การมีส่วนร่วมของชายในการใช้บริการป้องกันการติดเชื้อเอดส์จากแม่สู่ลูก ในอำเภอไจไมยอ รัฐมอญ ประเทศพม่า

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วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย
ปีการศึกษา 2552

MALE INVOLVEMENT IN PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV/AIDS SERVICES AMONG MARRIED MEN IN KYAIKMARAW TOWNSHIP, MON STATE, MYANMAR.

Ms. Thidar Aung

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Public Health Program in Public Health
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Thesis Title	MALE INVOLVEMENT IN PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV/AIDS AMONG MARRIED MEN IN KYAIKMARAW TOWNSHIP, MON STATE, MYANMAR
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Field of Study	Public Health
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นางสาว ทีค้า อ่อง: การมีส่วนร่วมของชายในการไปใช้บริการป้องกันการติดเชื้อเอดส์จากแม่สู่ลูก ในอำเภอไจไมยอ รัฐมอญ ประเทศพม่า (PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV/AIDS / MALE INVOLVEMENT/ MARRIED MEN) อ. ที่ปรึกษา : ผศ. ดร. รัตนา สำโรงทอง, 79 หน้า

การศึกษาภาคตัดขวางครั้งนี้ กลุ่มตัวอย่างเป็นชายชาวพม่าที่สมรสแล้ว อายุระหว่าง 15-60 ปี โดยใช้แบบสอบถามแบบมีโครงสร้างทำการศึกษาในอำเภอไยคมารอ รัฐมอญ ประเทศพม่า วัตถุประสงค์ของการศึกษาเพื่อ 1) ประเมินความรู้ และการรับรู้เกี่ยวกับโรคเอดส์ และ 2) เพื่อศึกษาถึงการมีส่วนร่วมของชายชาวพม่าที่สมรสแล้ว ในการใช้บริการเรื่องการ ป้องกั นการติดเชื้อเอด ส์จ ากแ ม่สู่ ลูก ผลการศึก ษาพบว่า จากก ลุ่มตัวอย่างมีอายุระหว่าง 15-60 ปี อายุต่ำสุด 17 ปี สูงสุด 52 ปี อายุเฉลี่ย 31.9 ปี ร้อยละ 52 เป็นกลุ่มอายุระหว่าง 25-35 ปี ส่วนใหญ่ของกลุ่มตัวอย่างมีการศึกษาระดับประถม และมัธยมศึกษา ร้อยละ 44 เป็นแรงงานในไร่นา ร้อยละ 71 มีรายได้ไม่เพียงพอ หากแต่ไม่มีหนี้สิน มากกว่า 2 ใน 3 ของกลุ่มตัวอย่างมีบุตร 1-3 คน สำหรับการมีส่วนร่วมของกลุ่มตัวอย่างในกา รไปใช้บริการเรื่องการป้องกั นการติดเชื้อเอดส์จากแม่สู่ลูก พบว่ากลุ่มตัวอย่างร้อยละ 79 มีความรู้เรื่องโรคเอดส์อยู่ในระดับต่ำ ร้อยละ 16.7 มีความรู้เรื่องโรคเอดส์อยู่ในระดั บปานกลาง เพียงร้อยละ 27.4 มีส่วนร่วมในการไปใช้บริการในการป้องกันก ารติดเชื้อเอดส์จากแม่สู่ลูก โดยพาภรรยาไปรับบ ริการดังกล่าว และร้อยละ 36.5 พูดคุยเรื่องไปใช้บริการใน การป้องกั นการติดเชื้ อเอดส์จาก แม่สู่ ลูกกับภรรยา ปัจจัยที่ มีความ สัมพันธ์อย่ างมีนัยสำคั ญทา งสถิติต่อการพูดคุยเรื่อง ไปใช้บริก ารในการป้องกั นการติ ดเชื้อเ อดส์จากแ ม่สู่ลูก กับภรรยา ได้แก่ ระดับการศึกษา (p-value 0.05) อาชีพ (p-value 0.006) จำนวนบุตร (p-value 0.04) และระดับความรู้ (p-value 0.02) และพบว่าการรับรู้ความรุนแร งของโรคมีค วามสัมพันธ์อย่ างมีนัยสำคัญทาง สถิติต่อการพูดคุย เรื่องไปใช้บริการ ในการป้องกันการติดเชื้อเอดส์จากแม่สู่ลูกกับภรรยา (p-value 0.01) นอกจากนี้ยังพบว่า การรับรู้ความเสี่ยงต่อโรคเอดส์ อันได้แก่ ตนเองอาจติดเชื้อห ากภรรยา ติดเชื้อเอดส์ และตนเองสามาร ถติดเชื้อจากการได้รับเลื อดจากผู้ติด เชื้อมีความสัม พันธ์อย่างมีนัยสำคัญทาง สถิติต่อการพูดคุย เรื่องไปใ ช้บริการในการป้องกัน การติดเชื้อเอดส์จากแม่สู่ลูก กับภรรยา (p-value 0.01, 0.003 ตามลำดับ) การรับรู้เรื่องอุปสรรค (มีความกังวลใจ เรื่องการ รักษา ความลับ ของผู้ให้บริการ) มีความสัมพันธ์อย่างมีนัยสำ คัญทางสถิ ติต่อก ารพู ดคุย เรื่ องไปใช้บริ การในการป้องกัน การติดเชื้อ เอดส์จากแ ม่สู่ลูกกับภรรยา (p- value 0. 0 3) ไม่พบว่ามี ปัจจัยใดมีความ สัมพันธ์กับ การ พาภรรยาไปรับบริการฯ

สาขาวิชา สาธารณสุขศาสตร์ ลายมือชื่อนิสิต.....

ปีการศึกษา 2552..... ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก.....

5279105053 : MAJOR PUBLIC HEALTH
KEYWORDS : PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV/AIDS / MALE INVOLVEMENT/ MARRIED MEN

THIDAR AUNG: MALE INVOLEMENT IN PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV/AIDS SERVICES AMONG MARRIED MEN IN KYAIKMARAW TOWNSHIP, MON STATE, MYANMAR. THESIS ADVISOR: ASSISTANT PROFESSOR RATANA SOMRONGTHONG, Ph.D., 79 pp

The cross sectional descriptive study was collected in Kyaikmaraw Township, Mon State, Myanmar. Two hundred and fifty two married men of age (15-60) asked by using structure interview questionnaire. The objectives of the study are 1) To assess the knowledge about HIV/AIDS and perception and 2) to find out the involvement of male in prevention of mother to child transmission (PMTC) of HIV/AIDS services utilization. Among married men age from (15 to 60) years, minimum age was 17 years and maximum age was 52 years with a mean age of 31.9 years, 52% of respondents were (25-35) years old and most of the respondents were secondary school and high school. About 44% are working in labor farm, 71% answer that they are not enough money for monthly expenses but no debt. More than two third had (1-3) children. Most of the respondents 79% had poor level of knowledge, 16.7% of respondents had moderate level of knowledge. The percentage of male involvement in PMCT were 27.4% in accompany for counseling of PMCT with wife, 36% in discuss about PMCT services with wife respectively. There are significant associations between education at p-value 0.058, occupation at p-value 0.006, number of children p-value 0.04, and level of knowledge at p-value 0.021and discuss with wife about PMCT services. Besides this, in the perceived susceptibility there was an association between HIV/AIDS can transmit via infected wife at p-value 0.01 and can get infection from receiving blood of infected donor's blood at p-value 0.003 and perceived barriers of "worried for confidential" at p-value 0.03. But there was no association between independent variables and accompany for counseling of PMCT services with wife.

Field of Study: Public Health **Student's Signature**.....

Academic Year: 2009 **Advisor' Signature**.....

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ABBREVIATIONS

AIDS	Acquired immune deficiency syndrome
ANC	Antenatal care
HIV	Human immunodeficiency virus
PMCTC	Prevention of mother to child transmission
PLWHA	People living with HIV/AIS
UNAIDS	the Joint United Nation Program on HIV/AIDS
W H O	World Health Organization
SW	Sex workers
IDU	Injection drug users
MSM	Men who have sex with men
RHC	Rural health centre
STI	Sexual transmitted diseases
AN care	Antenatal care
UNDP	United nation development program
NAP	National AIDS program
FSW	Female sex worker
ARV	Antiretroviral
UNICEF	United nation international children funds
IOM	International organization for migration

CHAPTER I

INTRODUCTION

1.1 Background & Rationale

Human Immunodeficiency Virus is an unprecedented public health problem facing the entire world. In country‟s most heavily affected, HIV has reduced life expectancy by more than 20 years, slowed economic growth and deepened household poverty. According to the United Nation Development Programme (UNDP, 2007), HIV has become the “single greatest reversal in human development” in modern history.

To achieve the United Nations Millennium Development goals of reducing child motility and improve maternal health, combat HIV/AIDS took place in vital role. HIV/AIDS is now the leading cause of death worldwide among adults aged 15-59 years. As of December 2008, the global epidemic data of Acquire Immune Deficiency Syndrome, the total number of people living with HIV was 34 million, women account for 15.5 million and children less than 15 years were 2.0 million (UNAIDS, 2008).

Vertical Transmission of HIV from mother-to-child account for the vast majority of the infections among the children. The under availability of effective HIV treatment and intervention to prevent mother-to –child transmission increase the importance of male participation of voluntary, counseling and testing for Human Immunodeficiency Virus(HIV) in both pregnant mother and fathers, it becomes a central strategy in the response to mother to child transmission.

Global HIV/AIDS situation

World Health Organization global data of Human Immunodeficiency Virus there was an estimated 33.4 million people living with HIV, 2.0 million people died due to Acquire Immune Deficiency Syndrome (AIDS) of them420, 000 cases are children under 15 years old (WHO, 2007).

Women accounted for a half of the people living with (HIV) worldwide in 2007 and an estimated 15.5 million women. Death due to Acquire Immune Deficiency Syndrome (AIDS) among children is an estimated 270 000(250 000-290 000).

Mother-to-Child Transmission of HIV/AIDS situation in Asia / South East Asia

In Asia, an estimated 4.7 million people were living with HIV in 2008, including the 350000 people who were newly infected that year. In some year, approximately 380 000 died from AIDS – related illness. Approximately 2.6 million men, more than 950,000 women and almost 330,000 children died of AIDS related diseases.

In 2008, the number of south and South East Asia, adults and children living with HIV was 3.8 million (3.4 million-4.3 millions) and 270 000 (220 000-30 000) adults and child deaths were caused by AIDS. Besides this, Mother-to-Child transmission is also a significant HIV transmission route in Asia. At the end of 2007, it was estimated that 140, 000 children in South and South East Asia and 7,800 children in East Asia, were living with HIV, most of whom became infected through mother to child transmission.

Mother-to-Child Transmission of HIV/AIDS Situation in Myanmar

Myanmar is facing serious epidemic. The estimated number of people (all ages) living with HIV in 2007 was 370, 000(UNICEF, at a glance Myanmar, 2007). The estimated number of death due to AIDS during 2007 was 24,000 (UNAIDS, WHO, 2008) and the estimated percentage of HIV cases that occurred among (age 15-49) by the end of 2007 was 42%. Moreover, the estimated number of women (aged 15+) living with HIV was 100(thousand), (UNICEF, at a glance Myanmar, 2007) and an estimated number of HIV positive pregnant women was 52%. Besides this among HIV positive women who received ARVs for PMTCT was 13.77% in 2008, (UNITE FOR CHILDREN, 2009). According to 2003 data from UNAIDS, UNICEF and WHO the estimated number of infected children from 0-15 years was (170 000 – 16 000) and the number of deaths due to AIDS was (11000- 35 000).

