

CHAPTER IV

RESULTS

This descriptive cross-sectional study was conducted in Mae Tao Clinic in Mae Sod District of Tak Province, Thailand. The study investigated factors that influenced HIV positive pregnant women to complete ARV prophylaxis before delivery. In this study, it had been planned to study all (119) the known HIV positive pregnant women who had attended ANC in Mae Tao Clinic and had been registered in the PMTCT program. Nearly a quarter (28) of HIV positive pregnant women were excluded because they were either dead or too ill to be interviewed. Of the remaining 91 HIV positive pregnant women, a tenth (11%) were interviewed during the pre-testing of the questionnaire, three quarters (75%) were traced and interviewed for this study, and 14% could not be traced and therefore were lost cases.

Some of the reasons for the missing 13 HIV positive pregnant women could not be traced were that they may have moved on, since they were trans-migrants always moving between the borders in search of jobs and thus could not be tracked during the data collection period. It can be assumed that the results, from 75% (68) HIV positive pregnant women who participated in the research, are representative but they cannot be generalised to determine factors that influence HIV positive pregnant women completing ARV prophylaxis between HIV positive pregnant women in general. From the clinical data, it was known that the missing interviewees had

similar characteristics with those interviewed. Such factors include; they were HIV positive pregnant women, they fell into the same age bracket (22-36 years with a mean age of 28.6 years); the number of children ranged from 0-3 children per woman, they too were migrants living in the same border; and had same nationality and ethnic background.

The results were divided into the following parts:

4.1 Description of socio-demographic characteristics.

4.2 Description of dependent variable.

4.3 Description of independent variables.

4.3.1 Knowledge, attitude towards mother to child transmission of HIV/AIDS

4.3.2 Accessibility to health care services (PMTCT program)

4.3.3 Economic status

4.3.4 Different types of social support

4.4 Description of association

4.4.1 Association between pre-disposing factors and completion of ARV prophylaxis

4.4.2 Association between enabling factors and completion of ARV prophylaxis

4.4.3 Association between reinforcing factors and completion of ARV prophylaxis

4.1 Description of socio-demographic characteristics of HIV positive pregnant women

The HIV positive pregnant women ranged in age from 18 to 44 years and the mean age was 28.9 years. Sixty nine percent (47) were between the ages of 24 and 35 years. The education level of 50% (34), of the respondents was to primary level, 46% (31) were housewives and 47% (32) had never had children. Approximately, 47% (32) of respondents were living in the Mae Sod District. More than half 56% (38) had no official migration documents in Thailand.

Majority of the respondents 72% (49) were of Burman ethnicity and 94% (64) were Buddhist by religion. More than three-quarters of the respondents 77% (52) had less than Thai-Baht 1,000 as monthly family income. Socio-demographic characteristics of the respondents are summarised in Table 4.1.

Table 4.1: Socio-demographic characteristics of the respondents (n=68)

Characteristics	Number	Percentage
Age (years)		
18-24 years	13	19.1
25-35 years	47	69.1
More than 35 years	8	11.8
Ethnicity		
Burman	49	72.1
Karen	14	20.5
Others	5	7.4
Marital status		
First married	35	51.5
Second and more than	30	44.1
Widow/Divorce	2	2.9
Separated	1	1.5
Education		
No education	19	27.9
Primary School	34	50.0
Middle School	11	16.2
High School	4	5.9
Religion		
Buddhist	64	94.0
Islamic	3	4.4
Christian	1	1.5
Residents		
Mae Sod, Thailand	32	47.1
Myawaddy, Burma	31	45.6
Phophra, Thailand	4	5.9
Others	1	1.5
Employee status		
House-wife/unemployed	31	45.6
Formally employed	28	41.2
Self-employed	9	13.2
Migration Status		
Unofficial	38	56
Official	30	44

Table 4.1: Socio-demographic characteristics of the respondents (n=68) (cont.)

Characteristics	Number	Percentage
Monthly household income		
< 1,000 Thai Baht	52	77
1,000 – 2,000 Thai Baht	13	13
>2,000 Thai Baht	3	4
Type of family		
With parent in law	11	16
With parent	17	25
With own family	40	59
Number of Children		
No children	32	47
1-3 Children	32	47
>3 Children	4	6

4.2 ARV prophylaxis completion among HIV positive pregnant women

According to the World Health Organization Highly Active Antiretroviral Therapy (HAART) adult guidelines and Perinatal HIV Prevention Trial (PHPT) guidelines, the prescribed therapy for HIV positive women is Zidovudine (AZT) 300mg, twice a day continuously, from the 28th week of gestation until childbirth, or Zidovudine (AZT) 300mg twice a day continuously for a four-week period, before childbirth. In this study, 53% (36) HIV positive pregnant women did not complete their ARV prophylaxis whereas 47% (32) completed the ARV prophylaxis. (See Table 4.2).

