n=143)		Non-retention (n=42)		Retention (n=86)		Non-retention (n=99)	
	N	%	N	%	N	%	N	%
Health coverage								
- Health coverage	138	96.5	36	85.7	49	57.0	92	92.9
- Self-payment	5	3.5	6	14.3	37	43.0	7	7.1
Referral								
- Referral	127	88.8	7	16.7	74	86.0	60	60.6
- Non-referral	16	11.2	35	83.3	12	14.0	39	39.4
Disclosure of HIV status								
- Disclosure	123	86.0	29	69.0	77	89.5	75	75.8
- Non-disclosure	20	14.0	13	31.0	9	10.5	24	24.2

Table 2. Mean and Standard Deviation of Study Variables (N=185)

Variables	HIV clinics				OB & GYN clinics			
	Retention		Non-retention		Retention		Non-retention	
	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD
Access to Health Care	22.29	4.02	19.76	3.59	22.28	4.14	21.23	3.94
Receiving HIV Care	8.68	2.38	6.83	3.98	8.70	2.41	7.88	3.26
AHHCP	99.66	14.11	99.50	14.25	100.47	13.26	98.90	14.83
Stigma	24.48	5.38	25.48	5.44	24.57	5.45	24.83	5.38
Perceived Health Status	8.34	1.50	7.71	1.97	8.20	1.44	8.20	1.79

AHHCP=Attitudes toward health care providers

At HIV clinics, univariable logistic regression analyses revealed that six out of eight important factors were significantly associated with retention in care including health care coverage, referral, disclosure of HIV status, access to health care, receiving HIV care, and perceived health status. However, at the OB & GYN clinics, only two out of eight factors were significantly associated with retention in care, referral and disclosure of HIV status. Only significant variables from univariate logistic regression analyses were entered to multivariate analyses.

At HIV clinics, the result revealed that three factors (health coverage, referral, and perceived health status) could predict retention in care at HIV clinics, as shown in Table 3. The results also indicated that after controlling for the effect of other variables, the odds of retention in care at HIV clinics for mothers who had reimbursement of health coverage as a ratio to the odds for the mothers with self-payment equaled 46.32. Regarding referral, the odds of retention in care at HIV clinics for mothers who were referred to another HIV clinic, as a ratio to the odds for the mothers who were not referred, equaled 8.90. In regard to perceived health status, the findings indicated that every one unit of increased perceived health status increased the odds of retention in care at HIV clinics by 50%. These three significant factors could present the variance of retention in care at HIV clinics during the first year after delivery at 80%.

Table 3. Multivariate Logistic Regression Analysis of Predictive Model of Retention in Care at HIV Clinics (N=185)

Factors	b	S.E.	Wald	*p*	Exp(B)	95%CI
Health care coverage	3.84	0.79	23.60	<.001	46.32	9.86-217.71
Referral	2.19	0.66	10.99	<.01	8.90	2.44-32.44
Disclosure of HIV status	0.74	0.76	0.93	>.05	2.09	0.47-9.35
Access to health care	0.03	0.08	0.14	>.05	1.03	0.88-1.21
Receiving HIV care	-.008	0.11	0.005	>.05	0.99	0.80-1.23
Perceived health status	0.40	0.19	4.62	<.05	1.50	1.04-2.17
Constant	-6.97	2.23				

-2LL = 85.94, Nagelkerke's R^2 = 0.80

At OB & GYN clinics, two factors (referral and disclosure of HIV status) could predict retention in care at OB & GYN clinics, as shown in Table 4. The results also indicated that after controlling for the effect of other variables, the odds of retention in care at OB & GYN clinics for the mothers who were not referred was equal to 3.80. In regard to disclosure of HIV status, the finding indicated that the odds of retention in care at OB & GYN clinics for mothers who had disclosed their HIV status as a ratio to the odds for the mothers who had not was equal 2.46. These two significant factors could present the variance of retention in care at OB & GYN clinics during the first year after delivery at equal to 14%.

Table 4. Multivariate Logistic Regression Analysis of Predictive Model of Retention in Care at OB & GYN Clinics (N=185)

Factors	b	S.E.	Wald	*p*	Exp(B)	95%CI
Referral	1.33	0.38	12.51	<.001	3.80	1.81-7.95
Disclosure of HIV status	0.90	0.44	4.21	<.05	2.46	1.04-5.80
Constant	-1.89	0.49				

-2LL = 235.46, Nagelkerke's R^2 = 0.14

Discussion

In this study, approximately 77% of the mothers had retention in care at HIV clinics while only 46.5% had retention in care at OB & GYN clinics. Rates of retention in care was higher than those reported in prior studies conducted in Thailand[5, 6] and the United States.[28] Moreover, retention in care was higher at the HIV clinics than at the OB & GYN clinics, especially retention at the university hospital, because most mothers received financial support from the research project for HIV treatment and travel expenses.