Prevention of mother to child transmission of HIV/AIDS services in Myanmar

The Myanmar authorities have recognized that the prevention of mother to child transmission of HIV/AIDS is a national concern, and PMTCT in Myanmar includes more broad-reaching activities such as in improving overall maternal and child health services for antenatal care, delivery services and postnatal care. (UNICEF, Myanmar Country Office).

To increase the community awareness and benefits on PMCT services the Ministry of Public Health has been emphasized on the following intervention. Community-based PMCT intervention is still effective for pregnant women who live in rural area because access to hospitals is limited due to lack of transport and resources. Currently, PMCT/VCT offers pre-test counselling for pregnant women living in those areas by health staff in the RHC. Pregnant women, except for those who have obstetrical indication for hospital delivery, have the choice to receive post-test counselling, AN care, administration of ARV and delivery in the township hospital or RHC. Safe delivery and Universal Precaution training are conducted for all midwives and lady health visitors and nurses in township hospital to make sure that babies are delivered safely and the staff practice universal precaution for every delivery. The safe delivery and Universal Precaution training reinforces the fact that both mothers and fathers have an impact on the transmission of HIV to the infant, (UNICEF, Myanmar Country Office, PMCT services Myanmar).

In shwepyithar Township, a Myanmar community based program was started in 2007 to aid in the prevention of mother to child transmission of HIV/AIDS. Free voluntary counseling and testing for HIV services are currently available for pregnant couples in township hospital and urban health centre. (Save the Children Annual report 2007).

Prevention of mother to child transmission of HIV/AIDS services in Kyaikmaraw Township, Mon State, Myanmar

Mon State is an administrative division of Myanmar. It is located between Kayin State on the East, the Andaman Sea on the west, Bago division on the north and Tanintharyin Division on the south and has a short border with Thailand‟s Kanchanaburi Province at its south-eastern tip. The land area is 12,155 km^2 and the total population is 2,466,000. The state is organize in 10 district including Kyaikmaraw. The majority of inhabitants are Mons and Bamars. Kayin, Rakhine, Chin, Kachin, Shan and Pa-O national races also live in the state. The majority of people are Buddhists with Christians as minority. The main languages are Mon and Myanmar. The state is the top producer of rubber. The study will be carried out in 70 villages under Kyaikmaraw Township. The total population of married men at the age of 15-49 is 4806. To increase the community awareness and benefits on PMCT services the non-governmental organization such as Save the Children, International

organization for migration (IOM) and United Nation Development Program (UNDP) have been emphasizing on the PMCT intervention programme.

1.2 Research Question

What are the factors related to male involvements in prevention of mother to child transmission of HIV/AIDS among married men?

1.3 Objective

1.3.1 General Objective

To assess involvement of males in the prevention of mother to child transmission of HIV/AIDS among married men in Kyaikmaraw Township, Mon State, Myanmar.

1.3.4 Specific Objective

(a) To assess the social demographic factors and male involvement in PMCT
(b) To assess the knowledge about HIV/AIDS and male involvement in PMCT
(c) To determine the perceived susceptibility, severity of getting HIV/AIDS and factor related to the utilization of PMCT services among married men
(d) To determine the factors association between perceived benefits, barriers to utilization of PMCT and male involvement in PMCT
(e) To determine cues to action towards male involvement in PMCT
(f) To find the involvement of male in PMCT services utilization

Study Variables

Independent variables

(1) Socio-Demographic Characteristics

- Age
- Education
- Occupation
- Family Income
- Number of children
- Number of pregnancies

(2) Knowledge about HIV/AIDS

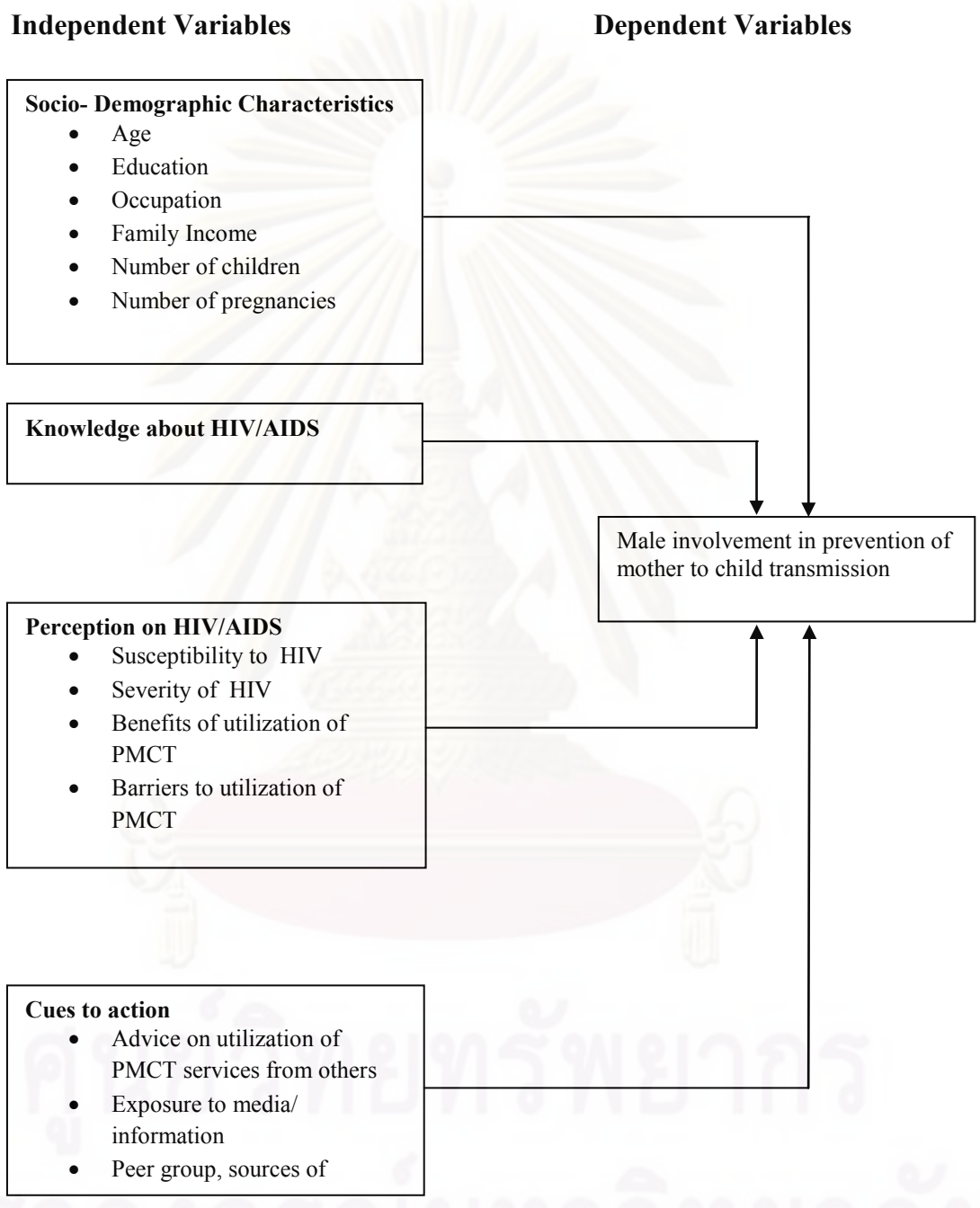
(3) Perception HIV/AIDS

- Susceptibility to HIV
- Severity of HIV
- Benefits utilization of PMCT
- Barriers to utilization of PMCT

(4) Cues to action

- Advice on utilization PMCT services from others
- Exposure to media/information
- Peer group, sources of information

1.4 Figure (1) Conceptual Framework



1.5 Terminology and Operational Definitions

Male involvement in prevention of mother to child transmission of HIV/AIDS refers to male participation during antenatal care taking and PMCT services during the last pregnancy of his spouse.

Age refers to the age in years of respondents at the time of interview.

Educational level refers to the highest attained level of education of the respondents; it will be measure in five categories, “No education or illiterate”, “primary school”, “ secondary school”, “high school”, and “collage level and above”.

Occupation refers to occupation of the respondents at the time of interview to be measured in three categories “unemployed”, “employed”, “self employed”.

Family income means income of all members of the family of the respondent at the time of the interview. It will be measure in three categories, “not enough income”, “enough but not save”, “enough and can save”.

Number of children refers to number of living children the respondents have. This was classified into: 0, 1, 2, and 3 and above.

Number of pregnancy refers to number of pregnancy (since marrying current husband only)

Knowledge

Knowledge about HIV/AIDS refers to the understanding about HIV/AIDS in terms of cause of disease, mode of transmission and risk factors, preventive measures, and HIV/AIDS treatment.

Perceptions

Perceived susceptibility to HIV/AIDS refers to the feeling or recognition of being at risk of acquiring HIV/AIDS infection.

Perceived severity of HIV refers to the respondent‟s belief of how serious condition (HIV/AIDS) is perceived to be and its undesired effects such as mortality, complication of getting HIV and economic consequences.

A benefit of utilization of PMCT services refers to the respondent‟s belief in the efficacy of counseling and testing for HIV to reduce seriousness of impact of

HIV/AIDS. The benefits are identified as benefits for child and mother with care and support for HIV positive person.

Cues to action refer to those who facilitate the performance of action and environmental conditions such as source of information, discussion and suggestion from friends, discussion about the utilization of prevention of mother to child transmission of HIV/AIDS.

Advice on utilization of PMCT services from others refers to any suggestion or sources of information to utilizing PMCT service which the respondent received from other related people such as health staff, NGO staff, volunteers, wife, relatives and friends.

Prevention of Mother to child transmission (MTCT) refers to prevention of vertical transmission of HIV from a mother who is HIV-infected to her infants. MTCT is the main transmission route for HIV infection in infants and children.

Male involvement in utilization of PMCT refers to all married men (age 15 to 60) involve in prevention of mother to child transmission of HIV/ AIDS services.

Married men refer to men (age 15 to 60) currently married to a women and living together in the same household.

CHAPTER II
LITERATURE REVIEW

2. 1 Human Immunodeficiency Virus

Human Immunodeficiency Virus is a lentivirus that causes Acquired Immune Deficiency Syndrome (AIDS), a condition in humans in which the immune system begins to fail, leading to life threatening opportunistic infections. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected T- cells.

Literature Review

The four major routes of transmission are unsafe sex, contaminated needles, breast milk, and transmission from and infected mother to her baby at birth (Vertical Transmission). Screening of blood products for HIV has largely eliminated transmission through blood transfusions or infected blood products in the developed world (WHO).

