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นางสาว นิลลา ฮัน

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วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย

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**ANTIRETROVIRAL DRUG TAKING AMONG MYANMAR
MIGRANTS CENTRAL REGION OF THAILAND**

Miss Nilar Han

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จุฬาลงกรณ์มหาวิทยาลัย

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By - Ms. Nilar Han

Field of Study • Health Systems Development

Advisor • Wiput Phoolcharoen M.D, M.P.H

Co advisor Usaneya Perngparn, M.A

Accepted by the College of Public Health Sciences, Chulalongkorn University
in Partial Fulfillment of the Requirements for the Master's Degree



..... Dean of the College of Public Health Sciences
(Professor Surasak Taneepanichskul, M.D.)

THESIS COMMITTEE


..... Chairperson
(Associate Professor Sathirakorn Pongpanich, Ph.D.)


..... Advisor
(Wiput Phoolcharoen M.D, M.P.H)


..... Co advisor
(Usaneya Perngparn, M.A)


..... External Examiner
(Associate Professor Bencha Yoddumnern-Attig Ph.D.)

คำสำคัญ: การกินยาด้านไวรัส/ การติดเชื้อเอชไอวี/ ผู้ย้ายถิ่นชาวพม่า/ ภาคกลาง/ ประเทศไทย

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การติดตามผลสำเร็จของการบำบัดรักษาการติดเชื้อ โรคเอดส์ จะนับรวมถึงการรักษาด้วยยาด้านไวรัส เป็นสำคัญ ยาด้านไวรัสมีได้กำจัดไวรัสแต่เป็นแค่การจำกัดการขยายตัวของไวรัสให้อยู่ในระดับต่ำ การศึกษาถึง การกินยาด้านไวรัสเอชไอวีในกลุ่มผู้ย้ายถิ่นเป็นเรื่องหนึ่งที่น่าสนใจ งานวิจัยนี้มีวัตถุประสงค์เพื่อหาปัจจัยซึ่งมีส่วนเกื้อหนุนหรือยับยั้งการกินยาด้าน ไวรัสของผู้ย้ายถิ่นชาวพม่าที่มารับยาด้านไวรัสในโรงพยาบาลต่างๆ ที่อยู่ใน ภาคกลางของประเทศไทย การศึกษานี้คาดหวังที่จะได้รู้ถึงปัจจัยที่มีผลต่อการกินยาด้านไวรัส เพื่อจะได้จัดหา วิธีการช่วยเหลือจำเพาะเพื่อที่จะเพิ่มและรักษาระดับของการมารับยาด้านไวรัสอย่างสม่ำเสมอ การศึกษาเชิง คุณภาพ คัดเลือกแบบเจาะจงได้ตัวอย่างเข้าร่วมการวิจัยจำนวน 27 คนจาก 4 โรงพยาบาล กล่าวคือ โรงพยาบาล ตัดหีบ โรงพยาบาลโพธาราม โรงพยาบาลราชบุรี และโรงพยาบาลสมุทรสาคร ผู้เข้าร่วมการวิจัยจะถูกถามเชิงลึก ผลการศึกษา พบว่า ผู้ที่กินยาด้านไวรัสอย่างสม่ำเสมอและผู้ที่ไม่กินยามีจำนวนใกล้เคียงกัน ผู้ที่กินยาด้าน ไวรัสมีรายได้ไม่เพียงพอต่อการกินยาในระยะยาว การขึ้นทะเบียนผู้ย้ายถิ่นจะมีผลทำให้ได้รับยาด้านไวรัสฟรี ในสภาพทั่วไปของคนไข้ จำนวนครั้งของการกินยาและการติดเชื้อฉวยโอกาส หรือการเกิดอาการทางคลินิกจะมี ผลต่อการกินยาด้านไวรัส สังคมและครอบครัวแวดล้อมที่สนับสนุนและการ ได้รับความรู้จาก โรงพยาบาลจะเพิ่ม ความมั่นใจให้แก่คนไข้ ซึ่งนับว่าเป็นสิ่งสำคัญ โดยสรุปแล้ว ภาวะเศรษฐกิจและปัจจัยเกี่ยวกับการทำงาน การได้ ขึ้นทะเบียนผู้ย้ายถิ่นและความมั่นใจในตนเองเป็นสิ่งสำคัญที่มีผลต่อการมารับยาด้าน ไวรัสของผู้อพยพชาวพม่า เหล่านี้

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Monitoring HIV treatment success includes a major portion in antiretroviral drug treatment. Antiretroviral drugs (ARV) do not eradicate the virus but they maintain viral replication at low levels. The study of ARV taking among migrants is an interesting issue. This study is aimed to identify factors which facilitate or constrain ARV taking among Myanmar migrant ARV users in the hospitals in central region of Thailand. It is expected to know factors affecting ARV taking in Myanmar migrants and to provide future specific intervention to increase and maintain high level of adherence. The qualitative study purposively selected 27 participants from 4 hospitals of Thailand (Sattahip Hospital, Photharam Hospital, Ratchburi Hospital, and Samut Sakhon Hospital). To develop the study, the participants were asked by in-depth interview. The number of participants regularly taking ARV and those having dose absence are nearly the same. Their incomes are not enough for long term ARV treatment taking. Therefore, free of charge treatment strongly improves their long term regular ARV taking. Their immigration registration highly affects to their free treatment. As regards the patients' condition, the frequency of medical taking and opportunistic infection/clinical symptoms affected ARV taking. Social and family support and knowledge from hospitals result in improving their self awareness. Despite these factors, self awareness itself is more important for this Myanmar migrant group. In conclusion, economic concern, work related factors, immigration registration and self awareness are affected Myanmar migrants ARV taking.

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Advisor's Signature.....
Co-advisor's Signature.....

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LIST OF ABBREVIATIONS

AIDS	Acquired Immuno-deficiency Syndrome
ARV	Antiretroviral
ART	Anti-Retro-Viral Treatment
ARV DR	Antiretroviral Drug resistant
CD4	Cluster of differentiation (is a glycoprotein expressed in surface of helper T cell)
HIV	Human Immuno-deficiency Virus
NGO	Non Governmental Organization
UNAIDS	Joint United Nations Programme on AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations International Children’s Emergency Fund
USAID	United States Agency for International Development
WHO	World Health Organization
IOM	International organization of migration

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CHAPTER (I)

INTRODUCTION

1.1 Background and rational

HIV/AIDS is not only health problems in individual level but also many social, economical, developmental and political consequences for family, community and society as well. The number of people living with HIV/AIDS globally rose from 29 million in 2001 to 33.2 million in 2007 due to continuing new infections, people living longer with HIV, and generally population growth. The global prevalence rate (the percent of the population with HIV) leveled over this period at 0.8 %.(WHO and UNICEF, 2007). Annual deaths increased from 1.7 million in 2001 to 2.1 million in 2007, but have declined in the last couple of years due in part to antiretroviral treatment scale up. New HIV infections are believed to have peaked in the late 1990s, and declined between 2001 and 2007 from 3.2 million to 2.5 million. The decline is attributable to natural trends in the epidemic itself and to prevention efforts. Still, in 2007, there were more than 6,800 new HIV infections each day.

In Asia, an estimated 5.0 million (4.1 million – 6.2 million) people were living with HIV in 2007, including the 380 000 (200 000-650 000) people who were newly infected that year. Approximately 380 000 (270 000-490 000) died from AIDS related illness. (UNAIDS ,AIDS epidemic 2008) .There is wide variation in the epidemic across the region. While epidemics in Cambodia, Myanmar, and Thailand show declines in HIV prevalence, those in Indonesia and Viet Nam are growing. (UNAIDS ,AIDS epidemic 2007).

In Thailand, the number of annual new HIV infection continues to decline. In recent year, more people are receiving antiretroviral therapy. HIV transmission pattern have changed in Thailand. Virus spread mostly in low risk people i.e. 43% of new cases were among women in 2005 .Prevalence among injecting drug users has remained high over the past 15 years,(between 30% and 50%) (WHO , 2007).

An estimated 1.2 million migrants have settled in Thailand as a result of internal conflict within neighboring countries and economic opportunities and available services in Thailand. Most are from Myanmar and more than half are belief to live in ten provinces of Thailand such as Bangkok, Samusakhon, Chaing Mai, Ranoon, Mae Sot etc. The health needs of the camp residents are addressed by NGOs and the registered migrant workers have access to government health services, but the large number of unregistered migrants experience financial, security, cultural, language and geographic barriers in obtaining health services. The mobility of the population, combined with access barriers, contributes to increased morbidity and mortality, particularly in tuberculosis and HIV/AIDS.

The relationship between HIV/AIDS and migration is recognized and IOM argues that work should not only be done to reduce migrants' vulnerabilities to HIV, but also to increase their access to health care and ART (International Organization for migration 2002).

HIV/AIDS prevalence of migrants in Thailand is estimated to be 17%, compared with 1.5% among adult Thais (RenuGarg HIV/AIDS Unit department:WHO,UNAIDS,UNICEFT 2004).Some provinces provide ART only to migrants who can pay for all of the treatment themselves, while other provinces

provide ART for free to a select group of migrants.(Simen Tellemann, Tropical medicine and international health , 2007).The following data is registered Myanmar people living with HIV on ARV in Thailand hospital. 2008 from provincial offices data.

No	Province	Adult	Child
1	Tak province	210	-
2	Kanchanaburi	37	3
3	Ratch Buri	20	1
4	Ranong	50	-
5	Nakhon Pathom	26	-
6	Samut Sakhon	22	-
7	Prachubkirikhan	11	-
8	Suphan Buri	11	-
9	Trat	7	-
10	Songkram	7	1
11	Petch Buri	5	-
12	Chaing Rai	225	20
13	Chon Buri	12	-

Chon Buri is the gateway to various coastal towns in the East of Thailand. Administratively, there are ten Amphoe (districts), namely, Muang Chon Buri, Nong Yai, Phanat Nikhom, Ban Bung, Phan Thong, Bo Thong, Si Racha, Bang Lamung, Sattahip and Ko Si Chang. In sea side district especially Sattahip, most of

Myanmar migrants work in fishing boats. Most of Myanmar migrants group is Mon ethnicity.