Table 4.2: Frequency and percentage of HIV positive pregnant women's completion of ARV prophylaxis (n=68)

Particulars	Number	Percentage
Completed ARV prophylaxis	36	53
Did not complete ARV prophylaxis	32	47

4.3 Description of Independent variables

4.3.1 Knowledge and attitude towards mother to child HIV/AIDS transmission

Results from this study show that the respondents had low knowledge about prevention of mother to child HIV/AIDS transmission. One-third 31% (21) of respondents had a high knowledge level of prevention of HIV/AIDS mother to child transmission. The means score of knowledge was 60%, with a standard deviation of 2.5. The minimum score was 0, and the maximum score 12 points possible to be attained. Of special note was that few women knew about safer methods of delivery such as cesarean section. Table 4.3 shows the knowledge level of respondents.

Table 4.3: Respondents knowledge level of prevention of HIV/AIDS transmission from mother to child (n=68)

Knowledge level	Number	Percentage
High (9-12 scores)	21	31
Low (0-8 scores)	47	69
$\bar{X} = 7.18$	SD=2.47	Minimum = 0 Maximum = 12

Responses to the 6 specific knowledge items are summarised in Table 4.4. When considering each item of their knowledge about prevention of HIV/AIDS mother to child transmission, which had 8 items, in all, 93% of subjects knew that the

HIV virus exists in high concentration in blood, sperm and vaginal fluid (item 3). The question with the least number of correctly answered, 3% was the question concerning mother to child transmission ways and prevention ways (Item 4 and 8).

Table 4.4: Number and percentage of the items on the knowledge correctly answered by respondents (n = 68)

Items	Number	Percentage
1. The HIV virus can enter through open wounds and soft tissue of the body.	57	84
2. The HIV virus destroys the body's immune system, causing illness to occur more easily	58	85
3. The HIV virus exists in high concentration in blood, sperm and vaginal fluid	63	93
4. Is there a drug to cure the HIV virus?	55	81
5. Do you know if your child can get HIV virus from you?	59	87
6. In which ways can HIV virus be transmitted to your child?	2	3
7. Can we prevent mother to child HIV transmission?	58	85
8. How do you prevent HIV virus transmission to your child from you?	2	3

Most respondents, 90% (61) had positive attitudes towards prevention of HIV/AIDS mother to child transmission, and majority believed that if they followed instructions from health workers they could reduce HIV/AIDS transmission from mother to child. Table 4.5 shows respondents attitude towards prevention of HIV/AIDS transmission from mother to child.

Table 4.5: Respondents attitude towards prevention of HIV/AIDS transmission from mother to child (n=68)

Attitude	Number	Percentage
Positive (7-8 scores)	61	90
Negative (4-6 scores)	7	10
\bar{X} =7.69	SD=0.89	Minimum = 4 Maximum = 8

Answers for specific attitude items are summarised in Table 4.6. When considering each item of the attitude towards prevention of HIV/AIDS mother to child transmission, which had four items, in all, 98% of subjects demonstrated a positive attitude towards following the instructions the program staff (item 2). The question with the least number of positive attitude, 91% was the question concerning remembering the next follow up visit (Item 4).

Table 4.6: Percentage of the respondents by the attitude towards prevention of mother to child HIV/AIDS transmission in each item (n = 68)

Statement	Yes	No	Not sure	\bar{X}	S.D.
	%	%	%		
1. Do you believe that one can prevent HIV virus transmission from mother to child?	95	3	2	1.94	.29
2. Do you believe that, if you follow the instructions from the health workers, you can reduce the rate of transmission to your baby?	98	0	2	1.99	.12
3. Do you believe that there is a difference between regular irregular visit for receiving AZT in the transmission of HIV virus to your baby?	94	3	3	1.91	.38
4. Did you always remember your next visit?	91	6	3	1.85	.50

4.3.2 Accessibility to the PMTCT program

Majority of the respondents 60% (41) stated that they had access to the PMTCT program. HIV positive women's accessibility to health care was included with information provided by program staff, waiting time, attitude of health providers, clients' privacy, confidentiality by staff, travel distance to the facility, migration status and police check point during traveling to health care service. Majority of respondents 79 %(54) received information about their follow up date from program staff. Eighty-one percent (55) of respondents needed to wait less than 15 minutes for a consultation in the program. Most of the respondents 62 %(42) lived around less than 10 kilometers distance from the PMTCT program in Mae Tao Clinic. About 65% (44) of respondents had to pass police checkpoints to traveling to program. Respondents' accessibility to the PMTCT program is shown in Table 4.7.