HIV primarily infects vital cells in the human immune system such as helper T cells (specifically CD4 T cells), macrophages, and dendrites cells. HIV infection leads to low level of CD4 T cells through three main mechanisms: first, direct viral killing of infected cells; second, increased rates of apoptosis in infected cells; and third, killing of infected CD4 + T cells by CD8 cytotoxic lymphocytes that recognize infected cells. When CD4 T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively more susceptible to opportunistic infections. Most people infected with HIV eventually develop AIDS. These individuals mostly die from opportunistic infections or malignancies associated with the progressive failure of the immune system. HIV progress to AIDS at a variable rate affected by viral, host, and environmental factors; HIV- specific treatment delays this process. Most will progress to AIDS within 10 years of HIV infection: some will have progressed much sooner and some will take much longer. Treatment with anti-retroviral increases the life expectancy of people infected with HIV. Even after HIV

has progressed to diagnosable AIDS, the average survival time with antiretroviral therapy was estimated to be more than 5 years as of 200. Without antiretroviral therapy, someone who has AIDS typically dies within a year (Medicine Net).

2. 2 Mother to Child Transmission of HIV

Mother-to-child transmission (MTCT) is when an HIV positive woman passes the virus to her baby. MTCT is also referred to as “Vertical Transmission” or “prenatal transmission”. Most of the children infected with HIV acquired the virus through MTCT.

Mother-to-Child Transmission can happen during pregnancy and after birth. During pregnancy, the fetus can become infected by contact with the maternal blood through a placental hemorrhage or by swallowing infected amniotic fluid. Maternal factors which increase the chance of mother-to-fetus transmission include: maternal seroconversion during pregnancy, high viral load, malnutrition, other sexually transmitted diseases, and lack of or poor compliance with antiretroviral drug therapy. During birth, factors that increase the risk of mother-to-child HIV transmission include: vaginal delivery, rupture of vaginal tissue, contact with maternal blood and vaginal secretions, and chorioamnitis. Higher maternal viral load is positively correlated with vertical HIV transmission. The higher risk appears to be related to greater exposure to maternal secretions during the delivery process secondary to prolonged rupture of membranes. After birth, the most significant risk factor is breastfeeding. The HIV virus has been isolated from breast milk, demonstrating the risk of long-term breastfeeding in infants. Transmission of HIV through breastfeeding occurs in 16-29% of cases. Mixed feeding of breast milk and other food sources has been shown to increase the risk of HIV transmission. Scientists hypothesize that an infant‟s immune response is triggered by the introduction of new foods, attracting white blood cells to the gastrointestinal tract and increasing targets for the HIV viruses to spread infection (Well Sphere).

Vertical Transmission is the cause of most incident of HIV in child below aged in 15, so it is important to how HIV pass from mother to child. Without intervention or treatment, the possible of HIV transmission from mother to child is 20%- 40 %. In addition, the appropriate intervention and treatment can be reduced from around 25%

to less than 2%.A Further 5%-20%will become infected through breastfeeding (WHO, MTCT Pocket Guide2004).

2. 3 Prevention of Mother to Child Transmission

Prevention of mother-to-child transmission is a term used to describe a package of services intended to reduce the risk of mother-to-child transmission of HIV (MTCT). There are four elements that reduce HIV infection in infants and young children. Preventing HIV infection among prospective parent by providing voluntary HIV counseling and testing, provide access to condoms has come to be known as the "ABC" approach: **A**- abstinence refrain from having sexual intercourse, **B**- being faithful to one partner not infected with HIV, **C**- using condoms correctly and consistently, early diagnosis and treatment of sexually transmitted infection (AVERT-PMTCT). The second strategy is that providing effective family planning, safe and effective contraceptive, high quality of reproductive health can help prevent unintended pregnancies and help women who are HIV-infected protect their own health while taking care of their families.

Among all these intervention; prevention of mother to child transmission of HIV/AIDS is a key. To provide the maximum opportunity for women to benefit from PMCT interventions, WHO recommends provider initiated HIV testing and counseling as a standard part of antenatal care (ANC), labor and delivery and post delivery care. For women who test HIV-negative, HIV testing and counseling in PMCT settings provide information and support to remain uninfected and information and support to breastfeed exclusively for six months. On the other hand, for pregnant women who are HIV-infected, HIV testing and counseling in PMCT settings provides an opportunity to receive appropriate and timely interventions to reduce MTCT including: ARV therapy or prophylaxis, information about delivering with a skilled birth attendant, provision of information on infant feeding options and infant feeding counseling and support, discussion of the importance of partner testing and prevention, prevention of sexual transmission of HIV, receipt of information on available treatment, care, nutrition, family planning and support services, learning about the importance of continuous health care, learn about the needs of HIV-exposed children: HIV testing of infants and children, Co- trimoxazole prophylaxis, referral of

older children for HIV testing, making informed decisions about their pregnancy(WHO,CDC,2008).

2.4 Male Involvement in prevention of mother to child transmission of HIV/AIDS

In general, it is now believe that people will take action to ward off, to screen for, or to control an ill-health condition if they regard themselves as susceptibility to the condition, if they believe it to have potentially serious consequences, if they believe that a course of action available to them would be beneficial in reducing either their susceptibility to or the severity of the condition, and if they believe that the anticipated barriers to (or cost of) taking the action are outweighed by its benefits.

Socio demographic factors are believed to have an indirect effect on behavior (i.e. taking HIV test during pregnancy) by influencing the perception of susceptibility, severity, benefits and barriers. Rural substance farmers were more likely to be, less educated and less informed about HIV and VCT. In a study done by Adih William K et al (2008), the respondents between 15-19 years old were less likely to report higher frequency of condom use in their life time than married men age 20-40.

According to the yearend evaluation of the community base PMCT project in Pakhoteku, Myanmar, the majority of people who utilize of PMCT service were pregnant mothers(89%) and participation of male involvement was very weak(35%), (Save the Children Report, 2008). Because of this, knowing the HIV status of pregnant mothers alone without knowing about their partners became a challenge to disclosure of HIV status among couples and continuing preventive practices especially for partners. Moreover, the role of husband plays key roles in reproductive health issues as individuals, family members and community decision maker. The study in Uganda found that, the majority of women (339 or 89%) informed them that they had gone to an antenatal clinic that day and also 68% (264) of the women thought that they should consult their husbands before having an HIV test. In addition 81% (299) of the women thought that their husbands would approve of them being tested and the remaining feared that their husbands would not approve of them being tested(Francis Bajunirwe*1,2 and Michael Muzoora1). In terms of “ Male involvement in PMCT services in Mbeya region, Tanzania, barriers to PMCT attendance included lack of information/knowledge, no time, neglected importance,

the services representing a female responsibility, or fear of HIV test result(S. Thuring,2009).

In a study done by Jeve Yadava B, Mishra Vikas, 2005, acceptance of the test after pre test counseling is 99%. About 58.6% of women attended post test counseling and collected reports. Sero prevalence of HIV was 0.73% of which 62.5% came for post test counseling, 46.8% patient received nevirapine. Only 10% of the husbands of total antenatal cases came for counseling of which 65% got tested.

Men"s involvement and participation in PMCT should be the new focus for the programme as well as other reproductive health programmes because men are strong decision makers on reproductive health issues. Robey et al (1998). Nevertheless, despite the keys roles male have, they have not participated fully in PMCT in Zambia and Chipata district is no expectation. Data available shows that male involvement in voluntary counseling account for only 5% and testing (VCT) program in the districts. Following table shows the ratio of male: female participation in VCT at Chipata VCT center from 2004 to 2005.

Male: Female participation in VCT at Chipata VCT Centre 4th quarter 2004 to 4th quarter 2005

Year	2004	2005	2005	2005	2005
Quarters	4th	1st	2nd	3rd	4th
Women	88	100	78	98	66
Male	5	5	3	7	4
Total	93	105	81	101	70
Males	5.4%	4.8%	3.7%	6.9%	5.7%
Women	94.6%	95.2%	96.3%	93.1%	94.3%

Further more in Kenya, the United Nations International Children Emergency Funds (UNICEF) Project conducted in 2002(osbome, 2002) reported that women explained that they were afraid of being tested for HIV because they would be sent away by their husbands or accused of infidelity if their spouses found out about their status.

Therefore unless the problem of low male involvement and participation in PMCT activities are systematically researched and factors established, the vision and goals will not be met, men are not involve and do not participated in the PMCT program. There is a need therefore, to explore the involvement and participation of men in PMCT.

2. 5 Related Behavior Theory

Factor related male involvement in voluntary, counseling and testing for prevention of mother to child transmission of HIV/AIDS services depends on knowledge and perception of HIV/AIDS. The following Health Belief Model (HBM) is most commonly used in a number of studies involving perception and behavior change (Glanz Rimer Lewis, Health Behavior Health Education).

The Health Belief Theory:

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behavior by focusing on the attitudes and beliefs of individuals. The HBM was developed in the 1950 as part of an effort by social psychologists in the United States Public Health Service to explain the lack of public participation in health screening and prevention programmes (e.g., a free and conveniently located tuberculosis screening project). Since then, the HBM has been adapted to explore variety of long-and- short-term health behavior, including sexual risk behavior and the transmission of HIV/AIDS. In general, it now is believed that people will take action to ward off, to screen for, or to control an ill-health condition of they regard themselves as susceptibility to or the severity of the condition, if they believe it to have potentially serious consequences, if they believe that a course of action available to them would be beneficial in reducing either their susceptibility to or the severity of the condition, and if they believe that the anticipated barriers to (or cost of) taking the action are outweighed by its benefits.

According to the model, Behavior depends mainly on two variables: the value that individual places on a particular goal and the individual"s estimation on the likelihood that the given action will achieve the goal. When these variables were conceptualized in the context of the health related behavior, the correspondences included (1) the desire to prevent illness, (2) the belief that a specific health action will be effective to prevent illness. The HBM consists of the following variables:

(A)Perceived Threat consists of two parts as perceived susceptibility and perceived severity of a health condition.

Perceived Susceptibility

This construct refers to one‟s subjective perception of the risk of constructing a health condition. In the case of medically established illness, the dimension has been reformulated to include acceptance of the diagnosis, personal estimates of susceptibility and susceptibility to illness in general.

Perceived severity

Feelings concerning the seriousness of contracting an illness or of leaving it untreated include evaluations of both medical and clinical consequences (e g. death, disability and pain) and possible social consequences (such as effects of the conditions on work, family life, and social relation). The combination of susceptibility and severity has been labeled the perceived threat.

(B)Perceived Benefits

Perceived benefits of taking action refer to the believed effectiveness of given available alternatives in reducing the disease threat. The perceived barrier of acting refers to the negative aspects of preventive behavior, such as inconvenience, high costs, unpleasantness, etc.

(C) Cue to Action

In various early formulations of the HBM, the concept of cues that trigger actuation was discussed. Hochbaum (1958), for example, though that readiness to take action (perceived susceptibility and perceived benefits) could only be potentiated by other factors, particularly by cues to instigate action, such as bodily events, or by environmental events, such as media publicity. He did not, however, study the role of cues empirically. Cues to action may ultimately prove to be important, but they have not been systematically studied. Indeed, while the concept of cues as a trigger mechanism is appealing, it has been difficult to study in explanatory surveys; a cue can be as fleeting as a sneeze or the barely conscious perception of a poster.

Other Variables

Diverse demographic, socio demographic factors (e g., sex, age, and race), Scio psychological variables (e g, personality, social class) and structural variables (e g,

knowledge about the disease, prior experience with the diseases) may affect the individual"s perceptions and thus indirectly influence health – related behavior. Specifically, socio demographic factors, particularly educational attainment, are believed to have an indirect effect on behavior by influencing the perception of susceptibility, severity, benefits, and barriers.