The following data is ARV taking registered Myanmar Migrants in hospitals in Chon Buri Province. (Chon Buri public health office, 2008).

No	Hospital	ARV taking Myanmar
1	Chon Buri Hospital	2
2	Satthip Hospital	10
3	Ban Bung hospital	1 (move to Chaing Rai)
4	Paholopolpayuhasena Hospital	1 (Lose case)

Ratchburi is province in Western Thailand has a varied topography; from the fertile level ground around the basin of the Mae Klong River where the economy relies on all kinds of crop, vegetable and plant cultivation, to the high mountain ranges of the Tanawsri Mountain in the west, along the Thai-Myanmar border. Most of Myanmar migrants work in construction site and agricultural site. The following data is ARV taking registered Myanmar Migrants in hospitals in Ratchburi Province.

No	Hospital	ARV taking Myanmar
1	Ratchburi Hospital	10
2	Photharam Hospital	2

Samut Sakhon is located 30 kms. from Bangkok. The province occupies a total area of 872 square kilometers and is administratively divided into 3 districts: Muang Samut Sakhon, Krathum Baen, and Ban Phaeo. It is a major fishing port and also the biggest producer of brine salt. So most of Myanmar migrants from Shan state, Mon State come and work in here. Most of their working areas are industrial, factory and some people work as vendors. They take their health care in Samut Sakhon hospital. The following data is ARV taking registered and non registered Myanmar migrants in Samut Sakhon hospital.

No	ARV taking	No of ARV taking Myanmar Migrants
1	Recent ARV taking	22
2	People who take education before ARV taking.	26

Rational

“Access for all” was the theme of XVth International HIV/AIDS Conference in Bangkok 2004, while “Time to Deliver” was the theme of XVIth International HIV/AIDS Conference in Toronto in 2006. How to provide access to ART for vulnerable population such as migrants was one of the many questions raised at both the conferences. Even so, little research has been conducted on this topic.

At the same time, monitoring in treatment success includes as a major portion in ART treatment. Because ARV drugs do not eradicate the virus but it maintains viral replication at low levels. So treatment must be lifelong and must continue without interruption. (Palmer et al, 2008). A high level of ART is needed to reduce drug resistance that is closely associated with treatment failure (Panel on ARV guideline 2008).

Treatment of HIV infection with highly active antiretroviral therapy (HAART) requires high levels of adherence in order to obtain maximum benefit and minimize the development of antiviral resistance. Many patients in community clinical settings have imperfect adherence that may lead to poor clinical outcomes. Suboptimal adherence may result in reduced treatment response. Incomplete adherence can result from complex medication regimens, patient factors such as active substance abuse, depression and health system issues, including interruption in medication access and inadequate treatment education and support. (Panel on ARV guideline, 2008).

Patients need to understand that the first regimen is the best chance for long term survival. Drug resistant viruses constrain therapeutic options and this may be especially important in migrants and resource limited settings where second line ARV options are scarcely supplied. (Akileswaran et al, 2005). Resources need

to be identified to assist in success. Intervention can also assist with identifying adherence education needs and strategies for each patient. Examples include adherence support groups, adherence counselors, behavioral interventions and using based case managers and peer educators. Lastly and most importantly, adherence counseling and assessment should be done at each clinical encounter. Early detection of non-adherence and prompt intervention can greatly reduce the chance of Virologic failure and development of viral resistance.

This study would like to assess antiretroviral adherence rate in Myanmar migrants and to identify factor association to adherence in Myanmar migrants such as patient general characteristics, patient knowledge about HIV/AIDS and antiretroviral treatment, patient disease condition, patient social support, health resource. This study expects future intervention for antiretroviral adherence in migrants. Patient should access to sufficient information for this antiretroviral adherence. Patient should know how this antiretroviral adherence is important. So this study expects specific intervention for example individualized pharmacies counseling, group educational strategies, peer social support etc.

The other hand, researcher and provider should know whether ARV taking migrants have sufficient adherence rate or not. If they have not sufficient adherence rate, how provider will arrange this problem and which intervention should give for this problem. for example : Access to health care insurance and work permit (introduce a separate identification system for migration on ART), language and communication(use professional translators, peer educators who speak the patient's own language, use visual information), ART guidelines suitable for migrants by adjusting the way ART is provided.

Finally, this study prefers for future intervention in ARV taking migrant population. This study will be benefit to know the presence adherence rate in ARV taking migrant population and factors associated to ARV adherence in migrant population.

1.2. Research Objective

To identify factors which facilitate or constrain ART taking among Myanmar migrant ARV users in the hospitals of central area of Thailand. (I.e. Chonburi, Ratchburi and Samut Sakorn).

Operation objectives

- To identify social demographic factors which facilitate or constrain ARV taking
- To know the effect of registration condition.
- To determine social support which facilitate or constrain ARV taking.
- To know work related obstacles which affect to ARV taking.
- To know economic related factors that affect to ARV taking.
- To know patient's disease condition which affect to ARV taking.

1.3 Research question

- What are the barriers to ARV taking?
- What kind of informations should be provided to understand for adherence?

- What kind of arrangements should be provided for Myanmar migrants working groups who taking ARV to improve ARV taking?
- Which economic factors can affect to ARV taking in Myanmar migrants group?
- Should we need to think registration condition that affects to Myanmar migrants ARV taking?

1.4. Operational definition or Explanation about key themes

- Myanmar Migrants: People from Myanmar who cross the international boundary and living in Thailand. For this study, living outside camp, and economic migrant workers will be participated.
- Knowledge about HIV/AIDS and treatment refers to patient understanding about causative agent of disease (HIV), mode of transmission, treatment and prevention of disease.
- Missed dose refers people who have experience of missed dose. (No limitation time, frequency)
- Patient's social support refers to support from family, friends and peer support activities for patients on taking antiretroviral therapy.
- Disease condition refers having clinical symptoms and opportunistic infection or co infection recently.
- Economic concern refers to cost of transport, FOC treatment, saving money to support their family in Myanmar.
- Work related obstacles refer to ARV taking condition in working place, secret drug taking in working place, working hours and ARV taking.

CHAPTER (II)

REVIEW OF RELATED LITERATURE

2.1 HIV/AIDS among Myanmar Migrants in Thailand

There is a growing concern about the prevalence of HIV on the Thai side of the Border. In a clinic that serves mostly Myanmar sex workers in Mae Sot, the prevalence of HIV is around 10 percent. At the Mae Tao Clinic, the most recent prevalence rate is 2.2 percent, compared with 0.8 percent five years earlier. The rate in Burmese women presenting for antenatal care at Mae Sot Hospital is 1.6 percent, triple that of their Thai counterparts (Sawasdiwuthipong et al., 2006). The health needs of the camp residents are addressed by NGOs and the registered migrant workers have access to government health services, but the large number of unregistered migrants experience financial, security, cultural, language and geographic barriers in obtaining health services. The mobility of the population, combined with access barriers, contributes to increased morbidity and mortality, particularly in tuberculosis and HIV/AIDS.

2.2 Antiretroviral Therapy

Today AIDS can be regarded as a chronic manageable disease. Defining opportunistic infection and preventing & treatment them significantly prolonged the survival of people with AIDS but it was the introduction of ART as HAART (Highly active antiretroviral therapy) that provided a new dawn and new

hope for many people with HIV/AIDS. ART has now proven to significantly prolong the survival and improve the quality of life of patients with HIV/AIDS.

The goals and objectives for antiretroviral therapy can be described as follows-

- Virologic Goal- greatest possible reduction in viral load (preferably to <20-50 copies/ml) for as long as possible to halt progression of disease.
- Immunologic Goal-immune reconstitution that is both quantitative (CD4 count in normal range) and qualitative (pathogen specific immune response).
- Therapeutic Goals- rational sequencing of drugs in a fashion that achieves clinical, Virologic, and immunologic goals while maintaining treatment options, limit drug toxicity and facilitate adherence.
- Epidemiologic Goals-reduce HIV transmission.(WHO 2006)

In the early years (the introduction the use of HAART, 1996), the trend had been to start ART as soon as the diagnosis of HIV was obtained. But within a few years medical doctors as well as patients understood better the reality of ART. Requiring lifelong treatment, these complex treatment regimes were also associated with a high rate of side effects. While discussion of the initiation of ART even in the seroconversion stage has been advocated for the potential long term benefits generally, it is nowadays advised to start therapy only when indication for treatment are present.

2.3 Antiretroviral therapy in Thailand

Between 1996 and 1997, randomized controlled trial was carried out to study the provision of short course AZT (zidovudine) to prevent mother to child transmission of HIV in Bangkok. Due to the successful result of pilot studies, AZT was used in most hospital in Thailand in 1999.

In 2000, combination of antiretroviral drugs (ARVs) started to be used to treat people living with HIV in Thailand. This combination therapy called HAART (Highly active antiretroviral therapy). In subsequent years the number of people accessing ARVs increased dramatically, significantly reducing the number of people dying from AIDS.

In 2003 the government made an official commitment to ensuring adequate treatment for all people living with HIV, and set targets to improve treatment access. The third National Plan for the prevention and alleviation of HIV/AIDS in Thailand (2002-2006) has worked towards target of reducing HIV prevalence to less than 1% and providing access to care and support for at least 80% of people living with HIV and other affected individuals.

By the end of 2007, national HIV prevalence was 1.4%, down from 1.8% in 2003 and more than a decade earlier.

Some provinces provide ART only to migrants who can pay for all of the treatment themselves, while other provinces provide ART for free. NGO (HIV NAT, MSF etc) arranges ART for migrants' people. NAPHA extension arrange free of charge treatment for migrants ARV users.

2.4 Antiretroviral Adherence

The optimal adherence to ART is 95% or more of all prescribed doses taken on time. The decrements to adherence can assess prior to initiation of ART, within first few days of initiation of ART, at each visit to assess any change in determinants.

How important is adherence?