Several factors were associated with the retention in care after delivery. First, one of the key predictors of retention in care for both clinic types was official referral. Most mothers had health care coverage at other hospitals therefore they needed to receive official referral in order to be retained in care. This result is consistent with a study in Kenya[29] where direct referral from clinic-to-clinic before patients' discharge increased clinical retention. Second, two predictors, health care coverage and perceived health status, significantly predicted retention in care at the HIV clinics, but did not significantly predict retention in care at the OB &

GYN clinics. In regard to health care coverage, more than 90% of participants had health care coverage. The available health care coverage schemes covers free HIV treatment, but did not cover the cost of a Pap smear. At present, a person who is HIV+ and has universal health coverage can transfer their benefits to any hospital for HIV treatment only by consent of the transferring hospital.[30] However, at OB & GYN clinics, most mothers could not take advantage of their health care coverage for Pap smear screening because their registered hospitals charged for this. However, 20% of the participants were willing to pay by themselves to facilitate retention in care at OB & GYN clinic. The mothers who could not pay this cost were not retained in care at the OB & GYN clinics. Therefore, the provision of a free service system contributed to higher patient retention in care at HIV clinic but not at OB & GYN clinic.

Regarding perceived health status, findings from this study differ from several previous studies. Although mothers perceived good health, they were retained at HIV clinics because of their perceptions of the necessity for treatment.[31] On the other hand, most mothers were not aware of the higher risk of cervical cancer in persons with HIV; pathological changes of the cervix are detected by cervical screening only.[32] Therefore, if the patients considered themselves at low risk for this disease, they would not screen for cervical cancer or be retained in health care.[33] Third, disclosure did not significantly predict retention in care at the HIV clinics because health care coverage and official referral were two greatly influential variables in the prediction equation of multivariate analysis at HIV clinics as aforementioned.

Fourth, four factors did not significantly predict retention in care at either the HIV or the OB & GYN clinics: access to health care, receiving HIV care, AHHCP, and stigma. Regarding access to health care, this finding is different from a study in sub-Saharan Africa.[34] In this study, access to health care measured perceived problems with access of the mothers when they became sick during the first year after delivery. Most mothers were never sick or had only minor illness such as headache. Thus, they used health service at clinics near their home or treated those symptoms by themselves. In regard to receiving HIV care and retention at HIV clinics, this result is not congruent with studies in several countries such as Taiwan[35] and Japan,[36] in which their health care systems provide comprehensive care by several HCPs who work together as a multidisciplinary team. In this study, some mothers received ANC at a hospital, but were referred to another hospital only for delivery. These women met a nurse only for a short period of time at the postpartum ward before being discharged, which was not enough time to increase retention in care after delivery.[37] In addition, during ANC, the mothers received HIV care from different clinics that meant a difference in the process of HIV care. Regarding AHHCP, findings from this study are inconsistent with several studies.[37, 38] Attitudes in this study were derived from the experience of the women in contacting health care providers during antenatal to postpartum care. It does not affect retention in long-term care after giving birth. Relating to stigma, this finding is also inconsistent with several studies.[30, 34,] Although, most mothers experienced high levels of social stigma, this may motivate individuals to seek support from their health care providers and thus be retained in care.[39]

Limitations

The limitations of this study are related to data collection which might lead to three types of bias[40] as follows. Firstly, there is the potential for recall bias. Several mothers had given birth in the past two or three years, so they could not fully recall the situation during that period. Their answers might have deviated from the actual circumstances through recall bias. Secondly, there is potential response bias. The registered nurses or health care providers of the clinics who were familiar with the patients introduced them to the

research project and the researcher. This might have resulted in overestimated scores of receiving HIV care and AHHCP. Moreover, during data collection at the HIV clinic, the university hospital where the research project was conducted provided free laboratory testing and ARV drugs for the patients. This might have affected the number of patients who were retained at the hospital. Therefore, the prevalence rate of retention in care is more likely to have been overestimated. Finally, there is potential non-response bias. This research was based on convenience sampling; non-respondents (34.6% of population) may have differed from those who responded and their exclusion could have led to non-response bias.

The measure of access to health care is another limitation as the internal consistency (Cronbach's alpha) in this study was 0.62. This instrument was developed to use for AIDS-advanced stage patients who were in urgent need of care. Therefore, it might not have been an appropriate for measure in asymptomatic patients. Finally, the research findings might have limitation in generalization. In addition, the data were collected only the setting that had research program to improve retention in care among asymptomatic mothers with HIV.

Conclusions and Implications for Health Care Policy and Nursing Practice

This study fills a significant gap in the extant literature by examining factors associated with retention in care after delivery among Thai mothers with HIV. Three factors were predictive of retention in care at HIV clinics: official referral, health coverage, and perceived health status. Two factors were predictive of retention in care at OB & GYN clinics: referral and disclosure of HIV status.

Based on the findings of this study, policy makers should pay greater attention to having a roadmap to construct an effective referral system and linkage to HIV health service for enhancement of retention in HIV care. Mothers who use a social security scheme or universal coverage should have a chance to determine their registered hospital by themselves so they can have ease of access. Moreover, policy makers might consider the possibility of improving health benefits of health care coverage to be more relevant to individuals' needs. The health care policy should also determine a framework for monitoring the health coverage operational management of health care facilities in accordance with the HIV treatment guidelines to reduce barriers to patients' health service utilization, especially in private hospital. Moreover, the health care policy should provide equally proactive care for both HIV symptomatic and asymptomatic patients.