For the health behavior we have been considering, people who feel threatened by and illness (perceiving the disease is serious and that they are likely to develop the health problem), and believe the benefits of taking action outweighing the barriers are more likely to perform the preventive behavior. In terms of male involvement in voluntary, counseling and testing for prevention of mother to child transmission of HIV/AIDS, the HBM assumes that the people who perceive the threat of HIV infection, perceived benefits of taking HIV test more than barriers of taking HIV test, have more knowledge about HIV/AIDS and have internal or external cues of the action are more likely to take HIV test during pregnancy.

Health Belief Model Component and Linkages

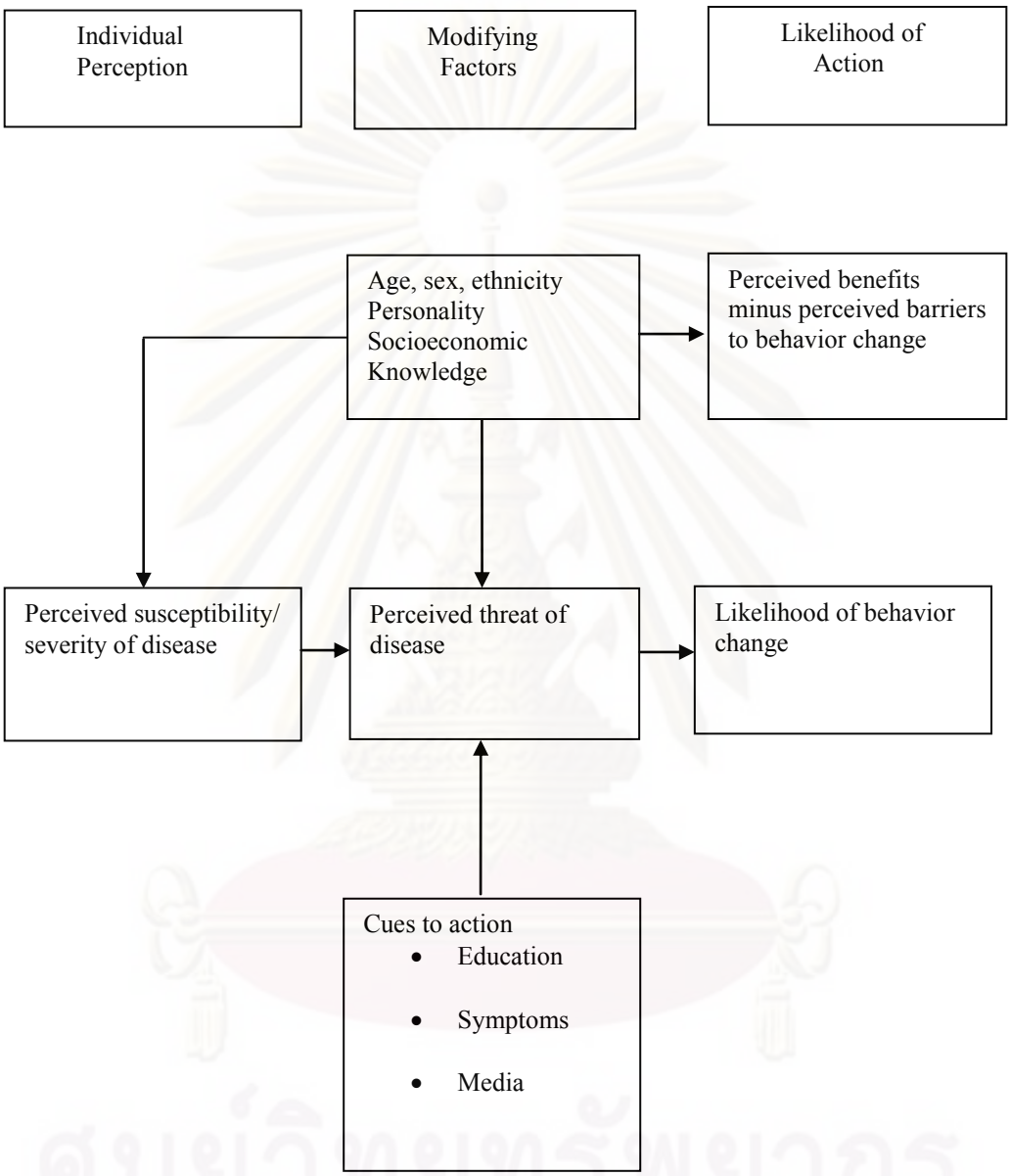


Figure 2: Health Belief Model Components and linkages 3rd edition (Glanz Rimer Lewis, 2002)

For the health behavior we have been considering, people who feel threatened by and illness (perceiving the disease is serious and that they are likely to develop the health problem), and believe the benefits of taking action outweighing the barriers are more likely to perform the preventive behavior. In terms of male involvement in voluntary, counseling and testing for prevention of mother to child transmission of HIV/AIDS, the HBM assumes that the people who perceive the threat of HIV infection, perceived benefits of taking HIV test more than barriers of taking HIV test, have more knowledge about HIV/AIDS and have internal or external cues of the action are more likely to take HIV test during pregnancy.

CHAPTER III

RESEARCH METHODOLOGY

3. 1 Site of the study

The study was carred out in Kyaikmaraw Township, Mon state, Myanmar. Mon state is an administrative division of Myanmar. It is sandwiched between kayin state on the east, the Andaman Sea on the west, Bago division on the north and Tanintharyin Division on the south and has a short border with Thailand"s Kanchanaburi Province at its south- eastern tip.

The majority of inhabitants are Mons and Bamar, Kayin, Rakhine, Chin, Kachin, Shan and Pa-O national races also live in the state. The majority of people are Buddhists with Christians as minority. The main languages are Mon and Myanmar. The state is the top producer of rubber.

3. 2 Research Design

The research design was a cross-sectional descriptive study and use to find out male involvement in prevention of mother to child transmission of HIV/AIDS prevention services in Kyaikmaraw Township, Mon State, Myanmar.

3.3 Study Population

The target population was all married men in Kyaikmaraw Township, Mon State, Myanmar.

3. 4 Sample size

Estimated sample size is based on the following formula that is stated by Daniel W. W. (p.189):

$$n = \frac{Z^2_{\alpha/2} * P(1-P)}{d^2} * D.eff$$

$$n = \frac{(1.96)^2 * 0.35 * 0.65}{0.08 * 0.08} * 1.7 \cong 232$$

n = estimated minimum sample size

Z = level of significance, in this study, it is set 0.05. Therefore Z= 1.96

d = acceptable minimum allowable error = 8% = 0.08 (MIN MIN THEIN, 2008)

D.eff=Design Effect= Var (p) cls
Var (p) srs

P = rate of HIV testing and counseling among married men . According to Pakkoku Township"s 2008 yearend report the rate was 35%

5 percent of the calculated for mission data = 23

Total sample size = 257

3.5 Sampling Technique

The two-stage cluster sampling was used in this study; the total number of married men is 4806 in 70 villages.

The 1st stage: Selection of sample village: List the 70 village in Kyaikmaraw Township and 5 villages were randomly selected.

The 2nd stage: Selection of sample married men: Sample size was randomly selected from the list of men from among 5 villages.

(a) Inclusion Criteria

All married men (age- 15 to 60) who are willing to participate in the study by giving written consent.

(b) Exclusion Criteria

Married men who are mentally ill who cannot communicate.

Men who are widows or separated/divorce.

Men who do not give consent.

3.6 Data Collection Tool

The tool for data collection was structured interview form. Structured Interview form was developed by reviewing the related literature and based on the conceptual framework including on Health Belief Model. The questionnaire initially prepared in English and translated into Myanmar language for use.

The structure interview form comprised of four parts:

- Socio-Demographic characteristics such as age, education, occupation, family income, reproductive health history and number of children
- Knowledge about part of the prevention of mother to child transmission
- Perceived susceptibility, severity of HIV/AIDS , barriers, benefits of utilization of PMCT
- Cues to action such as advice on utilization PMCT services from others, exposure to media/ information, peer group, sources of information

3.7 Data Collection

The structured interview form pretested and revises. Training of male research assistance was done by the investigator before the actual data collection. Data collection took place only after revision of the finalized structure interview form and training. Besides this, during the interview, tape/audio recorders were not used. Experiences research assistance recruited with the help of a senior research scientist from Department of Medical Research.

3.8 Data Management

(a) Validity

Revision and correction of the questionnaire were made according to suggestion and recommendation with three experts.

(b)Reliability

The reliability was done by pretesting on the similar population of the study in Shwepyithar Township, Myanmar. Cronbach‟s alpha coefficient was used to measure reliability of the data collection tool. The Cronbach‟s alpha coefficient was set at 0.7 of knowledge about part of PMCT.

3.9 Data analysis

All of the data items were given codes, recheck and analyzed by SPSS version 16. The data was analysed by descriptive and analytic statics.

Descriptive Statistics: Number, percentage, mean and standard deviation were used to describe the variables.

Inferential Statistics: The association between independent variables and dependent variables was tested by Chi-square test, with significant level set at 0.05.

Scoring and Grouping

Scores	Independent Variables Scores			
	Knowledge	Perceived Susceptibility Severity	Perceived Barriers	Perceived Benefits
Good (80-100%)	16-20	16-18	29-33	13-15
Moderate (60-79%)	12-15	13-15	24-28	11-12
Poor (0-59%)	0-11	6-12	11-23	5-10

The level of knowledge was presented on the basic of commonly used 80% and 60% cut off points. The correct answers were given 1 point, and 0 for the incorrect and don"t know answers.

- Good level of knowledge : 80-100% of the total score(16-20) points
- Moderate level of knowledge: 60-79% of the total score(12-15) points
- Poor level of knowledge:0-59% of the total score(0-11) points

The likert‟s scale (agree, uncertain and disagree) was used to measure the level of perception. The scoring was given as 3 for agree, 2 for uncertain and 1 for disagree in positive questions. A negative question was given reversely. The scores of perceived susceptibility, severity of getting HIV/AIDS and perceived benefits, barriers to utilization of PMCT are classified into good if score are ≥80% and moderate 60-79 % and poor if score <60%. The score from 16 to 18 were good, 13 to 15 were moderate and 6 to 12 were poor for perceived susceptibility and severity. For perceived barrier, the score from 29 to 33 were good, 24 to 28 were moderate and 11 to 23 were poor level. For perceived benefit, the score from 13 to 15 were good, 11 to 12 were moderate and 5 to 10 were poor.

3.11 Limitation of the study

There were selection biases because this study focused on only married men who live in Kyaikmaraw Township. The study did not include, who did not want to be interviewed for research. The studies were community based and relied on the self-report by the respondents. This study leaded to reporting bias because of the reluctance to disclose sensitive behaviors such as those for HIV prevention.

3.12 Ethical Consideration

This study was applied to the Chulalongkorn University„s Department of Public Health and Research Committee to receive ethical approval. Meanwhile, need to send official collaborative letter and consent was taken for the local authority of Kyaikmaraw Township. Moreover the participant was informed that their participation in the study was voluntary and they can withdraw from the study at anytime. In addition, measures were taken to ensure the confidentiality of the data. In particular, the interview was held in privacy away from relatives and friends, Participants accessed to the final report. The data was not used for other purposes.