Adherence to ART is well recognized to be essential component of individual and programmatic treatment success. Higher level of adherence are associated with improved virology and clinical outcomes .It is a challenge to achieve rates this higher over a long period of time and numerous approaches to improving adherence have been investigated in the developed world and have begun to explored in the developing world. Focusing on maximizing adherence is even more crucial to try to avoid drug resistant and insure durability of ARV regimen effect. Non adherence is recognized as one of the main of treatment failure.

There are 3 types of treatment regime failure

- Virologic failure –incomplete virology response

-Virologic rebound

- Immunologic failure
- Clinical failure (Anthony S.Fauci & John G.Bartlett 2004)

If treatment failure is appeared in ART taking patient, the entire regimen is changed from a first to a second line combination regime. Cross-resistant may compromise the potential of alternative dual components in the second line regime. For many in the developing countries switching to a second line regimen will mean a big rise in the cost as well as the use of drugs associated with more serious side effects, or the second line regime may not be as effective as the first one.

Resistant to antiretroviral drugs often develops in patients with incomplete viral suppression. So long term adherence (lifelong) drugs becomes extremely important. Transmission of drug resistant HIV from patient with treatment failure also appears to become the growing problem. This transmission of drug resistant HIV underscores the role that adherence plays in controlling HIV in the individual, as well as in preventing a larger public health problem.

Therefore factors affecting adherence on antiretroviral therapy is critical part to get the successful therapy for ART taking people.

2.5 Drug resistant in Thailand

ART started in Thailand around 1988. From 1994 onwards, the Ministry of public health provided free ART and had treated 10,000 by 2003. This number increased to 50,000 in 2004. Of the 580,000 living with HIV/AIDS in Thailand by 2006, it is estimated that a total of 100,000 are being treated with ART.

In 2001, the study of national institute of health reported prevalence of ARV drug resistance of 4.6% (95%CI; 0.56-16.79%) among drug naïve HIV-1 infected Thai blood donors. Of 332 NRTI resistant, 226 (68.27%) were thymaditine analog mutation (TAMs) in 2001-2003. Of 105 NNRTI drug resistant codon mutation, 95 (90.48%) were related to nevirapine drug resistance. (HIV 1 drug resistant in Thailand Dec 2005).

And then, CD4 cell count and HIV RNA at the time of virological failure detection was 159 (105 to 248) cells/mm³ and 4.1 (3.7 to 4.7) log copies/ ml, respectively. Of the total, 10 (10.2%) patients had TDF (Tenofovir) resistance: 6 had K65R and 4 had ≥ 3 thymidine analog mutations (TAM). (14th CROI, conference on retrovirus and opportunistic infection, Dec, 2007).

In latest published research, seven of the 305 patients (2%) had baseline ARV-DR (Antiretroviral drug resistant). Via contact tracing, all seven patients with transmitted ARV-DR identified sexual partners with prior ARV treatment failure and had documented low (<75%) ARV adherence. (Apisamthanarak A.HIV medicine, May 2008).

2.6 .Factors association to ART adherence

A number of factors have been associated with no adherence to ART. There are main five factors with medication adherence, namely social demographic , treatment, disease, patient provider relationship and clinical setting.(Gordillo V,del Amo,Soriano V,1999)

Social demographic factors include age, gender, race, income, education, knowledge about HIV/AIDS and treatment, patient's social support.

Common predictors of non adherence include stressful life events, lack of social support, and inability to correctly identify the drug regimen.(Barlett JA,DeMasi,Quinn J,Moxham C, 2001).

Patient characteristics will explore in the study to find out their distribution and relations with antiretroviral therapy. It confirmed the result of past studies of gender and adherence (Karina M.Berg, MD, 2002), age and adherence (Kenneth H.Mayer, 2001) .Education level had a direct relationship with drug adherence.(Seth C.Kalichman,2007) The marital status is important for adherence to ART and one past study found that higher adherence rates in singles.(Maor C, 2002) .By considering occupation status, the finding of Gallent JE and Block DS in 1998 explained that adherence is not associated with occupation and income. So we can find these general characteristics in Thailand ART taking patient which characteristics will be associated with adherence.

Knowledge about HIV/AIDS may be associated with adherence to ART. From previous study, knowledge is associated with level of adherence. But the finding of Nu Nu Aye, 2006 explained that the knowledge itself is not enough to adherence to ART, this knowledge represents a necessary component, but it is not association between level of knowledge of disease and treatment and ART.

All HIV patients have to take different kinds of medication in everyday depends on stages and presence of co infection and opportunistic infection. The total number of pills counts per day, dosing frequency are influence their adherence.(Bartlett JA, 2001)

Patient's social support is likely that patient if they received a lot of cares from their society and family leading to depend much on their society for

everything and considered they are not solely responsible for taking the medication timely and regularly.(Nu Nu Aye 2006).

In health care service, ability to access health care service is important for migrants. Most of migrants have to send money to their family in their own country. So economic concern is important problem. In Simen Tellemann S 2007 qualitative study for migrants' access to ART, Myanmar migrants' financial position can have implication for ART in at least 3 ways: regular cost of transportation, the cost of treatment may be too high, missing work to attend follow up appointment. In work related obstacles, participants were really allowed sick leave but forced to work instead. In other sites, they were allowed sick leave but workers who missed work too often risked being fired.

In compatibility between race/ethnicity, racial/ethnic minorities rate the quality of interpersonal care by physicians and patient. It may have lower levels of positive affect among both patient and provider during the visits when patient and provider are not same race/ethnicity.(Woeringen JC 2002).

From the level of HIV staging , presence of clinical symptoms is quite interesting for study. According to previous studies,(Maor C,2001) (Jordan J,2005) presence of clinical symptoms increased the perceived severity of illness and thereby motivated patients to adherence. Other study that if the patient had less severe symptoms, it could possible raises their awareness on the benefits of the therapy and consequently lead to adhere more to ART.

There are many factors which related to ARV taking .This study will be identify factors related to ARV taking among Myanmar migrants.

CHAPTER (III)

RESEARCH METODOLOGY

3.1 Research Design

This study will use a qualitative research process because it will provide the mean of accessing the factors which affect to ARV drug adherence in HIV (+) Myanmar migrants who taking ARV from the hospital in central region of Thailand (i.e. Chon Buri, Ratchburi and Samut Sakorn). It will work with RAP, Rapid Assessment Procedure to explore the factors affecting to ARV taking in Myanmar migrants. This qualitative research design, RAP, is used as a tool for baseline data collection of factors affecting to ARV drug adherence in Myanmar migrants. This qualitative study is case study type of research because it attempts to shed light on a phenomena by studying in depth a single group (Myanmar migrants who taking ARV in Thailand hospital). Interactive interviewing (in depth interview) will be used in data collection.

3.2 Study area

This study will be done in hospitals in central region of Thailand (i.e. Chonburi, Ratchburi and Samut Sakorn). In Chonburi, Sathip hospital has 10 ARV taking patients. In Ratchburi, Ratchburi hospital and Photharam hospital were taken for study population. This project chooses the central area of Thailand because this area is industrial zone and fishing group area. So this factor will be covered the key themes of work related obstacle and economic concern.

3.3 Study period

The study period started in 30th January to 11st March 2009.

3.4 Study population and research subjects

The purposive convenience sample of 27 people was identified in hospital; purposively selected in ARV taking Myanmar people. These 27 people were representative of this project. In this purposeful sampling the size of the sample was determined by information considerations. This sample size 27 cause to cover the maximum informations for key themes because of the study population “s characteristics (i.e. working group in central area of Thailand, Burmese people who taking ARV in Thailand). This qualitative sampling design specifies minimum samples based on expected reasonable coverage of phenomenon given the purpose of the study.

3.5 Data Collection

In- depth interview method was used for data collection. So the project will be done in-depth interview for the individual’s factors. Tape recording will also be used in in-depth interview. All tape recording will be destroyed after data analysis. Note taking will be used in this approach .Note taking will the code number instant of their name.

Procedure

- The study was conducted in January 2009.
- First was taken the permission of hospital director and doctors who arrange for ARV in study population group.
- Patient information sheet and inform concern was being taken.

- Interactive interviewing was done in one place that is chosen by participants. This place will have privacy and convenient for participants.

- Individual in depth interview was started with guideline.

The interviewer was start how they know their HIV condition and continue the discussion until to get information of key themes.

- In depth interview guide line will be used with open – ended questions.

-On advice of local hospital, limited personal information will gather from participants in order to create a trusting atmosphere where the participants felt safe to share their experiences.

3.5.1 Key Structural Question

The interview guide line question are related to

- Patient knowledge about HIV/ARV
- How patients manage to take their medicine (Frequency / Tablets / Missed Dose)
- Recent clinical symptoms
- Economic concern (income/ free of charge treatment/ transportation fees)
- Work related factors (condition of ARV taking in work place/ time of ARV taking and working hours/ secret condition in working place)
- Language communication between patient and provider

3.5.2 The way to get information about cases

- With the help of research adviser and co adviser, the project collected the raw data of Myanmar migrants ARV taking people in Thailand hospital.
- The project informed to the purpose hospitals and took informations which related to the numbers of Myanmar ARV users.
- The project took the permission from hospital directors and doctors or nurses who have authority in ARV clinic.
- And then the project did in ARV clinic days of hospital. If some participants would not come to hospital, the interview did in their home.
- If the project did not get enough answers for key themes, the researcher took information from hospitals which already finished for interview. These hospitals contacted each other and gave information. And then, the project continued to get enough answer for key themes with the permission of each hospital director.

3.5.3 The quality of respond

- The quality of respond is very important for this project to get satisfied answers. First the researcher took their trust and warm friendship before interview (such as group talking about their work, their life in Thailand / health education about ARV adherence).
- Before interview, interviewer explained the research purpose and took inform consent for their psychological safe.
- The place for interview had chosen by participants for their privacy.
- And then the researcher divided the participants who can speak and understand Myanmar language. Especially in Satthip, it has Mon participants who

cannot understand fluently Myanmar language. Therefore, the researcher took the help of Mon – Myanmar translator who work in HIV setting in center of AIDS right.