Table 4.7: Respondents accessibility to Mae Tao Clinic PMTCT program (n=68)

Accessibility to PMTCT Program	Number	Percentage
Easy access	41	60
Difficult access	27	40

4.3.3 Economic status

In this study, economic status of HIV positive migrant pregnant women from Myanmar included the occupation of women, household incomes and ability to save money after spending on basic needs (food, shelter & clothing). More than half, 53% (36) of respondents, stated that they had low economic status and of these, nearly half, 46% (31) were housewives. Seventy-seven percent of respondents had less than 1,000 Thai-baht per month as their household income. Only 37%, (25) respondent

were able to save some money after spending on basic needs. Table 4.8 summarises the respondents' economic status.

Table 4.8: Number and percentage of respondents' economic status (n=68)

Economic status	Number	Percentage
High economic status	32	47
Low economic status	36	53

4.3.4 Different types of social support

In this study 43% (29) of respondents received a high level of social support from their family members. Most respondents 93% (63) stated that they received a high level of social support from PMTCT program staff and more than half, 54% (37) stated that they received a high level of social support from their peers (PLWHA). Table 4.9 summarises respondents' level of social support.

Table 4.9: Number and percentage of respondents' level of social support (n=68)

Level of Social support	Number	Percentage
Family members		
Not at all	29	42.6
Moderate	10	14.7
High	29	42.6
Peers (HIV positive persons)		
Not at all	15	22.1
Moderate	16	23.5
High	37	54.4
PMTCT program staff		
Not at all	1	1.5
Low	4	5.9
High	63	92.6

4.4 Description of association

4.4.1 Association between predisposing factors and the completion of ARV prophylaxis in the prevention of HIV mother to child transmission program

Chi-square test was used to determine the association between predisposition factors and the completion of ARV prophylaxis in prevention of HIV mother to child transmission program. The chi-square results of association between respondents' age and completion of ARV prophylaxis showed no statistical significance with a p-value >0.05 . All age groups demonstrated the same behaviors in completion of ARV prophylaxis.

The association between the respondents' number of children and completion of ARV prophylaxis was statistically significant with a p-value <0.05 . Association between respondents' education level and completion of ARV prophylaxis was not statistically significant in this study p-value >0.05 . This meant that regardless of the respondents' level of education they portrayed similar behavior in completion of ARV prophylaxis.

There was a positive association and statistic significance between respondents' knowledge about prevention of HIV/AIDS transmission from mother to child and the completion of ARV prophylaxis with a p-value <0.05 . The results demonstrate that knowledge towards prevention of HIV/AIDS transmission from mother to child plays an important role on whether HIV positive pregnant women complete their ARV prophylaxis.

However, there was no positive association between attitudes towards prevention of HIV/AIDS transmission from mother to child transmission and respondents' completion of ARV prophylaxis nor any statistically significant p-value >0.05 . This means respondents' attitudes towards prevention of HIV/AIDS transmission from mother to child did not affect their completion of ARV prophylaxis in the program. Similarly, marital status and place of residence did not have a statically significant association, with respondents' completion of ARV prophylaxis in the program p-value >0.05 and 0.211, respectively. Table 4.10 shows the association between predisposing factors and respondents' completion of ARV prophylaxis

Table 4.10: Association between predisposing factors and the respondents' completion of ARV prophylaxis (n=68)

Pre-disposing factors	Received ARV Prophylaxis [n(%)]		Total (%)	Chi Square	df	P- value
	Complete	Incomplete				
Age(years)						
18-24	6(46.2)	7(53.4)	13(100.0)	0.364 ^a	2	>0.05
25-35	23(48.9)	24(51.1)	47(100.0)			
>35	3(37.5)	5(62.5)	8(100.0)			
Number of children						
No child	19(59.4)	13(40.6)	32(100.0)	6.036 ^a	2	<0.05
1-3	13(40.6)	19(59.4)	32(100.0)			
>3	-	4(100.0)	4(100.0)			
Education levels						
No Education	7(36.8)	12(63.2)	19(100.0)	2.297 ^a	3	>0.05
Primary	16(47.1)	18(52.9)	34(100.0)			
Middle	6(54.5)	5(45.5)	11(100.0)			
High	3(75.0)	1(25.0)	4(100.0)			
Knowledge						
High	17(81.0)	4(19.0)	21(100.0)	14.010 ^b	1	<0.05
Low	15(31.9)	32(68.1)	47(100.0)			
Attitude						
Positive	30(49.2)	31(50.8)	61(100.0)	1.071 ^b	1	>0.05
Negative	2(28.6)	5(71.4)	7(100.0)			
Marital status						
First married	18(51.4)	17(48.6)	35(100.0)	3.338 ^a	3	>0.05
Second and more	13(43.3)	17(56.7)	30(100.0)			
Widow/divorcee	0	2(100.0)	2(100.0)			
Separate	1(100.0)	0	1(100.0)			
Residence						
Mae Sod, Thailand	19(59.4)	13(40.6)	32(100.0)	4.518 ^a	3	>0.05
Myawaddy, Burma	11(35.5)	20(64.5)	31(100.0)			
Phoprah, Thailand	2(50.0)	2(50.0)	4(100.0)			
Other	0	1(100.0)	1(100.0)			