3.13 Application Benefits

This study will provide information for Government and NGOs for expansion of male involvement in the PMCT program. Beside this, study will provide base line information about prevention of mother to child transmission of HIV/AIDS among married men.

CHAPTER IV
RESULTS

This descriptive cross-sectional study was conducted in Kyaikmaraw Township, Mon State, Myanmar. The study investigated the male involvement in prevention of mother to child transmission of HIV/AIDS services. In this study, it was planned to study all (252) married men between ages 15 and 60.

The results were divided into the following parts:

4.1 Description of independent variables

4.1.1 Socio-Demographic characteristics

4.1.2 Knowledge about HIV/AIDS

4.1.3 Perceived susceptibility to transmission, perceived severity of mother to child transmission, perceived barriers and benefits of utilization

4.1.4 Cues to action

4.2 Description of dependent variables

4.3 Description of association of accompany for counseling of PMCT with wife

4.4 Description of association of discussion with wife about PMCT services

4.4.1 Association between socio-demographic characteristics and discuss with wife about PMCT services

4.4.2 Association between knowledge about HIV/AIDS and discussion with wife about PMCT services

4.4.3 Association between perceived susceptibility of transmission, perceived severity of mother to child transmission, perceived barriers and benefits of utilization and discuss with wife about PMCT services

4.1 Description of independent variables

4.1.1 Description of socio-demographic characteristics of married men

Among 252 married men age 15 to 60 years, minimum age was 17 years and maximum age was 52 years with a mean age 31.9 years. (52%) of respondents were 25-35 years old.

In education, most of the respondents were in secondary school and high school. In specifically 39.3% were secondary school level and 38.1% were high school and above. According to the occupational level, 44% of respondents are working on farm, rubber plantation; others are employee in private business and business ownership and government stuff. In terms of monthly expenses, 71% of respondents answer that they do not enough money for monthly expenses but had no debt. More than two third of respondents have the children have 1-3 children, less than one third of respondents who had more than 3 children. About 75% of respondents had the experiences 1-3 times.

Table 1. Number and percentage distribution of Socio-demographic characteristics of 252 married men

Socio-demographic characteristics	Number	Percent
Age (years)		
17-24	45	17.9
25-35	131	52.0
36-52	76	30.2
Mean+/-S.D(years) 31.90 +/- 7.962		
Minimum-Maximum (17-52)		
Education		
Primary school and below	57	22.6
Secondary school	99	39.3
High school and above	96	38.1
Occupation		
Unemployed and others	19	7.5
Government employee	11	4.4
Employee in private business	75	29.8
Own business	35	13.9
Labor in farm, rubber plantation	112	44.4
Monthly expenses		
Enough with saving	7	2.8
Enough without saving	40	15.9
Not enough but no debt	179	71.0
Not enough and in debt	26	10.3
Number of children		
1-3 children	198	78.6
more than 3 children	38	15.1
Number of pregnancies		
1-3 pregnancies	190	75.4
more than 3 pregnancies	50	19.8

4.1.2 Knowledge about HIV/AIDS

In table 2, to assess respondent‟s current knowledge of HIV transmission, fourteen questions regarding HIV knowledge was directed to respondents. The answer were categorized as “yes”, “no” and “don‟t know”. Correct answers were given 1 point each. Incorrect answers and uncertain answer or “don‟t know” was evaluated as score “0”.

While analyzing items of the knowledge about HIV/AIDS, of the respondents who knew about transmission of HIV from positive mother to unborn baby (92%) knew that using condom cannot prevent Mother to Child transmission and (90%) of respondents identified HIV status can know my testing blood. (79 %) respondents knew pregnant women with HIV/AIDS can transmit to a child. (80%) knew transmission cannot prevent by vaccine and (50%) knew HIV cannot transmit by touching. Most of the respondents (80%) did not know “Partner is not responsible for seeking information about PMCT services”. (79%) did not know HIV can transmit by needle sharing and breast feeding can transmit mother to child. The question of “Positive partner of pregnant woman cannot transmit HIV to his wife and baby” had not been correct by respondent (71%).

Table 2, Items about knowledge on HIV/AIDS

Knowledge	Correct answer		Incorrect answer	
	Number	Percent	Number	Percent
A pregnant women with HIV/AIDS can transmit HIV her baby	200	79.4	52	20.6
Positive partner of pregnant woman cannot transmit HIV to his wife and baby*	73	29.0	179	71.0
Transmission by sharing needles and syringes	52	20.6	200	79.4
Transmission by touching body*	128	50.8	124	49.2
Mother to child transmission through breastfeeding	52	20.6	200	79.4
Prevention by using condom	233	92.5	19	7.5
Prevented by vaccine*	202	80.2	50	19.8
Knowing HIV status by testing blood	229	90.9	23	9.1
Positive mother should take antiretroviral drugs	77	30.6	175	69.4
Using disposable syringes	173	68.7	79	31.3
Using condom cannot prevent Mother-to-Child transmission of HIV	33	13.1	219	86.9
Counseling cannot help to cope the test result *	103	40.9	149	59.1
Partner is not responsible for seeking information about PMCT services *	50	19.8	202	80.2
Sharing meal with infected person *	136	54.0	116	46.0

Negative question *

Regarding to the knowledge about HIV/AIDS, the minimum sum score was 4 , the highest score was 14 and the mean score was 7. The score of knowledge was classified into three categories, namely good, moderate and poor by using (60%) and (80 %) of total knowledge score as the cutting point. Among 252 married men, most of the respondents 79% had poor level of knowledge, 16.7% of respondents had moderate level of knowledge and a few respondents 4.4% had good level of knowledge.

Table 3. Number and percentage distribution of 252 respondents by level of knowledge about HIV/AIDS

Level of knowledge	Number	Percent
Poor	199	79.0
Moderate	42	16.7
Good	11	4.4

Mean total knowledge score 1.25
Minimum knowledge score 1
Maximum knowledge score 14

4.1.3 Number and percentage distribution of 252 respondents by items on perceived susceptibility/ severity of HIV transmission, perceived benefits/ barriers to utilization of PMCT

Table 4 Perceived susceptibility of mother to child transmission of HIV/AIDS

Perceived susceptibility of transmission	Correct answer Agree		Incorrect answer Disagree		Uncertain	
	Number	Percent	Number	Percent	Number	Percent
If my wife is HIV infected, my baby can get infection	88	34.9	2	.8	162	64.3
If I am infected, my wife can get infection	232	92.1	14	5.6	6	2.4
If my wife is HIV infected, I can be infected	229	90.9	11	4.4	12	4.8
If my wife has HIV/AIDS, transmission through breastfeed-ing to baby	35	13.9	40	15.9	177	70.2
If my wife had transfusion of untested blood, she can be infected	201	79.8	8	3.2	43	17.1
I can get infection from receiving blood from infected donor	210	83.3	19	7.5	23	9.1

In Table 4. About 80-90% of the respondents understood that “if they had infected, wife could get infected”, “if my wife is infected with HIV, I can be infected”, and “blood received from infected donor” could transmit HIV infection. But 13.9% of the respondents perceived that HIV can transmitted “if my wife has HIV/AIDS, transmission to baby occurs through breastfeeding”.

Table 5, Perceived severity of mother to child transmission of HIV/AIDS

	Correct answer Agree		Incorrect answer Disagree		Uncertain	
Perceived severity	**Number**	**%**	**Number**	**%**	**Number**	**%**
If I have infection, my wife and new born baby may have premature death	27	10.7	13	5.2	212	84.1
	226	89.7	12	4.8	14	5.8
If my wife pregnancy with HIV infected, baby will have chance to get HIV infection during pregnancy and delivery						
	42	16.7	25	9.9	185	73.4
If my wife had HIV infected, baby will have chance to get HIV infection during breastfeeding						
	41	16.3	66	26.2	145	57.5
Although my wife and baby are infected, they can have normal life by taking antiretroviral drugs						
	57	22.6	16	6.3	179	71.0
My wife and new born baby can live life long even if they were HIV infected						

In terms of perceived severity, only 89% of the respondents perceived that their baby would have a chance to get HIV infection during pregnancy and delivery, and one-third of the respondents assumed that “my wife and newborn baby can live longer even if they were HIV infected. Over 16% of respondents thought that baby would have a chance to get HIV during breastfeeding and “my wife and new born baby can have normal lives by taking antiretroviral drugs”.

Table 6, Perceived barriers to utilize of prevention of mother to child transmission of HIV/AIDS services

Perceived barriers to utilization of PMCT services	Correct answer Agree Number	%	Incorrect answer Disagree Number	%	Uncertain Number	%
Fear of gossiping by the other people	176	69.8	4	1.6	72	28.6
Fear of the test result	47	18.7	43	17.1	162	64.3
I am afraid that heath care providers will not keep the results of our HIV test confidential	161	63.9	19	7.5	72	28.6
Don't want to take HIV test, discriminate in the community	78	31.0	58	23.0	116	46.0
If I am trying to get condom, I will feel embarrassed	56	22.2	93	36.9	103	40.9
If I use PMCT services, there is no any discrimination in my family members*	28	11.1	97	38.5	127	50.4
Wife will think me like a HIV positive	30	11.9	134	53.2	88	34.9

Negative question *

Looking at the item-wise barriers, fear of gossiping by other people and fear that health care providers will not keep the results of HIV test confidential were noticed as barriers by over 60% of the respondents. Only about 11.1% of the respondents perceived "not discriminated by family members" and "wife will think me like a HIV positive" as barriers to utilization of PMCT services. Under 40% of the respondents though that "fear of the test result", "Don"t want to take HIV test due to discrimination in the community" and "If I am trying to get condom, embarrassed in my community" were barriers to utilizing prevention services.

Table 7, Perceived benefits of utilization of PMCT services

	Correct answer		Incorrect answer			
		Agree		Disagree		Uncertain
Perceived benefit of utilization	**Number**	**%**	**Number**	**%**	**Number**	**%**
If I don't use PMCT services, no one will find out about our HIV condition	74	29.4	69	27.4	109	43.3
Knowing my HIV status will help to protect my wife by using condoms	156	61.9	22	8.7	74	29.4
If I use condoms, my baby will not be prevented from getting HIV	82	32.5	29	11.5	141	56.0
Knowing our HIV status will help my wife to use antiretroviral drugs	62	24.6	13	5.2	177	70.2

Regarding perceived benefits, the majority of the respondents (i.e. about 61.9%) believed that knowing their HIV status would help to protect their wife because they would use condoms. One -third of the respondents believed that "if I don"t use PMCT services, no one will find out about us", "if I use condoms, my baby will not be prevented from getting HIV" and " knowing our HIV status will help my wife to use antiretroviral drugs". Most of the respondents answered "uncertain" to the statements "Knowing our HIV status will help my wife to use antiretroviral drugs" (70.2%) , "If I use condoms, my baby will not be prevented from getting HIV" (56%), and "If I don"t use PMCT services, no one will find out about us" (43.3%).