3.6. Data Analysis.

In depth interviews were been recorded and transcribed. The set of transcripts was been review to identify the main themes: the data was been coded according to a particular theme and categorized accordingly. Ideas and patterns was been inferred from the participants' specific responses. The researcher responsible for the data collection carried out the manual analysis. The recording equipment used for the discussions and interviews was been checked regularly to determine its reliability.

Key Analysis for their respond

- Regular ARV taking – never missed dose, on right time taking
- Irregular taking - one time missed dose, have skip dose, have missed dose, no taking on right time
- Knowledge - Mode of transmission, Prevention, AIDS is acquired immune deficiency syndrome, ARV is lifelong therapy, ARV cannot kill HIV virus, and ARV taking people can transmit HIV to other.
- Social Support - Family member, Peer group, Both (+), Nothing, Family member or Peer, Friends
- Economic concern - Income is enough or not, Free of charge treatment, Transportation fees

- Work related factors - Missed dose in working place, Time of ARV taking and working hours, Secret taking in working place.
- Communication (Language barrier) – can speak or understand Thai language, Translator (+), Volunteer (+).

3.7 Inclusion criteria

- Both male and female aged >18 years old.
- Participants who can speak and understand Myanmar language.
- Patients who were currently taking ARV drug.
- Patient who were taking ARV drug supply from hospital.

3.8 Exclusion criteria

- Patient who refused to answer the questions.
- Patient who could not communicate with the interviewer due to the problem hearing defect or sever illness condition.
- Patient who were unable to take medication by him /herself.

3.9 Method to protect the right of the research subjects

- Approval will be obtained from Chulalongkorn University Ethical Committee.
- Participant information sheet and informed consent will be obtained before interview
- Interviewer will give verbal explanation to each potential participant.
- The nature of the study, its purpose, the procedures involved, the expected duration, the potential risks and benefits will be explained

- Each potential participant also informed that participation in the study was completely Voluntary and that they can withdraw at any time, and that withdrawal of consent will not affect the subsequent treatment or relationship with the health care facility staffs.

3.10 Limitation of the study

Critical limitation of this study is purposive selection of the cases and this study ignored the ARV users who already dropped out from the treatments. So this study can know the factors affecting to recent ARV users in hospitals and this study cannot know the problems of dropped out ARV users.

Since study population was scattered in the community and hard to reach to them, it is important to respect the confidentiality of patients as HIV/AIDS is still considered as social stigma in the community. So data collection was hospital based. This study do not access the adherence rate due to duration of adherence reflect.

The study uses a client sample that is currently on ART and does not include individuals who had discontinued treatment.

3.11 Expected outcome

- The factors which may be relationship with adherence among Myanmar migrant HIV-infected patients in Thailand will be identified.
- The identification of factors reacted with adherence may provide the basis for future specific intervention to increase and maintain high levels of adherence to anti retroviral therapy. Example includes adherence support groups,

adherence counselors, behavioral interventions and using based case managers and peer educators.

3.12 Lesson Learned

Ethical Consideration

This type of research is confidential. So, we need to think about ethical consideration. Although the university or college ethical gave the permission to do this research, we need to think about hospital's ethical consideration (if we want to do hospital approach).

Time limitation

If we have limited time (for example – one year master course) , we should to the hospitals that will not arrange hospital's ethical again.

Qualitative study

Before doing pure qualitative study, we should study the qualitative approach and construction. We should practice and participate in interviewing approach of field qualitative study.

Connection to hospital

We will need the help of responsible person to introduce to hospital director and the doctors and nurse who have authority in HIV section. And then we must have the recommendation letters from the university.

Money and Time

The pure qualitative study is depended on the enough answer for key themes. So we cannot know exactly to tell the data finishing time. (For example I expected this

research in my time frame to finish in February 2009. But I did not get enough samples to represent my key themes. So my research continued to March 2009.

Trust

The most important thing in this HIV drug taking qualitative study is the trust of respondents. So we need to explain and we need to get familiar condition before interview. Because non registered migrants afraid to discuss and answer trustily to interviewer. They try to cover their condition if they feel strangely. They think that interviewer may be from the side of immigration.

Keep promise and Give advantage

We must keep their confidential conditions. If possible, we should do health education section in this research period. They can easily know how they arrange their lifelong therapy. They can get the chance to discuss with interviewer in this research duration.



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CHAPTER (IV)

RESULT

4.1 Description of the sample

The breakdown of the interviewed is as follow: (27) people taking ARV, (17) man taking ARV (MTARV) and (10) woman taking ARV (WTARV).

Fig 1 Study area and ARV taking of people interviewed

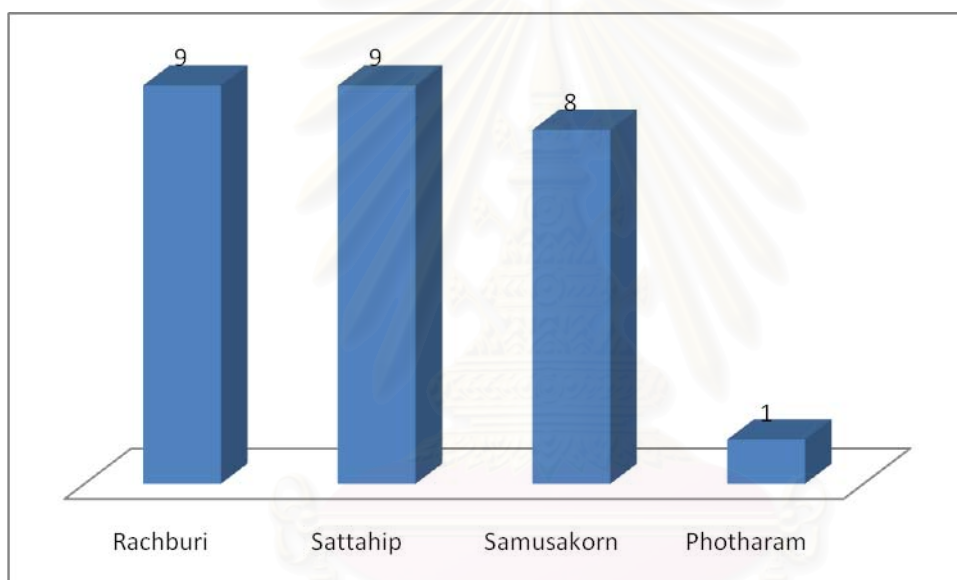


Table 4.1 Total Sample

People taking ARV	Burma	Mon	Karin	Shan	Total
MTARV	10	7	-	-	17
WTARV	4	4	1	1	10
	14	11	1	1	27

Table 4. 2 General Characteristics of () participants

General Characteristics	Number	Percentage
Age Group		
< 20	0	0%
21-30		18.52%
31-40	5	62.96%
41-50	17	18.52%
Over 50	5	0%
	0	
Sex		
Man	17	63.00%
Woman	10	37.00%
Marital Status		
Single	1	3.71%
Married	22	81.48%
Divorced/Separated	1	3.71%
Widow	1	3.71%
Widower	1	7.41%
	1	
	2	
Education		
Illiterate	0	0%
Just read and write		55.56%

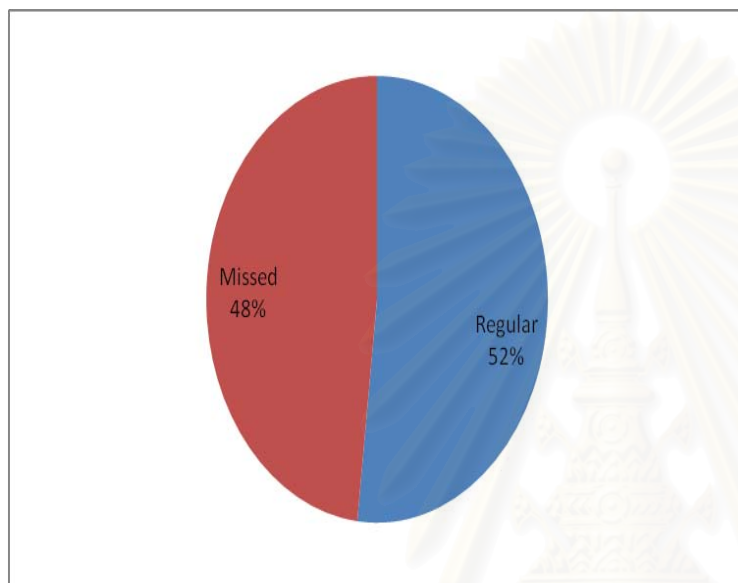
Primary school	15	18.52%
Secondary school		25.92%
High school	5	0%
Higher education	7	0%
	0	
	0	
Occupation		
Housewife/Unemployed		14.81%
Fisherman	4	22.22%
Vendor	6	22.22%
Work in construction site		3.71%
Health Volunteer	6	3.71%
Industrial worker	1	33.33%
	1	
	9	
Registration		
Register migrants		81.48%
Non register migrants	22	18.52%
	5	

In 27 participants, 62.96% are age group (30-40) . 63% are MTARV (Man taking ARV) and 37% are WTARV (Woman taking ARV). Most of participants are married (81.48%) and education status is just read and writes (55.56%). Industrial worker (33.33%), a fisherman is (22.22%), vendor is (22.22%), house wife is (14.81%) ,

health volunteer and worker in construction area (3.71% for each) are participated in this research. 81.48% are register migrants.

4.2 ARV taking condition

Fig 2 Participants who have missed dose experience and have no missed dose



experience

48% of participants have an experience of missed dose (at least one time or late 20 -2 hours). 52% of participants have regular taking drug.