In regard to nursing practices, nurses should emphasise the importance of retention in care after delivery during postpartum period; the possibility of retention in care at registered hospitals under their health care coverage or other health facilities; their registered hospital according to their census registration; the treatment plans for mobile workers who have their registered hospital in a rural area; and asking for permission to provide a formal transfer letter to another health facility. Moreover, nurses should help the individual mothers plan for their disclosure. This should include discussing and thinking about what needs to be considered prior to disclosure, developing communication and language skills applicable to disclosure, and preparing for potential reactions and outcomes to disclosure.

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ปัจจัยที่เกี่ยวข้องกับการคงอยู่ในการดูแลสุขภาพของมารดาหลังคลอดที่ติดเชื้อเอชไอวี

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บทคัดย่อ: การวิจัยครั้งนี้เป็นการศึกษาย้อนหลังแบบภาคตัดขวาง มีวัตถุประสงค์เพื่อศึกษาความชุกของการคงอยู่ในการดูแลสุขภาพ และทดสอบปัจจัยทำนายการคงอยู่ในการดูแลสุขภาพในช่วงหนึ่งปีแรกหลังคลอดบุตรของมารดาที่ติดเชื้อเอชไอวี กลุ่มตัวอย่างที่ใช้ในการศึกษาครั้งนี้คือ มารดาติดเชื้อเอชไอวีที่คลอดบุตรที่โรงพยาบาลของรัฐแห่งหนึ่ง ระหว่างวันที่ 1 มกราคม พ.ศ. 2553 ถึง 31 ธันวาคม พ.ศ. 2555 จำนวน 185 ราย เก็บข้อมูลระหว่างวันที่ 1 มีนาคม - 31 กรกฎาคม พ.ศ. 2557 โดยการตอบแบบสอบถามด้วยตนเองและการสัมภาษณ์ผ่านทางโทรศัพท์โดยใช้ 5 แบบสอบถาม ได้แก่ แบบสอบถามข้อมูลส่วนบุคคล การเข้าถึงการดูแลสุขภาพ การได้รับการดูแลทางด้านเอชไอวี ทัศนคติที่มีต่อผู้ให้การดูแลสุขภาพ การรับรู้ตราบาปเกี่ยวกับเอชไอวีฉบับย่อ วิเคราะห์ข้อมูลโดยใช้สถิติเชิงบรรยาย และการวิเคราะห์ถดถอยลอจิสติก

ผลการวิจัยพบว่า 77.3% ของแม่ที่ติดเชื้อเอชไอวีคงอยู่ในการดูแลสุขภาพที่คลินิกเอชไอวี ขณะที่ 46.5% ของแม่ที่ติดเชื้อเอชไอวีคงอยู่ในการดูแลสุขภาพที่คลินิกสูติศาสตร์-นรีเวชวิทยา ผลการวิเคราะห์ถดถอยลอจิสติกพบว่า ปัจจัยที่สามารถร่วมทำนายการคงอยู่ในการดูแลสุขภาพของมารดาที่คลินิกเอชไอวี ได้แก่ หลักประกันทางสุขภาพ การส่งต่อแบบเป็นทางการ และการรับรู้สภาวะสุขภาพ โดยทั้งสามปัจจัยร่วมกันอธิบายโอกาสในการคงอยู่ในการดูแลสุขภาพของมารดาที่คลินิกเอชไอวีได้ร้อยละ 80 ปัจจัยที่สามารถทำนายการคงอยู่ในการดูแลสุขภาพของมารดาที่คลินิกสูติศาสตร์-นรีเวชวิทยา คือ การส่งต่อแบบเป็นทางการ และการเปิดเผยการติดเชื้อเอชไอวี โดยทั้งสองปัจจัยร่วมกันอธิบายโอกาสในการคงอยู่ในการดูแลสุขภาพของมารดาที่คลินิกสูติศาสตร์-นรีเวชวิทยา ได้ร้อยละ 14

ข้อเสนอแนะจากงานวิจัย ผู้ให้การดูแลสุขภาพควรจัดให้มีระบบการส่งต่อผู้ป่วยที่มีประสิทธิภาพไปยังสถานบริการพยาบาลที่ผู้ป่วยมีสิทธิหลักประกันสุขภาพ และปรับปรุงบริการของสิทธิประโยชน์ชนิดต่างๆ ให้สอดคล้องกับความจำเป็นในการใช้บริการของผู้ป่วยโดยรวมอย่างแท้จริง นอกจากนี้การจัดการดูแลผู้ติดเชื้อเอชไอวีควรคำนึงถึงการเปิดเผยตนเองของมารดาแต่ละรายด้วย

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คำสำคัญ: การติดเชื้อเอชไอวี ช่วงหลังคลอด สตรีตั้งครรภ์ การคงอยู่ในการดูแลสุขภาพ ประเทศไทย

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