a.2 cell(33.3%) have expected count less than 5.

4.4.2 Association between enabling factors and completion of ARV

prophylaxis

There was a statistically significant association between respondents' ability to access PMTCT health care services and their completion of ARV prophylaxis in the program with a p-value <0.05 . This indicates that information provided by program staff, waiting time, attitude of health providers, clients' privacy, confidentiality of staff, travel distance to the facility, migration status and police check point during traveling to health care services is key.

Likewise, respondents' migration status and household income had a strong statistical significant association with completion of ARV prophylaxis with a p-value <0.05 respectively, with the majority of respondents who had official migration documents and higher household income tending to complete their ARV prophylaxis.

There was no association between respondents' economic status and completion of ARV prophylaxis at the program and no statistic significance with a p-value >0.05 . Association between enabling factors and respondents' completion of ARV prophylaxis is shown in Table 4.11.

Table 4.11: Association between enabling factors and respondents' completion of ARV prophylaxis (n=68)

Enabling factors	Received ARV Prophylaxis [n(%)]		Total (%)	Chi Square	df	P- value
	Complete	Incomplete				
Accessibility to health care service						
Inaccessibility	5(18.5)	22(81.5)	27(100.0)	14.641 ^b	1	<0.05
Accessibility	27(65.9)	14(34.1)	41(100.0)			
Migrant status						
Official	29(96.7)	1(3.3)	30(100.0)	53.029 ^b	1	<0.05
Unofficial	3(7.90)	35(92.1)	38(100.0)			
Economic status						
High economic	2(2.9)	0	2(100.0)	2.318 ^b	1	>0.05
Low economic	30(45.5)	36(54.5)	66(100.0)			
Household income						
<1,000	19(27.9)	33(48.5)	52(100.0)	10.339 ^a	2	<0.05
1,000-2,000	10(76.9)	3(23.1)	13(100.0)			
>2,000	3(100.0)	0	3(100.0)			

a.2 cell(33.3%) have expected count less than 5

4.4.3 Association between reinforcing factors and respondents' completion of ARV prophylaxis

From the results of the study, respondents' social support included psychological support from family members, peer groups (PLWHA) and PMTCT program staff. Association between the respondents' different types of social support and their completion of ARV prophylaxis is shown in table 4.12. Chi-square test for respondents' social support from family and peer group and their completion of ARV prophylaxis was statistically significant with a p-value 0.00 and 0.001. However social support from program staff was of no statistically significant with completion of ARV prophylaxis.

Table 4.12: Association between different type of social support and respondents' completion of ARV prophylaxis (n=68)

Type of Social Support	Received ARV Prophylaxis [n(%)]		Total (%)	Chi Square	df	P-value
	Complete	Incomplete				
Family member						
High	22(76)	7(24)	29(100)	16.94	2	<0.05
Moderate	3(30)	7(70)	10(100)			
Not at all	7(24)	22(76)	29(100)			
Peer group (PLWHA)						
High	25(68)	12(32)	37(100)	13.89	2	<0.05
Moderate	3(19)	13(81)	16(100)			
Not at all	4(27)	11(73)	15(100)			
Program staff						
High	32(51)	31(49)	63(100)	4.79	2	>0.05
Moderate	0	4(100)	4(100)			
Not at all	0	1(100)	1(100)			

In this study, respondents' social support had an association which was statistically significant with their completion of ARV prophylaxis p-value 0.001. Table 13 shows the association between general social support and respondents' completion of ARV prophylaxis.

Table 4.13: Association between general social support and respondents' completion of ARV prophylaxis (n=68)

Social Support	Received ARV Prophylaxis		Total	Chi Square	df	P-value
	Complete	Incomplete				
High social support	22(68.6)	10(31.4)	32(100.0)	11.415 ^b	1	<0.05
Low social support	10(27.8)	26(72.2)	36(100.0)			