4.3 Gender and regular ARV taking condition (Subjective measurement)

Table 3 MTARV and ARV taking condition

Key theme (for ARV taking)	Support comment	Code No	% in MTARV
1. Regular taking (never missed dose and take on right time)	-“I know that this drug should not be missed. So I never missed my dose. I take care my drug taking.”	M7	41.18%
	-“I have no missed dose. I take the drug on right time.”	M8	
	-“I make phone alarm. I have no missed dose”	M9	
	-“I try to take my drugs regularly. I	M11	

	<p>have no missed dose within these 2 months.”</p> <p>-“I have no missed dose since the starting time. I make phone alarm”.</p> <p>-“I participate in peer group discussion. This drug cannot be missed .So I take regularly”.</p> <p>-“ I take medicine regularly and my wife also reminds.”</p>	<p>M12</p> <p>M14</p> <p>M17</p>	
2. Missed dose (start one time missed dose)	<p>-“I forgot my drugs in my working site. When I went to sea, I forgot. When I started my drugs, I had to buy my drugs. So I did not take regularly.”</p> <p>-“Yes, I missed in working area. I have to go 2 times/year to the sea. So I missed in my working period.</p> <p>-“I missed to take during working hours. I missed 2 times in this week.”</p> <p>-“I missed my drugs to take in working place . But this is just a little times.”</p> <p>-“Last month, I missed my dose in working place. I have to secret my condition in working. This month rested my work.”</p> <p>-“Yes, I have missed dose sometime”.</p>	<p>M1</p> <p>M3</p> <p>M4</p> <p>M6</p> <p>M10</p> <p>M13</p>	35.29%
3. Can't take on right time	<p>- “Sometime, I did not take medicine on right time in my work place. But I never missed my dose.”</p> <p>-“Sometime, my drug taking skips over about one or two hours.”</p> <p>-“I never missed my drug. But I do not take medicine on time. As you know, I will be skipped over about one hour in working place.”</p> <p>-“I skipped over my dose in my work</p>	<p>M2</p> <p>M5</p> <p>M15</p>	23.53%

	about one or two hours”.	M16	
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According to subjective measurement from in-depth interview, 41.18% of FTARV are never miss dose and take on right time. 35.29% has missed dose at least one time.

23.53 % cannot take the medicine on right time.

Table 4 .4 FTARV and ARV taking condition

Key theme (for ARV taking)	Support comment	Code No	% in FTARV
1. Regular taking (never missed dose and take on right time)	<p>-“I am a health volunteer. I take the drugs regularly and on right time.”</p> <p>-“I make phone alarm to take medicine on right time. I have no missed dose.”</p> <p>-“I take my medicine regularly. I have no work except my house work. So I take care my medicine taking”.</p> <p>-“I make phone alarm. I take medicine regularly”</p> <p>-“Yes, I take medicine regularly. My husband also reminds to take medicine. So I have no missed dose”.</p> <p>-“I never missed my dose. My daughter always take care my medicine taking.”</p>	F1 F2 F4 F10,F7 F8 F9	70.00%
2. Missed dose (start one time)	-“I have one time missed dose last month.”	F3	30.00%

missed dose)	-“my child is only 18 months. And then I work in plastic making home. I have missed dose. But I try to take regularly.” -“Yes, I have missed dose. But it was not too many time.”	F5 F6	
3. Can't take on time			00.00%

According to subjective measurement from in-depth interview, 70% of FTARV are never miss dose and take on right time. 30% of FTARV has missed dose at least one time.

According to table 3 and table 4, Myanmar women ARV taking participants are more regular taking of drug than Myanmar men ARV taking participants. Myanmar men interviewed for the study (41.18%) are regular drug taking participants and (35.29%) and (23.53%) are non regular drug taking participants. (So, total (58.82%) are non regular taking participants). 70% of women participants have regular taking drug.

4.4 Knowledge

All hospital has counseling and education section before ARV treatment. The answer from respondents indicated a provision of a mixture answers between information and knowledge (Cross-sectional qualitative data) .These answers could base on (a) knowledge related to signs or symptoms (b) perceived knowledge on cause (c) knowledge on HIV/AIDS and ARV (d) Duration of staying.

Their knowledge is a more subjective way of knowing and is typically based on experiential or individual values, perceptions and experience. Most of their information was from hospital and friends.

(a) Knowledge related to signs and symptoms

The respondents know the warning symptoms of disease. For example – diarrhea, illness, weight loss and loss of appetite. These were core symptoms that drove them to have blood test according to their answers. If they did not have these symptoms, their blood check was either their husband / partners HIV condition or died from HIV/AIDS.

Example answers

(1) 31 years old Male, married, fisherman, Burma

I live in Sathip (Cho Buri) about 18 years. I live my wife. I am a fisherman. I knew my HIV condition due to blood test. I took my blood test in Bangkok hospital because of severe diarrhea, headache.

(2) 33 years old, female, Mon racial, married

I live in here 3 years. I knew my HIV condition due to blood test. Because my husband had HIV . I took my blood test in hospital.

(b) Perceived knowledge on cause

Most of them have the knowledge of the cause that are perceived as having unsafe sex and /or blood transfusion.

Example answers

(1) 41 years old, female, Burma, married

I know that HIV can be transmitted from having sex without condom and blood transfusion.

(2) 23 years old, male, Mon racial, single

HIV can be transmitted from unsafe sex and blood transfusion. So I used condom when I have sex after I had known my HIV condition.

(c) Knowledge on HIV/AIDS and ARV

The respondents seemed to know HIV/AIDS quite well according to their answers. Their answers to the questions regarding HIV infection and methods of prevention show similar patterns. However the answers of ARV are varied. This variation can be probably be interpreted as an uncertainty of knowledge possession.

Example answers

(1) 31 years old Male, married,

I just know HIV knowledge from friends and hospital. But I don't know exactly.

Interviewer If so, let's me know your knowledge about HIV /AIDS.

Interviewer: Do you think HIV /AIDS is a hereditary disease?

M1 No

Interviewer: Do you think we can know who has HIV/AIDS by looking.

M1 We cannot know.

Interviewer: how do you think HIV is virus or Bactria?

M1 It is virus.

Interviewer: Can you tell me the mode of transmission of HIV?

M1 sex, blood

Interviewer: Can you tell me the prevention of HIV?

M1 I use condom. Mostly I control myself because I afraid to transmit to my wife.

Ok you have nice knowledge about HIV. And then I want to know your ARV knowledge.

Interviewer: Do you think ARV is lifelong therapy?

M1 my doctor already told.

Interviewer: Do you think ARV kills HIV?

M1 only control this virus

Interviewer: If so, ARV controls your body defense mechanism.

M1 Yes, sure doctor.

Interviewer: Do you think, HIV can still be possible to transmit from patients on ART to others.

M1 No

(2) 35 years old, male, Mon racial, married,

I know some knowledge about HIV.

Interviewer If so, let's me know your knowledge about HIV /AIDS.

Interviewer: Do you think HIV /AIDS is a hereditary disease?

M3 No

Interviewer: Do you think we can know who has HIV/AIDS by looking.

M3 No

Interviewer: how do you think HIV is virus or Bactria?

M3 HIV is virus.

Interviewer: Can you tell me the mode of transmission of HIV?

M3 sex without using condom, blood transfusion

Interviewer: Can you tell me the prevention of HIV?

M3 using condom when I have sex.

Doing blood test when blood donation .

Ok you have nice knowledge about HIV. And then I want to know your ARV knowledge.

Interviewer: Do you think ARV is lifelong therapy?

M3 I don't know

Interviewer: Do you think ARV kills HIV?

M3 No

Interviewer: If so, ARV controls your body defense mechanism.

M3 Yes

Interviewer: Do you think, HIV can still be possible to transmit from patients on ART to others.

M3 Yes

(3) All of their about HIV knowledge is nearly the same. So I will not mention again and I will mention about ARV knowledge.

37 years old, Female, Burma racial, married

Interviewer: Do you think ARV is lifelong therapy?

F2 Yes, this is lifelong taking.

Interviewer: Do you think ARV kills HIV?

F2 No

Interviewer: If so, ARV controls your body defense mechanism.

F2 Yes, Just control my condition.

Interviewer: Do you think, HIV can still be possible to transmit from patients on ART to others.

F2 No, I don't know.

(d) Duration of staying in Thailand

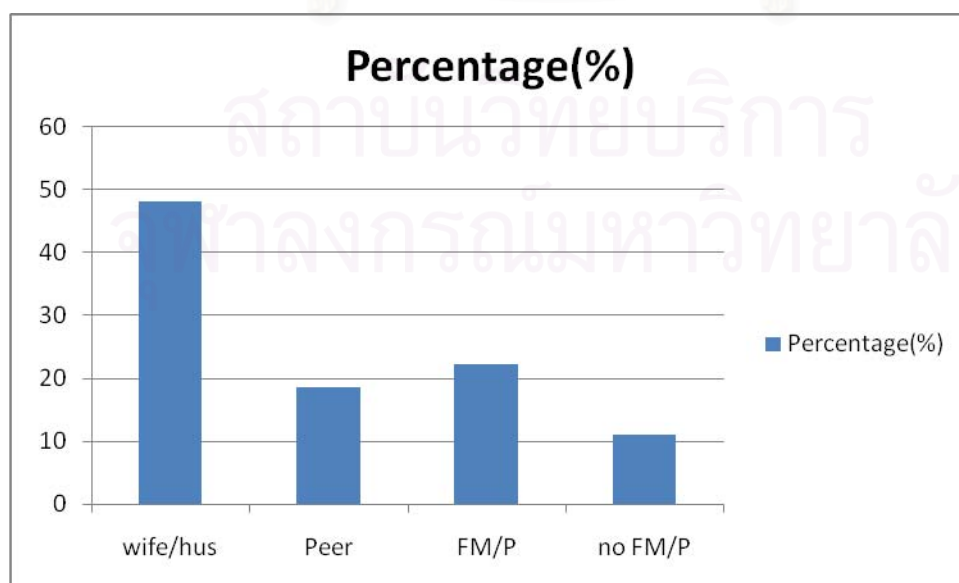
This does not seem to indicate the risk, ranging from one and half to twenty years. But we cannot know exactly how long they stay in Thailand. However

The matrix of their answer related to knowledge is below.

Information they have	Knowledge they possess	Information and knowledge they need
General information- (virus, cannot know by looking, not hereditary disease) Transmission Prevention ARV can control body defense mechanism.	Warning symptoms (weight loss, diarrhea, illness etc;) Perceived knowledge about causes	-Need to add their knowledge and information about mother to child transmission and multiple infection e.g. opportunistic infection and co infection. - Need to improve about ARV drug knowledge.