4.1.4 Cues to action towards male involvement in PMCT services

In terms of the first question "Have you ever heard about couple counseling and testing?", the respondents answered "Yes" (82.9%), five times more than (17.1%) "No". About (29 %) of the respondent had heard about couples counseling and testing of HIV/AIDS from television, and a minority group of respondents had from various sources of media. Two- thirds of the respondents had heard from radio, pamphlets and health education sessions by Non Governmental Organizations (NGOs). Some also had heard from newspapers (7.5%), books and magazines (0.8%), bill boards (1.2)

and others (0.4%). One-third (33.4%) of the respondents get PMCT services. The majority of the respondents (24%) who got advice for PMCT services received it from peers. Government health staff (11.1%) and friends/ relatives (11.5%) took place of advice for PMCT services. Private Doctor/ nurses, NGO staff, volunteers, wives and others were the third most common sources of advices and received by 6.3%, 8.3%, 1.6%, 1.2% and 0.4% of respondents respectively.

Table 8, Number and percentage distribution of 252 respondents by cues to action to involvement in PMCT

Cues to action	Number	Percentage
Have you ever heard about couple counseling and testing		
Yes	209	82.9
No	43	17.1
Sources of media(couples counseling and testing of HIV/AIDS)		
Radio	41	16.3
Television	73	29.0
Newspaper	19	7.5
Books and magazines	2	.8
Bill board	3	1.2
Pamphlets/ poster	39	15.5
Health education session by NGO	31	12.3
Others	1	.4
Did you get advice about PMCT services		
Yes	163	64.7
No	89	35.3
Type of personal who gave advice for PMCT services		
Government health staff	28	11.1
Private Doctor/ Nurses	16	6.3
NGO staff	21	8.3
Volunteers	4	1.6
Wife	3	1.2
Relatives family members	29	11.5
Friends/social network	61	24.2
Others	1	.4
Willing to accompany your wife		

Yes	116	46.0
No	136	54.0

*multiple response

4.2 Description of Dependent variables

4.2.1 Male involvement in prevention of mother to child transmission of HIV/AIDS services among married men

According to Table 9, 72.6% of the respondents answered "No" when asked about "Accompany wife to PMCT". Besides this, the majority of the respondents (36.5%) were discussing with their wife about PMCT services. After analyzing these two questions, there was less male involvement in prevention of mother to child transmission of HIV/AIDS services.

Table 9, Male involvement in prevention of mother to child transmission of HIV/AIDS services among married men

Male involvement in prevention of mother to child transmission of HIV/AIDS services	**Number (%)**
Accompany for counseling of PMCT with wife	
Yes	69 (27.4)
No	183 (72.6)
Discuss about PMCT services with wife	
Yes	92 (36.5)
No	160 (63.5)

4.3 Description of association of accompany for counseling of PMCT services with wife

Table 10, Association between Socio-demographic characteristics and accompany for counseling of PMCT with wife

Socio-demographic characteristics	Accompany for counseling with wife		Total	P-value
	Yes n (%)	No n (%)		
Age(years)				
17-24 years	9 (20.0)	35(80.0)	45	0.130
25-35 years	33 (25.2)	98(74.8)	131	
36-52 years	27 (35.5)	49(64.5)	76	
Education				
Primary school and below	17(29.8)	40(70.2)	57	0.632
Secondary school	29(29.0)	70(70.7)	99	
High school and above	23(24.0)	73(76.0)	96	
Occupation				
Unemployed and others	3(15.8)	16(84.2)	19	0.389
Government employee	2(18.2)	9(81.8)	11	
Employee in private business	25(33.3)	50(66.7)	75	
Own business	7(20.0)	28(80.0)	35	
Labor in farm, rubber plantation	32(28.6)	80(71.4)	112	
Monthly expense				
Enough with saving	0(0)	7(100.0)	7	0.06
Enough without saving	6(15.0)	34(85.0)	40	
Not enough but no debt	54(30.2)	125(69.8)	179	
Not enough and in debt	9(34.6)	17(65.4)	26	
Number of children				
1-3 children	51(25.8)	147(74.2)	198	0.018
More than 3 children	17(44.7)	21(55.3)	38	
Number of pregnancy				
1-3 pregnancy	49(25.8)	141(74.2)	190	0.088
More than 3 pregnancy	19(38.0)	31(62.0)	50	

Table 11 , Level of knowledge on PMCT of HIV/AIDS, and accompany for counseling of PMCT with wife

Level of knowledge	Accompany for counseling of PMCT with wife Yes n (%)	No n (%)	Total	P-value
Poor	58(29.1)	141(70.9)	199	0.411
Moderate	8(19.0)	34(81.0)	142	
Good	3(27.3)	8(72.7)	11	

Table 12 , Perceived susceptibility, severity of mother to child transmission, perceived barriers, benefits to utilization of PMCT and accompany for counseling of PCMT with wife

Perceived susceptibility	Accompany for counseling of PMCT with wife Yes n (%)	No n (%)	Total	P-value
If my wife is HIV infected, I can be infected by her				
Agree	66(28.8)	163(71.2)	229	0.235
Uncertain	1(8.3)	11(91.7)	12	
Disagree	2(18.2)	9(81.8)	11	
I can get infection from receiving blood from a donor				
Agree				
Uncertain				
Disagree				
Perceived severity				
Baby will have chance to get HIV infection during pregnancy and delivery				
Agree	63(27.9)	163(72.1)	226	0.694
Uncertain	4(28.6)	10(71.4)	14	
Disagree	2(16.7)	10(83.3)	12	
Perceived barriers				
Worry for confidential				
Agree	49(30.4)	112(69.6)	161	0.279
Uncertain	17(23.6)	55(74.4)	72	
Disagree	3(15.8)	16(84.2)	19	
Perceived benefits				
Knowing my HIV status will help to protect my wife by using condom				
Agree	50(32.1)	106(67.9)	156	0.047
Uncertain	17(23.0)	57(77.0)	74	
Disagree	2(9.1)	20(90.0)	22	

Association between socio-demographic characteristics, level of knowledge of PMCT of HIV/AIDS, perceptions of mother-to-child transmission of HIV/AIDS.
There were no associations between accompany wife to PMCT counseling and socio-demographic factors, level of knowledge of PMCT of HIV/AIDS, perceptions of mothers-to-child transmission of HIV/AIDS. But there was an association between accompany wife to PMCT counseling and number of children (p=0.018), perceived benefits of utilization of PMCT services (p=0.047).

4.4 Description of association of discuss with wife about PMCT services

4.4.1 Association between socio-demographic characteristics and discuss with wife about PMCT services

In Table 13, although there was no association between age and discussion with wife about PMCT services (p=0.087) most of the respondents who discussed with their wife about PMCT services were ages 25 -35. There was also an association between education level and discussion with wife about PMCT services (p=0.058).

High school / above respondents were more likely to discuss with wife about PMCT services. Occupation level was also significantly associated with discuss about PMCT services (p= 0.006). Employees in private business were more discuss about PMCT services than respondents who worked labor in farm, rubber plantation. Number of children was also associated with discuss with wife about PMCT services (p=0.04). Respondents who had 1-3 children were more discuss with wife about PMCT services than those with more than 3 children.

Table 13 Association between, Socio-demographic characteristics and discuss with wife about PMCT services

Socio-demographic characteristics	Discuss with wife about PMCT services Yes n (%)	No n (%)	Total	P-value
Age(years)				
17-24 years	12(26.7)	33(73.3)	45	0.087
25-35 years	56(42.7)	75(57.3)	131	
36-52 years	24(31.6)	52(68.4)	76	
Education				
Primary school and below	14(24.6)	43(75.4)	57	0.058
Secondary school	36(36.4)	63(63.6)	99	
High school and above	42(43.8)	54(56.2)	96	
Occupation				
Unemployed and others	4(21.1)	15(78.9)	19	0.006
Government employee	6(54.5)	5(45.5)	11	
Employee in private business	39(52.0)	36(48.0)	75	
Own business	10(28.6)	25(71.4)	35	
Labour in farm, rubber plantation	33(29.5)	79(70.5)	112	
Monthly expense				
Enough with saving	2(28.6)	5(71.4)	7	0.894
Enough without saving	14(35.0)	26(65.0)	40	
Not enough but no debt	65(36.3)	114(63.7)	179	
Not enough and in debt	11(42.3)	15(57.7)	26	
Number of children				
1-3 children	82(41.4)	116(58.6)	198	0.04
More than 3 children	9(23.7)	29(76.3)	38	
Number of pregnancy				
1-3 pregnancy	76(40.0)	114(60.0)	190	0.195
More than 3 pregnancy	15(30.0)	35(70.0)	50	

4.4.2 Association between level of knowledge about HIV/AIDS and discuss with wife about PMCT services

There was an association between level of knowledge and discussion with about PMCT services (p=0.021) in the result of poor level of knowledge, total number of respondents were 199, in this respondent only (39.2%) of respondents discussed with their wives about PMCT services and (60.8%) did not discuss with wives about PMCT services. In total, 11 respondents of good level of knowledge (54.5) discussed about PMCT services with their wives and (45.5%) had no experiences about PMCT discussion with wife.

Table 14, Association between Knowledge about HIV/AIDS and discuss with wife about PMCT services

Level of knowledge	Discuss with wife about PMCT services		Total	P-value
	Yes (N/%)	No (N/%)		
Poor	78(39.2)	121(60.8)	199	0.021
Moderate	8(19.0)	34(81.0)	42	
Good	6(54.5)	5(45.5)	11	

4.4.3Perceived susceptibility, severity of mother to child transmission, perceived barriers, benefits to utilization of PMCT and discuss with wife about PMCT services

According to Table 15, there is an association between the answer of "if my wife is infected with HIV, I can be infected" and discuss with wife about PMCT services (p= 0.01). There was an association between the answer of "worry for confidentiality" and discuss with wife about PMCT services with wife (p= 0.036).

Table 15, Perceived susceptibility, severity of mother to child transmission, perceived barriers, benefits to utilization of PMCT and discuss with wife about PMCT services

Perceived susceptibility	Discuss with wife about PMCT services Yes (N/%)	No (N/%)	Total	P-value
If my wife is HIV infected, I can be infected by her				
Agree	90(39.3)	139(60.7)	229	0.010
Uncertain	0(.0)	12	12	
Disagree	2(18.2)	9(81.8)	11	
I can get infection from receiving blood from a donor				
Agree	86(5.3)	124(94.7)	210	0.003
Uncertain	5(21.7)	18(78.3)	23	
Disagree	1(5.3)	1894.7)	19	
Perceived severity				
Baby will have chance to get HIV infection during pregnancy and delivery				
Agree	86(38.1)	140(61.9)	226	0.266
Uncertain	4(28.6)	10(71.4)	14	
Disagree	2(16.7)	10(83.3)	12	
Perceived barriers				
Worry for confidential				
Agree	65(40.4)	96(59.6)	161	0.036
Uncertain	25(34.7)	47(65.3)	72	
Disagree	2(10.5)	17(89.5)	19	
Perceived benefits				
Knowing my HIV status will help to protect my wife by using condom				
Agree	62(39.7)	94(60.3)	156	0.360
Uncertain	24(32.4)	50(67.6)	74	
Disagree	6(27.3)	16(72.7)	22	

4.4.5 Willing to accompany your wife and have you ever accompanied her to ANC

According to the Table 15, the respondent answered willing to accompany their wives but in reality the number of respondent who accompanied their wife to ANC was 48.3 %.