4.5 Social Support

Fig 3 Percentage of participants who have social support



Most of participants are living with family (husband or wife) and 18.52% participated in peer group education in follow up. 22.22% of participants are living with family member and then they participated in peer group education. 11.11% are not participated in peer education and they are not being supported of taking care by family members. Most of ARV taking participants is couple. They take care each other when husband lives in home. Because husband works in working places (sea, industrial, construction site). The social support conditions of following one couple and one unregistered migrant could indicate the drug taking support pattern of Myanmar migrants ARV taking in Thailand. The following are their answers about social support.

36 years old man and 27 years old woman

36 years old man ... (M2)

We live in Sathip about 6 years. I work in fishing boat. We have one child. I knew my HIV condition due to blood test. I took my blood test due to illness, weight loose and diarrhea last one year. I started ARV last one year. I took my medicine everyday (Morning 8; 00 am and Night 8: 00 pm), Drugs (D4T, 3TC, INAVIR), Morning 4 tablets + Night 3 tablets. Yes, I missed in working area. I have to go 2 times per year to go to the sea. So I missed in my working period. Now my drugs were added afternoon 2 tablets and night one tablet due to my condition. My wife always reminds to me to take medicine at home. We take the drugs together when he lives in home. When I go to sea, I talk my medicine myself. Yes, this Sathip has CAR (Center of AIDS Right). This health center has volunteer (Mon people) for group discussion. So we can easily participate in health education section. It has peer group education. I participate sometime. But I cannot do always because I have my work. My wife

always participates in there. I changed my medicine last follow up. I suffered headache and weakness. So I took sick leave from work. I did not suffer from any side effect of drugs. But I do not improve my condition. I think that this condition may be my missing pills. So I try to take my drugs at right time for the changing new drugs.

27 years old woman (F3)

I took my blood test due to my husband HIV condition. Yes I have to take my medicine everyday (Morning 8: 00 am and Night 8: 00 pm), Drugs (Tenofovir, Efavirenz, and 3TC), Morning 4 tablets + Night 4 tablets. Yes, last month, I missed the drug for one dose because I went to Chonburi. Normally, I did not miss the dose and I took right time. But I missed only one dose for my trip. I make my phone alarm. And my husband always takes care to take the drugs when he lives in home. We take the drugs together when he lives in home. I always participate in peer group discussion. . I did not suffer any side effect of the drugs. My health is so good.



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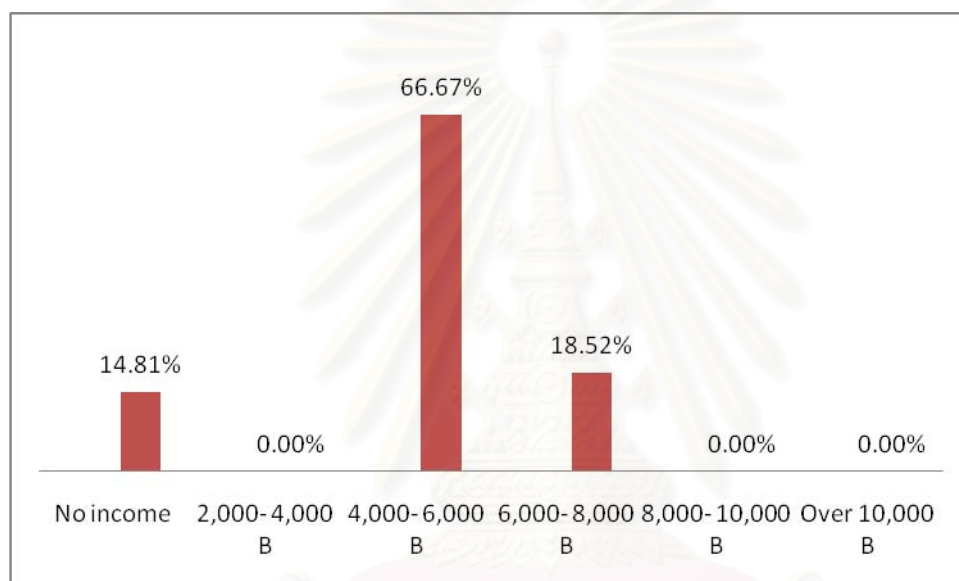
4.6 Health Care Service

(Access to health care)

4.6.1 Economic Concern

4.6.1. 1 Income of participants

Fig 4. Monthly income of participants (Baht per month)



66.67% of participants have monthly income 4,000-6,000 Baht per month. 14.81% has no income and 18.52% has 6,000-8,000 Baht per month.

4.6.1.2 Free of Charge for treatment and ARV taking

In Thailand, FOC treatment for ARV drugs are supported by NAPHA extension, (Global Fund), for registered migrants ARV users. Free of Charge treatment for ARV drugs depends on registered or non registered condition. (81.48%) are registered migrants and (18.52%) are non register migrants. So (18.52%) do not get FOC for treatment.

The following interviews are FOC treatments and ARV taking relationship.

Code No M1

“My doctor told me that this drug is my last change for treatment. I took ARV treatment last 2 years. At that time, I have no register. So I did not get FOC for drugs. I bought my drug in the e hospital, Bangkok. You will already know this drug is so expensive. So I cannot buy regularly. I decided to do register and I tried to become a registered worker. Last year, I got register. Last 7 months, I took my drug FOC from Sathip hospital. But my doctor told me that this drug is my last chance. I have to take regularly for this last chance. In former, I always missed my dose because I cannot buy the drug.”

Code No M9

“I am non -register worker. I have to money to take the treatment. Now I have 3 times followed up and I can give for these 3 times. I think that I cannot take the treatment for long time to pay money. I am thinking about it how I can manage my treatment and my income.”

Code No M12

“I got the treatment FOC from hospital. For my side, I have to take medicine regularly and follow up regularly”.

Code No F5

“I cannot take the treatment without FOC for long term. I try to pay money for treatment. As you know my work in plastic making place and I do not get money too much. And then I have 18 months child. But I cannot get FOC due to my registration condition.”

4.6.1.3 Transportation Fees to come follow up

Transportation fees of follow up treatment were mentioned that it is not a problem to compare free of charge treatment. (See section on below)

Code M1

“I live in Samesan village and I have to go Satthip hospital for follow up treatment monthly. Total transportation cost is around 100 Baht. I think it is not a problem to get free of charge treatment.”

Code F5

“Transportation cost is not an important thing for me. If I will get the free of charge treatment, I can come every follow up. I will not care for transportation cost.”

4.6.2 Work related obstacle

Most of participants (85.18%) were workers in related field i.e. fisherman, vendor, industrial worker, construction place worker. Many participants need to make adjustments in their working life and ARV taking.

4.6.2.1 ARV taking in working place

Most participants who have missed dose have a problem in working place ARV taking.

Code No M2

“When I am busy in my working place, I cannot take medicine on right time.”

Code No M3

“I missed in working area. I have to go 2 times/year to the sea. So I missed in my working period.”

4.6.2.2 Time of ARV taking and working hours

Adjustment between ARV taking time and working hours is an important factor according to their responding answers.

Code No M17

“I have to take my medicine in 7:30 am and 7; 30 pm. My working hours is 8;30 am to 5 pm. So I take medicine before I go to work and after I come back to work. So I do not to take medicine in work place.”

Code No M4

“I missed 2 times last week. I have to take medicine 9:30 am and 9:30 pm. I always take my morning medicine in working place. Yes, I missed my morning drug 2 times.”

4.6.2.3 Secret drug taking condition in working place

HIV is secret condition for migrant workers. They can face from Fired-work if their boss knew this condition. So, drug taking in working place become a secret condition.

Code No F5

“I do not want to know my boss and my friends about my HIV condition. So I have to take my drugs as a secret condition. I never take my medicine in front of my boss and my friends. Because they will ask which medicine does u take? I think they will guess when they see my medicine regularly.”

Code No M10

“My boss and my friends do not know my HIV condition. So I never take medicine in front of my friends.”

4.6.3 Communication between patients and providers

Communication between patients and providers is one of the important things in ARV adherence. Most of participants can speak Thai language and they can understand. The Samesan village has volunteer health worker for communication between patients and providers. The Samusakhon hospital also has translator for communication. All of participants from the Photharam hospital and the Ratchburi hospital can speak and understand Thai language well. The following interviews can show what the barriers in communication are?

Code No M3

“I can speak Burma, Mon and Thai language. I can understand all of my doctors counseling. I can understand peer group discussion. I think this Thai language must be needed to communicate our doctors. I have to take this medicine for long time in Thailand. I do not face communication difficulty because I can speak Thai language.”

Code No F3

“I understand Thai language just a little. My husband is Mon and he can speak and understand Thai language. When he has no work to go the sea, he can help me to go follow up communication. When he went to sea, I went to hospital with health volunteer from CAR (center of AIDS right). Health volunteers for communication and health education are helpful person for us who cannot communicate Thai language. If it has no volunteer, I will face communication difficulty to go follow up.”

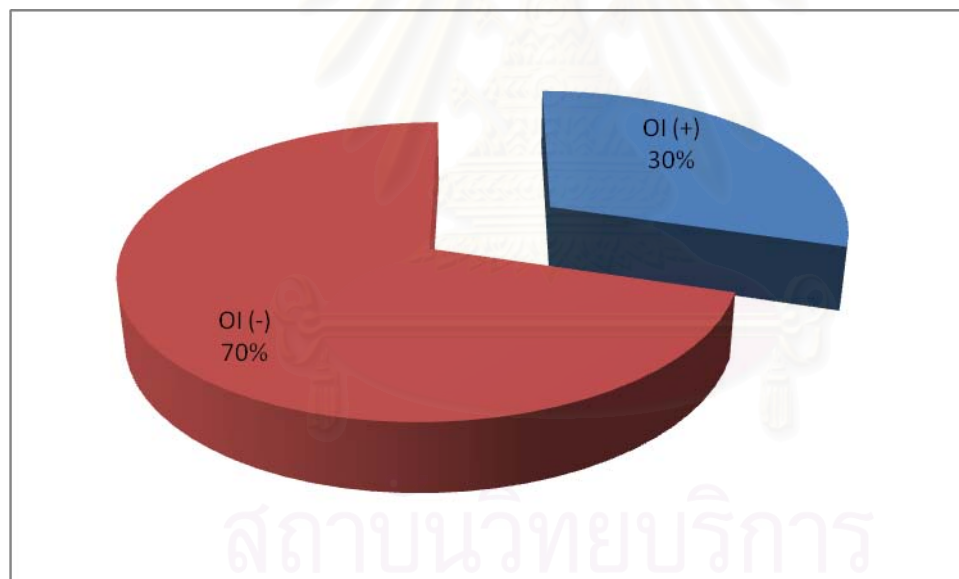
Code No M11

“This Samusakhon hospital has Thai-Myanmar translators, Mon-Myanmar-Thai translators. So I have no problem for communication. Even health education and peer groups, they can help for communication. I have to come for follow up. They will translate between doctors, pharmacist and me.”

4.7 Disease condition and ARV taking

4.7.1 Opportunistic infection

Fig 5 Participants who have HIV with opportunistic infection (subjective reports and treatment records)



30% of participants have opportunistic infection. This 30% are code numbers M1, M2, M3, M4, M10, M12, F1 and F6. By comparing with table 3 and table 4, most of them have the practices of missed dose. The following are common answer from interviews.

Code No M2

“I suffer from severe headache. Now I take a rest in home. I cannot work. The doctor said I have another disease in brain. Even I take medicine, I suffer from this condition. I have the missed dose when I worked in fishing boat. So I try to take medicine regularly.”

Code No M3

“Now I cannot eat and drink. I vomited all food and liquid that I ate. Fortunately, I can take medicine. My doctor said that I have a problem in my gut tract. I cannot work now. They said to take medicine regularly to cure this condition. I will try to take my medicine regularly on right time. I have missed dose in my work place. I think this is the consequence of my missed dose.”

Code No F2

“I am fine. I trust the drug advantages. I take my medicine regularly. So I feel better. My CD4 count is >300 now.”

4.7.2 Medical taking according to disease condition

Table 5 shows the number and percentage of prescribed drugs regime by daily frequency of drugs administration and number of pills per day. 88.89% of respondents have to take drugs for equal to 2 times per day. Only 11.11% of them have to administer the drugs for 3-4 times per day due to their OI condition. All of them have to take medicines for minimum 2 times and maximum 4 times per day. Regarding number of tablets that respondents have to take on every day, the mean of tablets is

6.9 with the range of 4-11 tablets, 77.78% have to take 6-9 tablets every day since last visit.

Table 4.5 Prescribed drug regimes by daily frequency of drug administration and numbers of pills per day (n=27)

Medical taking	Number	%	Code No
Number of times patients have to take medicine in everyday since last visit			
2	24	88.89%	All participants Except M2,3,4
3-4	3	11.11%	M2,M3,M4
(Median=2, Range= 2-4)			
Number of tablets that patients have to take every day since last visit			
0	0	0.00%	
2	3	11.11%	M9,M12,F3
3-5	21	77.78%	All participants except M2,3,4,9,12, F3
6-9			
>10	3	11.11%	M2,M3,M4
(mean = 6.9 , Range = 4-11)			

Code No M2, M3 and M4 are respondent who have to take medicine > 10 tablets and 3 times per day.

Code No M2

“ I have to take my medicine morning 4 tablets, afternoon 2 tablets , evening 4 tablets and one tablet before sleeping. I have to take so many tablets and I try to take regularly. But I do not want to take every day. But we have no choice. If I will take my medicine, I feel better. If possible, I want to reduce medication times. Some drugs must be taken after meal.”

Code No F2

“My drug taking time is morning 9:00 (3 tablets) and night (4 tablets). I take my drugs regularly on right time. I got the drug FOC. I know, my duty is drug regular taking. I am so thankful for FOC drug. But I want to reduce my tablets, if possible.”



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CHAPTER (v)

DISCUSSION AND RECOMMENDATION

5.1 Discussion

This qualitative study was conducted from January to March 2009. The purpose of this study is to find the factors which facilitate or constrain to antiretroviral drug taking in Myanmar migrants who take ARV from Thai hospital, the central area of Thailand. Research findings were discussed as follows; 1. Antiretroviral drug taking 2. Factors which facilitate or constrain to drug taking, (2.1) gender and ARV taking (2.2) Knowledge about HIV and ARV (2.3) Social Support (2.4) Health care service (2.5) Disease condition.

1. Antiretroviral drug taking

It is the first study of assessing to ARV taking and factors influencing to ARV taking in Myanmar migrants in the central area of Thailand. Since HIV/AIDS is still social stigma and sensitive issues in community, it is hard to reach target population in the community and was leading to clinical based study. This study was built by in depth interview. And then the condition of antiretroviral drug taking was assessed by subjective reports. It can assess that they can take the drug regularly or not. It does not measure pill counting methods, drug refilling methods etc due to time limitation and ethical consideration. According to in-depth interview, 48% of participants have the experience of missed dose and 52% of participants have no experience of missed dose.

Although self reported method in interview is totally relied on respondent's report, nearly the same proportion of participants who have missed dose experience and have no missed dose experience. 52% of respondents were experienced for at least one time and they

will late for 15 minutes to 2 hours. This study does not mean adherence rate is good or no adherence.

The participants who have no experience of missed dose may be due to several possible explanations. And also the participants who have missed dose may be due to several factors. According to this qualitative study,

Gender and ARV taking condition

Regarding gender, Myanmar women ARV taking participants are more regular taking of drug than Myanmar men ARV users. As it has been reported in one study that gender issue are not affect to ARV adherence. (Karina M.Berg.MD 2004) One qualitative study showed gender was not strong factor for drug adherence. (Nu Nu A. 2006) This study does not correspond with the previous studies. Because of the study population is migrant group. Especially, man ARV users are working group and women ARV users are dependent group. The women who participated in the study were more stable, with less travelling. The answers of man who have an experience of missed dose are related to their works. For this qualitative study, a gender issue is one factor in ARV taking condition according to Table 3 and 4.

Knowledge of HIV & ARV

All participants in this study got counseling and education at least one time from the hospital. They know the transmission, prevention of HIV according to their common answer box 3. It has no doubt has that knowledge about HIV and ARV has been increasingly gained. But 48% of participants have missed dose experience. So their knowledge do not affect to their practice. The result of this study is the same with one study (Nu Nu A.2006) , knowledge itself was not enough to affect to ARV taking. Therefore the knowledge of HIV

and ARV therapy represent a necessary component, but it would not be sufficient as a strong factor to ARV taking.

Family or Social Support

According to Fig 3, most of participants live with family. Most of ARV taking participants is couple. 18.52% of participants participated in peer group education and discussion regularly. From box 2 interview answer, man can take regularly in home because their family or wives remind the drug taking time. Most of man have missed dose in working place. The women have the practice to participate the peer group. In the side of non register ARV taking participants have a problem to come and take regular peer group support. In male, they have to adjust their working hours. This qualitative study found that peer group participation is not sufficient and they have need wiliness to participation. Even most of them have family support, they missed in working place. Family and social support alone is not a factor to increase regular ARV taking.

Free of charge treatment

66.67% of participants have between 4,000-6,000 Baht per month. 81.48% of participants get ARV free treatment from NAPHA (extension) due to their registration conditions. According to interviews, FOC treatment for ARV is strongly related to ARV using. They can access to health care service regularly and they can come to regular follow up due to free of charge treatment. In non register participants, they have to buy the drugs and they have to pay for treatment. They do not want to take treatment for long term without free of charge treatment. Even they have to cost for transportation fees, they can come if they will get FOC treatment.

So this free of charge treatment is depended on register condition. Access to health care service is strongly depended on FOC treatment in migrant group.

Transportation Fees for regular follow up

All participants have to cost 60 – 100 Baht for transportation fees. Almost all participants answered that they have no problem for this transportation fees to come regular follow up. All registered participants can come to hospital for FOC treatment without thinking about transportation fees as a problem. And also non registered participants will come to hospital if they will get FOC treatment. In one research, (Simen Tellemann. 2007) cost of transportation is one of the problems for ART accessing. For this study, cost of transportation has to think as a one of the problems for accessing follow up treatment. But it is not a strongly factor according to their interviews.

Work related obstacle

ARV taking in work place is an important problem for migrant ARV users. 81.18% are workers i.e. fisherman, vendor, industrial worker, construction place worker. From their interviews, fisherman have to go the sea and they have a problem to take medicine regularly (family care, busy conditions in working place etc.) One month follow up is not convenient to fisherman group because they have to work in the sea 3-4 months/one time. And other construction place workers, industrial workers also have strongly affected in missed dose in working place. And then they do not want to know their drug taking condition. They make as a secret drug taking in working place. Most of them have to take drug at least one time in working place. They afraid that their bosses and friends will guess their drugs may be ARV. If their bosses and friends know, they will face to fire from work. So, work related obstacle is one factor for missing and skipping dose in ARV taking.

Communication

For migrant population, language barrier appears as a factor for communication between patient and provider. According to in depth interview, speaking/understanding Thai language or having translator or volunteer are easier to communicate between patient and provider. It is easier to access health care service. But percentage of having missed dose and percentage of regular drug taking are nearly the same. Even they got facilities for language or even they can speak and understand Thai language, they have the experience of missed dose. It may be related with wiliness to take drugs and self health care. Although language barrier is one factor for migrants ARV user, it is not strongly affected to ARV regular taking.

Disease condition and ARV taking

Opportunistic infection and clinical symptoms

In previous studies said that the presence of clinical symptoms, opportunistic infection increased the perceived severity of illness and thereby motivated patients to adhere. (Maor C, 2002) (Jordan J, 2005). It could be the same result for this qualitative study. 30% of participants have middle- sever opportunistic infection. They have clinical symptoms. According to their answers, it could be possibly raise their awareness on the benefits of the therapy and consequently lead to take regularly to ARV.