Table 16, willing to accompany your wife and have you ever accompanied her to ANC

		accompanied her to ANC		Not accompanied her to ANC		
	Total	**Number**	**Percent**	**Number**	**Percent**	**P-value**
Willing to accompany your wife						
Yes	116	98	48.3	18	36.7	0.146
No	136	105	51.7	31	63.3	

P-value by chi-square test

CHAPTER V

DISCUSSION, RECOMMENDATION AND CONCLUSIONS

5.1 Discussion

This chapter presents a discussion of findings, conclusion, and recommendations. Conclusion and recommendations are presented in a single section.

This was a descriptive study that aimed to assess involvement of male in prevention of mother to child transmission of HIV/AIDS among married men in Kyaikmaraw Township, Mon State, Myanmar. The subjects were 252 married men under Kyaikmaraw Township. Data was collected through structured interviews between February and March 2010. The respondents aged were between 15-60 years. The main questions explored in this study concerned socio-demographic characteristics, knowledge about HIV/AIDS, perception on utilization of prevention of mother to child transmission of HIV/AIDS and cues to action HIV/AIDS information. Analysis of each variables and chi-square test for knowledge and perception of the respondents. In this section, the findings will be discussed in the context of research questions and objectives.

5.1.1 Socio demographic characteristics of respondents

Regarding descriptive information, a study by Sushil Kumar Koirala in Nepal for factors influencing the utilization of voluntary counseling and testing services among HIV/AIDS high risk groups found that age and sex of the respondents are significantly associated with utilization of VCT. A study on "Voluntary HIV counseling and testing among men in rural Western Uganda" study by Hutchinson and colleagues in Eastern Cape found that the major barriers to VCT use among men were poor utilization of VCT services due to poor access, stigma and confidential services.

The study of factor influence men involvement in PMCT of HIV program in Mambwe District, Zambia, in 2006 November, Desire Dinzela Tshibumbu"s findings revealed that there was a weak positive association between age and the level of involvement with a Pearson Correlation Coefficient (r) of 0.199, with p=0.025,(statically significant at 0.05). The positive association may suggest that an increase in

age has a positive influence on men‟s willingness to be involved in PMCT. Kiarie et al, (2004:78), Kenya, found tht women whose husbands were 25 years or over were more likely to accept the option of not breastfeeding and chose replacement feeding for PMCT. According to the data of this study, has shown no association between ages and discussion with wife about prevention of mother to child transmission of HIV/AIDS services.

In terms of education level, the vast number of respondents was about one third were in the high school and above educational level (i.e. 43.8% in high school and above). Higher rate of respondents who discuss with wife about PMCT services were found in high school and above. It was concluded that the higher the level of education, the more discussion about PMCT services with wife. Desire Dinzela Tshibumbu (2006), the finding also revealed a weak positive association between level of education and level of involvement with an r=o.160 and p= 0.073. The same approach was used to assign numerical values to level of education, from 0 for “Never attend school to 6 for “Completed Collage/ University”. This weak positive association may suggest that an increase in the level of education has positive influences on men‟s involvement in PMCT. Lardner et al (1996:72), in their study on factor associated with failure to return for HIV post-test counseling in pregnant women in Rwanda. They found that the level of partner‟s education was a significant factor for women return for post test counseling. Kiarie et al (2004:78), in Kenya, found that women whose husbands had a secondary education or more were more likely to avoided breastfeeding for PMCT.

Occupation: Occupation is often studied in most study. It was found that most of the respondents work in private business (52.0%) and there was association between occupation and discuses about PMCT services with wife (p=0.006). Meanwhile, most respondents who discuss with wife about PMCT services were “not enough but no debt” (i.e. 36.3%) but there was no association between monthly expense and discusses with wife about PMCT services.

In number of children, the large amount of respondents who discussed about PMCT services were respondents who had 1-3 children (41.4%) and there was significantly association between number of children and discuss with wife about PMCT services(p=0.04). This indicated that married men who had 1-3 children had more discusses with wife about PMCT services than married men who had more than 3 children. In

number of pregnancy, although there was no association between number of pregnancy and discuss with wife about PMCT services, the respondent who had 1-3 pregnancies had more discuss with wife about PMCT services.

5.1.2 Knowledge on prevention of mother-to-child transmission of HIV/AIDS

Previous result of Desire Dinzela Tshibumbu (2006), a positive association was also found between knowledge and total score on level of involvement with an r of 0.483 and p=0.00. This positive association was the strongest to all other association between involvement and other factors. This finding may suggest that an increase in knowledge and awareness about PMCT may have a positive influence on men"s involvement PMCT. The population council (2005:2) also found in India and South Africa that when men are informed and involved from the beginning, they provide a better support for their female partners, which is also in accordance with the theory of diffusion of innovation theory which postulates that the adoption of programmers by recipients is influenced by knowledge and answers (Glanz et al 2002:315). In one of the research, Britta C. Mullany, 2005, while hasband"s interest levels and attempts to support pregnancy health were relatively high, low knowledge levels appeared to pose a significant obstacle to becoming positively involved.

In a contrast of the previous research the finding revealed that the levels of knowledge amongst respondents, 79.4% of the respondents know that a pregnant woman with HIV/AIDS can transmit HIV to her baby. The majority of the respondents preventive measure of HIV/AIDS such as “HIV/AIDS can be prevented by using condom properly during sex about (92.5%)”, “ HIV/AIDS can be prevented by vaccine (80.2%)” and “A person can know his /her HIV status by testing blood (90.9 %)”. Very few of the respondents know about “A woman with HIV/AIDS can transmit HIV to her baby through breastfeeding (20.6%)”, “Using condom during sex cannot prevent mother to child transmission of HIV (13.1 %)” and “A partner is not responsible for seeking information about PMCT services if the wife is pregnant (19%)”. According to the knowledge level of in this study, most of the respondent had poor level of knowledge even though their education level is secondary school, high school and above. But 37% of the respondents discuss about PMCT services with wife. In poor level of knowledge there were association between level of knowledge and discuss with wife about PMCT services with wife.

5.1.3 Perceived susceptibility of mother to child transmission of HIV/AIDS

In terms of the findings, there was an association between perceived susceptibility and discuss with wife about PMCT services (p=0.010). A study in Malai found that the majority of counseling and testing clients were motivated by perceptions of being at risk of HIV infection. Some different results were found, in a study among young Myanmar male workers on HIV preventive behavior there was no significant association between perceived susceptibility and condom use. A study by Cho Cho Aung found that the significant association between perceived susceptibility and condom use but no association with perceived severity.

5.1.4 Perceived severity of mother-to-child transmission of HIV/AIDS

In perceived severity of mother-to-child transmission of HIV/AIDS the respondent who discusses with wife about PMCT services in " if I get infected with HIV and transmit it to my wife, my baby will have a chance to get HIV during my wife pregnancy, delivery" were about 38.1% were agree, 16.7 % disagree and 28.6% uncertain. There was no association between perceived severity of mother to child transmission of HIV/AIDS and discuss with wife about PMCT services (p=0.266).

5.1.5 Perceived barriers of utilization of mother to child transmission of HIV/AIDS

The findings revealed that the majority of the respondents in the category of being agree in "I am afraid that health care providers will not keep the results of our HIV test confidential". Among them the respondents who discuss with wife about PMCT services were (40.4%) and (p=0.03). There was an association between perceived benefits of utilization of mother to child transmission of HIV/AIDS (p=0.360).

5.1.6 Perceived benefits of utilization of mother-to-child transmission of HIV/AIDS

In this study, the most respondents who agree in "Knowing my HIV status will help to protect my wife by using condoms when having sex with her" were about (39.7%). But there was no association between perceived benefits of utilization of mother to child transmission of HIV/AIDS and discussion about PMCT services with wife.

5.2 Conclusion

The cross-sectional descriptive study was conducted among married men in Kyaikmarw Township, Mon State, Myanmar to assess involvement of male in prevention of mother to child transmission of HIV/AIDS services. Data was collected in February and March 2010. The main objective of the study was to study the factors related male involvements in prevention of mother to child transmission of HIV/AIDS among married men and various factors including socio-demographic characteristics, knowledge about HIV/AIDS, perception and to determine the association among them. The data was collected and analyzed for the entire variable that mention above.

The sample consisted of 252 married men. In the results of dependent variables 72.6% of the respondents answer “No” while asking about “Accompany for counseling of PMCT with wife”. Besides this, majority of the respondents (36.5%) were discussing with wife about PMCT services. After analyzing of these two questions, there was less male involvement in prevention of mother to child transmission of HIV/AIDS services.

As a total sample of 252, age between 25 to 35 years and with a mean age of 7.96 years. About two third of the respondents were secondary school, high school and above and most were employee in private business. The respondents who had “not enough but no debt,” took a high percentage than “enough with saving”, “not enough without saving” and “not enough and in debt” respondents. The participant who had 1-3 children and 1-3 pregnancies were the majority group. This study showed significant association between age, education, occupation, number of children and discussion about PMCT services with wife. However, monthly expenses and number of pregnancy were not significantly associated with discussion with wife about PMCT services.

Because of nearly two third of the respondents had poor level of knowledge, there were large amount of respondents who did not discuss with wife about prevention of mother to child transmission of HIV/AIDS services. But there was significant association between overall knowledge level and discussion with wife about prevention of mother to child transmission of HIV/AIDS services.

For the perception of the married men, there was association between perceived susceptibility and discussion with wife about PMCT services. In perceived severity of

mother to child transmission of HIV/AIDS the respondent who discuss with wife about PMCT services in " if I get HIV infection and transmit it to my wife, my baby will have a chance to get HIV during my wife pregnancy, delivery" were about 38.1% were agree, 16.7 % disagree and 28.6% uncertain. There was no association between perceived severity of mother to child transmission of HIV/AIDS and discuss with wife about PMCT services (p=0.266). The findings revealed that the majority of the respondents in the category of being agree in "I am afraid that health care providers will not keep the results of our HIV test confidential". Among them the respondents who discuss with wife about PMCT services were (40.4%) and (p=0.03).There was an association between perceived benefits of utilization of mother to child transmission of HIV/AIDS (p=0.360), the most respondents who agree in "Knowing my HIV status will help to protect my wife by using condoms when having sex with her" were about (39.7%). But there was no association between perceived benefits of utilization of mother to child transmission of HIV/AIDS and discuss about PMCT services with wife.

In terms of cues to action, about (29 %) of the respondent had heard about couples counseling and testing of HIV/AIDS from television and a minority group of respondent heard from various sources of media. Two third of the respondents heard from radio, pamphlet and health education session by NGO. Some also heard from newspaper (7.5%), books and magazines (0.8%), bill board 1.2 and others (0.4%). One third of (33.4%) the respondent get about PMCT services. Majority of the respondents 24% got the advice for PMCT services from peers. Government health staff 11.1% and friends/ relatives 11.5% was take place of advice for PMCT services. Private Doctor/ nurses, NGO staff, volunteers, wife and others were the third most common types advices and received by 6.3%, 8.3%, 1.6%, 1.2% and 0.4% respectively.

5.3 Recommendation

Based on the above findings, the following recommendation can be made for improving men‟s involvement in PMCT. To increase their knowledge and awareness about PMCT, information about the programmed should be given to all men and in particular to those in a relationship with women in reproductive age. PMCT clinic should be made friendlier to men and services providers should ensure that all efforts are made to involve men from the begging in every PMCT intervention.