Medical taking

Depends on stages and their disease condition, all respondents have to take different kinds of medication every day. Participants had to administer for minimum 2 times and maximum 4 times per day and the mean of tablets is 6.9 (Range 4-11). According to their answers, they want to reduce their medical taking times. They didn't tell about their tablets count. Some participants want to reduce their drug taking time in working place. In one study

said that the total number of pills per day, dietary restrictions and dosing frequency are likely to influence their adherence. (Nu Nu A, 2006) For this study, if they will get the adjustment between drug taking times and working hours, it may prone to get regular drug taking. So this is one factor that affect to ARV taking. (for this study dietary restrictions did not mention because there was no dietary restriction for current antiretroviral drug).



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5.2 Conclusion

This qualitative study was conducted to assess the factors which facilitate or constrain to ARV taking. The study population was Myanmar migrants ARV users from the central area of Thailand, i.e. Chon Buri, Ratchburi and Samusakhon. The study hospitals were Sathip hospital (Chon Buri), Ratchburi hospital, Photharam hospital (Ratchburi) and Samusakhon hospital. Data collection was conducted during the period January 30 to March 11, 2009.

It was found that 63% of respondents were male and 37% were female. 62.96% were between the ages of 31-40. Regular taking ARV and having the missed dose experience were nearly the same. Mostly, man has more experience of missed dose. It may be related to their work related conditions. Knowledge of HIV and ARV only cannot promote their regular drug taking practice. Participation in peer group was not sufficient. Family support only cannot become a factor to increase regular taking practice. Although language barrier is one factor for migrants ARV users, it is not strongly affected to ARV taking.

Registration and non registration conditions may affect the ARV taking. Because free of charge treatment highly depends on registration condition. If they will get FOC treatment, they will continue and try to take regularly medicine administration. Work related obstacle becomes an important factor for ARV taking. They have missed dose in working place. They have secret drug taking in working place.

Clinical symptom and opportunistic infection could be to awareness on the therapy. Frequency of medical taking is one factor for ARV taking and it will need the adjustment between ARV taking times and working hours.

According to their in depth interview answers, gender, income and registration conditions appeared as a factors in general condition. From being male or female, man in

Myanmar migrants has more working condition than woman. So they have a factor in ARV taking in working place. Their incomes are not enough for long term ARV treatment taking. So free of charge treatment is strongly improve their long term regular ARV taking. Registration condition is highly affected to their free of charge treatment. Registration condition itself affected to ARV treatment (to get health care assessment and safely to go regular follow up). In patient's condition, frequency of medical taking and having opportunistic infection / clinical symptoms affected to ARV taking. And then having clinical symptoms and opportunistic infection affected to their income (economic concern). Their frequency of medical taking affected to ARV taking in working place (work related factors). Having social and family support and giving knowledge from hospitals improve their self awareness. Even they got family/social care and giving knowledge from hospital, self awareness itself is more important for this Myanmar migrant group.

In conclusion, economic concern, work related factors, registration condition and self awareness are mostly affected in Myanmar migrants ARV

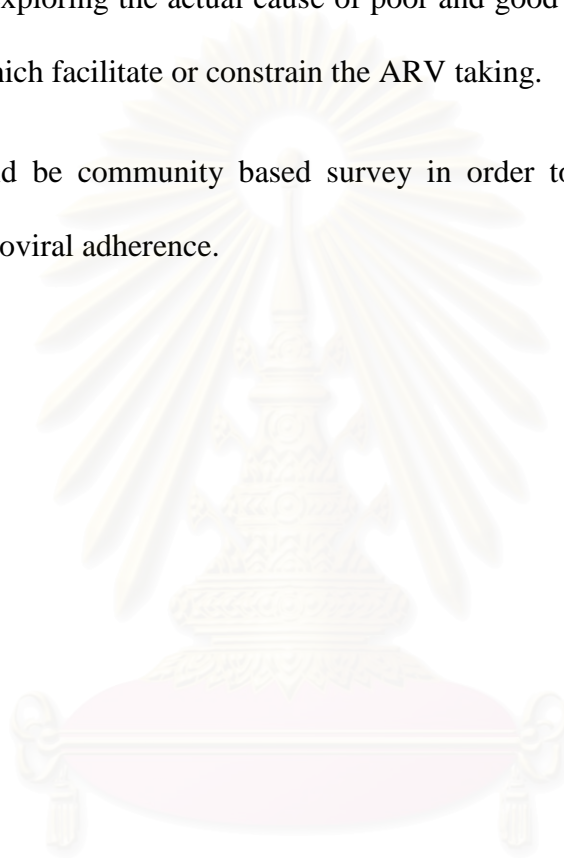
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5.3 Recommendations for Implementation

1. Registration condition
2. The information about ARV is a lifelong therapy and risks of HIV transmission from ARV users to other people should be more stress during health education.
3. Peer group participation is not sufficient even hospitals give facility to them. Individual wiliness to participation may be needed.
4. Forgetfulness is the primary cause of poor adherence, create or provide reminder system may have resulted in good adherence. (For example: Phone alarm).
5. Adjustment in follow up time and arrangement for 3 or 4 months medicine giving for fisherman group when they have to go to the sea.
6. Medical taking time arrangement for working group will be needed. For example if they have to go work 8:30 am, medical taking time is 7:30 am to avoid medical taking in working place.

5.4 Recommendation for further study

1. Further study should be both qualitative and quantitative study.
2. Quantitative assessment for adherence by cross checking with subjective assessment (self report) and objective assessment (follow up record, pill count record). In qualitative side, further study must be exploring the actual cause of poor and good adherence behavior based on this study factors which facilitate or constrain the ARV taking.
3. Further study should be community based survey in order to find out the significant determinants of antiretroviral adherence.



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APPENDIX

In-depth Interview Guideline

Patients will be contacted initially at the health facility, but the interview will be conducted at another time and place. Introduction of the interview, introduction of the study, consent requested with option not to participate.

Warm Up

How long do you stay in here? Where is your home area? Do you live with family or not? (If not, where do your family live in? Are they in Myanmar?) How do you know your HIV condition?

1. Patient knowledge about HIV/AIDS

Perceived problems and possible solutions
We would like to understand what people actually know about the illness that they have. Can you tell me what you know about HIV/AIDS? (Probe on the following: mode of HIV infection, methods of prevention).

Apart from this, is there anything else you may have heard from your community that explains AIDS in a different way?

2. How patients manage to take their medicines

We are trying to find out how patients manage to take their medicines for some people it's not a problem, but we also know that others don't always find it easy. Please feel free to be open about the problems you face with this.

1. Do you have your medicines with you? May I see them? Please can you tell me when you take each of the medicines?

2. Are there any other medications you are taking (e.g. traditional medicines,

herbs, medicines from other hospitals, clinics, shops/chemist, etc.)

3. Did you perhaps miss any? (Details if yes.)

4. This is a very important question. We appreciate how difficult it can be to take pills on a daily basis. If you sometimes miss a dose, please can you tell me what causes this to happen? Can you give an example or two?

5. On the other hand, what is it that helps you to take your pills regularly and on time? (e.g. friend, relatives, individuals etc.)

6. Have you disclosed your status to any one? If so, who? Do they help you to take your pills?

7. Have you had your treatment changed at any moment since you were started on ARVs? If yes, why? (Probe: treatment failure, side-effects, drug not available).

8. In your opinion, what would happen if you skip your medicine?

3. For clinical symptoms

1. What is your last visit?

2. Do you have some symptoms in the last visit?

3. If you have a symptom, how do you think about your ART taking and your symptom?

4. For Economic concern

1. Can you tell me your average income per month?

2. Do you have to send your money to your family from Myanmar?

3. When you go to the hospital for follow up, how much do you have to cost for transportation and other facilities?

4. How do you manage above cost and saving money to support to family?

5. For work related obstacles

1. What are your working hours?

2. How do you manage to go follow up appointment and your working hours?

3. I have known that the employer had tested all the workers' blood sample for HIV in some work sites. In other sites, HIV (+) workers will fire if their employer knows.

So, how do you manage your HIV condition? For example do you have to take medicine as a secret condition? Do you conceal your HIV condition as your secret?

4. How does your employee management your sick leave?

6. Patient and provider

1. Can you speak Thai language?

2. How do you feel for communication between your provider and you?

3. If you cannot speak and understand Thai language, how can you make communication between your provider and you?

4. Can you understand all of provider counseling?

7. Perceived problems and possible solutions

1. What do you perceive as the biggest problem regarding taking ARV treatment?

2. What do you think could be done to improve this?

Do you have any questions for me?

Thank you for your time and co-operation!

Inform Consent Form

Project Title (Factors affecting to antiretroviral drug adherence in HIV (+) among Myanmar Migrants)

Responsible person (s) and hospital

.....;

Date of consent..... /...../.....

Place

(Mr.Mrs.Ms)

Code..... I have already known the information of the project from Dr Nilar Han, the principal investigator; I have read and understudied all statements in the informed consent form. I also have been given an explanation the objectives and methodology of the study and possible risks and benefit that may occur to myself upon participation in the study. I understand that my study results will be kept confidential. The result of this study may be published and/or presented at any meeting without naming me as a subject. I understand that I shall be given a copy of the singed consent to keep.

I have the right to withdraw from the project at any time without any adverse effects upon myself.

Signature

Signature

.....

.....

(.....)

(Dr Nilar Han)

(Respondent/Informant)

(Principal investigator)

Date

Date

Signature.....

(.....)

(Witness) Date

CURRICULUM VITAE

Name : Nilar Han

Date of Birth : 3rd Feb, 1985

Place of Birth : Pyawbwe, Myanmar

Education : M.B.,B.S (2008)
University of Medicine Mandalay, Myanmar

Work Experience : 2006-2008
Assistant Clinician
Win “ HIV/AIDS and tropical infectious disease clinic
Mandalay, Myanmar

Permanent address : Thein Htit Thu, Anawyahtar Street, Myin Bat quarter
Pyawbwe Township, Mandalay Devison, Myanmar

Phone; 064-49190

Email address : nilarhan08@gmail.com