This study reveals that among the married men in kyaikmaraw‟s population, a lack of knowledge about HIV/AIDS and PMCT, and a lack of male-oriented services deter men from sharing the responsibility in reproductive health matter. This health education should specifically highlight the vulnerable reproductive health of the females and the role men can play in improving their condition. In a patriarchal society, it is the male who makes major decisions, regulates the household economics and also imposes their views/choices on the females. Rural women cannot utilize even free, basic health services against their husbands‟ wishes. It is time to eliminate this gender inequality by empowering women through education, strengthening them economically, and creating grass roots level security arrangement against domestic violence, so that their word will be respected.

For further research, a qualitative research should be done on the level of men‟s involvement PMCT. Provision is required for counseling and treatment of both male and female reproductive health problems. Such a program should also include proximate contributors to health, such as gender equity and sustainable community development. From this study it is evident that married men have a two-fold responsibility. First, they must be a supportive partner to their wife. Second, they must take care of their own unmet reproductive health needs. Although our suggested strategies have focused on the males, we believe that men and women can be equal agents of change for sustainable development. A stronger partnership between men and women means healthier families.

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APPENDICES

APPENDIX A

Informed Consent Form

Instruction: Please modify this form accordingly

Address
Date 24/ 3/ 2010

Code number of participant ……

I who have signed here below agree to participate in this research project. **Title;** "MALE INVOLVEMENT IN PREVENTION OF MOTHER TO CHILD TRASMISSION OF HIV/AIDS AMONG MARRIED MEN IN KYAIKMARAW TOWNSHIP, MON STATE, MYANMAR"

Principle researcher's name Ms. THIDAR AUNG

Contact address 521/3-4, Soi Sriayuthaya 2-4, Sriayuthaya Road, Prayatai District,Rajthavee,Bangkok 10400

Telephone 0816276313

I have **(read or been informed)** about rationale and objective(s) of the project, what I will be engaged with in details, risk/ham and benefit of this project. The researcher has explained to me and I **clearly understand with satisfaction.** I willingly **agree** to participate in this project and consent the researcher to answer the self-administered questionnaire for approximately 20 minutes.

Researcher has guaranteed that procedure(s) acted upon me would be exactly the same as indicated in the information. Any of my personal information will be **kept confidential.** Results of the study will be reported as total picture. Any of personal information which could be able to identify me will not appear in the report.

If I am not treated as indicated in the information sheet, I can report to the Ethical Review Committee for Research Involving Human Research Subjects, Health Sciences Group, Chulalongkorn University (ECCU). Institute Building 2, 4 Floor, Soi Chulalongkorn 62, Phyat hai Rd., Bangkok 10330, Thailand, Tel: 0-2218-8147 Fax: 0-2218-8147 E-mail: eccu@chula.ac.th,

I also have received a copy of information sheet and informed consent form

Sign ……..…… Sign ……..……

(……..……) (……..……)

Researcher Participant

Sign ……..……

(……..……)

Witness

APPENDIX B

Questionnaires

Interviewer code number: _____

Date: _____

PART 1 : Socio-demographic characteristics of the respondents

1. How old are you?
2. What is your highest education attainment?
   1 ❑ None
   2 ❑ Primary school
   3 ❑ Secondary school
   4 ❑ High school
   5 ❑ Higher university education
   6 ❑ Graduate
   7 ❑ Others…….
3. Occupation
   1 ❑ Unemployed
   2❑ Government employee
   3 ❑ Employee in private business
   4 ❑ Own business
   5 ❑ Labor on farm, rubber plantation
   6 ❑ Others……

4. Do you have enough money for monthly expenses?
   1❑ Enough with saving
   2❑ enough without saving
   3❑ Not enough but no debt
   4❑ Not enough and in debt
5. How many pregnancies did your wife had in her life time with you?
6. How many a live children do you have, who are currently living with you?

Part 2 : Knowledge on PMCT of HIV&AIDS

1. A pregnant woman with HIV/AIDS can transmit HIV to her baby.

   1 ❑ Yes
   2 ❑ No
   3 ❑ Don‟t know

2. A positive partner/husband of pregnant woman cannot transmit

   HIV to his wife and baby. *
   1 ❑ Yes
   2 ❑ No
   3 ❑ Don‟t know

3. A person can get HIV infection by sharing needles and syringes.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

4. HIV can be transmitted from one person to another by touching their body.*

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

5. A woman with HIV/AIDS can transmit HIV to her baby through breastfeeding.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

6. HIV/AIDS can be prevented by using condom properly during sex.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

7. HIV/AIDS can be prevented by vaccine.*

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

8. A person can know his/her HIV status by testing blood.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

9. HIV positive pregnant mother should take antiretroviral drugs, to prevent transmission to her baby.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

10. Using disposable syringes can prevent HIV transmission.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

11. Using condom during sex cannot prevent mother to child transmission of HIV.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

12. Counseling for HIV cannot help to cope with the test result.

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

13. A partner is not responsible for seeking information about PMCT services if the wife is pregnant.*

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

14. A person can get HIV infection by sharing a meal with someone who is infected HIV.*

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

Negative Question *

Part 3 : Perceptions on towards mother to child transmission

For the following items, please tell me whether you agree or disagree or uncertain.

Perceived susceptibility of transmission

1. If my wife is HIV infected, my baby can get infection.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

2. If I am HIV infected, my wife can get infection.

1❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

3. If my wife is HIV infected, I can be infected by her.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

4. If my wife has HIV/AIDS, she can transmit HIV to her baby through breastfeeding.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

5. If my wife had transfusion of untested blood, she can be infected with HIV.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

6. I can get infection from receiving blood from a donor who has HIV/ AIDS.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

Perceived severity of mother to child transmission

7. My wife and new born baby may have premature death if I have HIV infection and transmit HIV to her.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

8. If my wife pregnancy with HIV infected, my baby will have chance to get HIV during my wife pregnancy, delivery.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

9. If my wife had HIV infected, my baby will have chance to get HIV during my wife breast feeding.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

10. Although my wife and baby get HIV infection, they can have normal lives by taking antiretroviral drugs.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

11. My wife and new born baby can live long even if they were HIV infected.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

Perceived barriers to utilization

12. My wife fears gossiping by other people if people know she got HIV from me.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

13. I have fear of the test result, it is better if I don't know anything about it.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

14. I am afraid that health care providers will not keep the result of our HIV test confidential.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

15. I don‟t want to take HIV test because I will be discriminated in the community if I am HIV positive.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

16. If I am trying to get condom, I will feel embarrassed in my community.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

17. If I take HIV test, my family members will not abandon me. *

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

18. If I use condom during sex, my wife will think me like a HIV positive.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

Perceived benefits of utilization

19. If I don‟t use prevention of mother to child transmission services, no one will find out about us.*

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

20. Knowing my HIV status will help to protect my wife by using condoms when having sex with her.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

21. If I use condom, my baby will not be prevented from getting HIV.*

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

22. Knowing our HIV status will help my wife to use antiretroviral drugs during pregnancy.

1 ❑ Agree
2 ❑ Uncertain
3 ❑ Disagree

Negative Question *

Part 4 : Cues to action

1. Have you ever heard about couple counselling and testing for HIV to prevent mother to child transmission?

❑ (1) Yes
❑ (2) No (if no, skip to part 6.7)

2. From which source of media did you get hear couple counselling and testing for HIV?

(Multiple response)

1❑ Radio
2❑ Television
3 ❑ Newspapers
4 ❑Books and magazines
5 ❑ Bill board
6 ❑ Pamphlets /poster
7 ❑ Health education session by NGO
8 ❑Others please specify……

3. After having married, did you get any advice on prevention of mother to child transmission of HIV/AIDS?

1 ❑ Yes
2 ❑ No
(if No, skip to No.5)

4. From whom, did you get the advice about prevention of mother to child transmission of HIV/AIDS?

1 ❑Government health staff
2 ❑ Private Doctor /Nurses
3 ❑ NGO staff
4 ❑ Volunteers
5 ❑Wife
6 ❑ Relatives family members
7 ❑ Friends/social network
8 ❑Others…….

5. Are you willing to accompany your wife to antenatal care?

1 ❑ Yes
2 ❑ No

Part 5 : Utilization of prevention of mother to child transmission of HIV/AIDS services

1. Did your wife take ANC during her last pregnancy?

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

2. Have you ever accompanied her to ANC during her last pregnancy

   1 ❑ Yes
   2 ❑ No

3. Has your wife been tested for HIV as part of PMCT services? (If No or Don"t know skip to 5)

   1 ❑ Yes
   2 ❑ No
   3 ❑Don"t know

4. Did she receive any pre-test counselling?

   1 ❑ Yes
   2 ❑ No
   3 ❑ Don"t know

5. Did you also go for counselling of PMCT with your wife?

   1 ❑ Yes
   2 ❑ No

6. If yes: did you also receive pre-test counselling?

   1 ❑ Yes
   2 ❑ No

7. What type of counselling did you and your wife receive?

   1❑alone
   2 ❑ along with wife (couple)
   3 ❑group counselling
   4 ❑ others ……

8. Have yourself been tested for HIV?

   1 ❑ Yes
   2 ❑ No
   (If No Skip to 10)

9. If yes: where did you have your HIV testing?

   1 ❑ Public Hospital
   2 ❑ Public health centre
   3 ❑ Private hospital/ Clinic
   4 ❑ Private lab
   5 ❑ others…..

10. Where did your wife receive her HIV testing?

    1 ❑ Public Hospital
    2 ❑ Public health centre
    3 ❑ Private hospital/ Clinic

4 ❑ Private lab
5 ❑ others…..
6❑ Don‟t know

11. Do you know your wife HIV status?

1 ❑ Yes
2 ❑ No

12. Have you ever discuss with your wife about PMCT services?

1 ❑ Never
2 ❑ Seldom
3 ❑ Occasionally

13. Did your wife receive any post test counseling?

1 ❑ Yes
2 ❑ No
3 ❑ Don‟t know

14. Is your wife HIV

1. ❑ Positive
2. ❑ Negative
3. ❑ Don‟t know

15. If your wife is HIV positive and she delivered a baby after knowing the HIV result, did she receive the following services?

(a) Provision of antiretroviral (ARV) drugs to mother and infant
1❑ Yes
2❑ No

(b)Safer delivery practices
1❑ Yes
2❑ No

(c)Infant feeding information, counselling and support
1❑ Yes
2❑ No

(d)Referrals to comprehensive treatment, care and social support for mothers and families with HIV infection
1❑ Yes
2❑ No

APPENDIX C

Time schedules

Research process	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010
Literature review	←	—	→						
Proposal writing and submission			←	—	→				
Ethical consideration					←	—	→		
Data collection							←	→	
Data analysis							←	→	
Writing report								← →	
Thesis presentation and final submission								←	→

APPENDIX D

Budget

Activities / Items	Total budget (baht)
1. Pre-testing	
-Photocopy	210
-Stationery	200
2. Data Collection	
-Photocopy Quest	1225
-Souvenir for respondent	1500
-Interviewer per diem	4400
-Transportation cost	8400
-Data Processing	3365
3. Document Printing	
-Printing+ Paper	4000
-Photocopy	2400
-Stationery	200
-Blinding Paper(exam)	900
-Blinding Paper(submit)	1200
GRAND TOTAL	28000

VITAE

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