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# Content Analysis of National Strategic Plans on HIV/AIDS and Global AIDS Response Progress Reports from Eight Southeast Asia Countries

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# CONTENT ANALYSIS OF NATIONAL STRATEGIC PLANS ON HIV/AIDS AND GLOBAL AIDS RESPONSE PROGRESS REPORTS FROM EIGHT SOUTHEAST ASIA COUNTRIES

BY

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GEORGIA STATE UNIVERSITY

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Content Analysis of National Strategic Plans on HIV/AIDS and Global AIDS Response Progress Reports from Eight Southeast Asia Countries

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## ACRONYMS

AIDS - Acquired Immunodeficiency Syndrome

ARV - Antiretroviral drug

HIV - Human immunodeficiency virus

IDU - Injecting Drug User

INGO - International Non-Government Organization

PEPFAR - The United States President's Emergency Plan for AIDS Relief

PLHA - People Living with HIV and AIDS

PMTCT - Preventing Mother to Child Transmission

PWID - People with Injection Drug Use

SEA - Southeast Asia

STI - Sexually Transmitted Infection

UN - The United Nations

UNAIDS - The Joint United Nations Programme on HIV/AIDS

UNGASS - United Nations General Assembly Special Session

WHO - World Health Organization

# Chapter I

# INTRODUCTION

## 1.1 Background

Globally, many successes have been achieved in HIV epidemic control over the past three decades. The number of new HIV infections is on the decline as more people have access to HIV prevention programs. The number of HIV related death is reducing as a result of increasing antiretroviral (ARV) treatment for HIV. In addition, the financial commitment to prevent HIV is increasing, globally. Many improvements have been made to HIV prevention through the global commitment on HIV/AIDS, including the development of potent ARV drugs, research on effective prevention methods, investment on immunization and curative treatments, and increased funding on public health intervention programs. Global organizations, like WHO and UNAIDS as well as international organizations, are providing assistance to the regions and countries that are most effected by HIV, technical deficiency, and less investment on HIV prevention and control.[1]

Despite these achievements, the world is still facing the HIV epidemic and its burden on public health. There were still 34 million people living with HIV, 2.7 million new infections, and 1.8 million AIDS-related deaths globally in 2011. The number of people receiving ARV is less than the number of new HIV infections. The HIV epidemic

is unevenly distributed across regions and countries in the world. Although the HIV incidence is stable or decreased in most of the region, some regions, such as Africa and Asia, still have a high incidence of HIV. Most of the HIV cases are in low and middle-income countries, especially in Africa, which accounts for 23 million infections followed by South and Southeast Asia, which account for 3.5 million HIV infections.[2] Within these African and Asia regions, people are lacking knowledge of HIV prevention due to inaccessibility to HIV education programs. The death rate is high due to inaccessibility to treatment. In addition, the HIV epidemic disproportionately affects specific groups, including women and young adults, ages 15 and 24. This unequal burden among regions and sub populations is one of the challenges that WHO addressed for the global HIV control.[1]

The region of Southeast Asia (SEA) has the second highest number of people living with HIV, second to the African region. Although the overall HIV prevalence for adults in this region was 0.3 %, the total number of HIV infected people was approximately 3.5 million in 2010, which is higher compared to the 3 million cases in America and the 2.3 million cases in Europe. The number of AIDS-related deaths in the SEA region is also the second highest. Along with the global progress in HIV response, SEA region have been showing a progress in HIV response in the last 10 years. The number of new HIV infections decreased by 31% in the last decade, and the number of HIV positive people who can access ARV treatment has tremendously increased from an estimated 180,000 in 2005 to 717,000 in 2010.[2]

However, there are still challenges in the SEA regional HIV response. The HIV burden is unevenly distributed within this region. Five countries, including India,

Indonesia, Myanmar, Nepal and Thailand bear approximately 99% of the burden. Within the country, HIV prevalence in urban areas is higher compared to rural area. The number of children living with HIV increased 46% between 2001 and 2009. Only 18% of pregnant women were tested for HIV and an estimated 34% of HIV infected pregnant women received ARV to prevent mother to child transmission in 2010. More than 60% of people eligible for ARV are not receiving treatment. Similarly, comprehensive HIV intervention coverage is still very low. Stigma and discrimination toward HIV infected people are still an issue in the area. Most of the countries have laws and policies that hinder HIV prevention responses. Some countries health systems are limited in capacity to reach their universal access to treatment and care targets. Consequently, there was an estimated 230,000 AIDS-related death in this region in 2009, which has not significantly reduced from 260,000 deaths in 2001 because the number of people who have access to treatment is still lower than the number of new infections.[4] Moreover, sustainability of political commitment and reduction in funding are also challenges along with the global economic crisis.[3]

Globally, Millennium Development Goal - No. 6A and 6B (MDGs) have been set for HIV/AIDS control, which is to ensure universal access of HIV treatment to all people in need by 2010 and to halt the spread of HIV by 2015. In the report, the UN Secretary General, Ban Ki-Moon, indicated that these goals are achievable if countries have their own development strategies, policies, and programs which are supported by international development partners.[5] WHO, UNAIDS, and international agencies have developed evidence-based strategies, policies, and programs to fight against HIV globally, yet, each

country is responsible for developing its own national policies, strategies, and programs for HIV control, which are aligned with their countries cultural and epidemic context.

Another global effort is that the UN member states endorsed the UN Declaration of Commitment (DoC) on HIV/AIDS. This document is the result of the 2001 UN General Assembly Special Session (UNGASS) on HIV/AIDS in response to the global HIV crisis and to guide countries with their national HIV control targets and actions. To address the global HIV/AIDS epidemic, government representatives and country leaders use this assembly to impact some of the most widely and devastatingly affected regions in the world, especially in Africa and Asia. The declaration highlighted key issues for effective responses to HIV. Member States countries submit their progress of HIV/AIDS response in Global AIDS Response Progress Report to the UNAIDS Secretariat biennially to follow up the adoption and their commitment on key subjects highlighted in the DoC for global HIV response (this report will be referred as country progress report later on).[6] In addition, WHO and UNAIDS regularly publish outlines for global strategies for HIV prevention and control to reach MDGs and to meet the UNGASS on HIV commitments. For the SEA regional response, SEA Regional Strategy on HIV/AIDS is separately published by WHO to address regional specific challenges.

Yet, countries in the SEA region have different approaches, investments, and priorities for their HIV prevention and control work. In addition, the policies, strategies and programs for HIV response vary across countries. As a result, the outcomes are different across the countries. HIV prevalence in some countries, such as Indonesia, Laos and Philippines, was less than 0.3% while prevalence in other countries, such as Malaysia, Myanmar and Thailand, was more than 0.5% in 2009. The gaps in ARV

coverage across countries are wide. In Cambodia, 68-95% of HIV positive people who needed ART were getting ARV, but only 14-31% of people in Indonesia were getting ARV in 2009. In 2009, HIV mortality rates in the Philippines were 0.2 per 100,000 populations, which is the lowest. In Thailand, the HIV mortality rates were 42 per 100,000 populations, which was the highest. Malaysia and Thailand had very high PMTCT coverage, which was an estimated 95% in 2009. The rest of the countries in this region had lower PMTCT coverage. Other HIV interventions, such as behavioral interventions, harm reduction interventions, and prevention program for most-at-risk population, also varied between countries. The interventions coverage of sex workers in Malaysia was only 12%, while Myanmar had coverage of 76%.[7] The social and political environment around HIV prevention work is also different among countries. Some countries, such as Vietnam and Myanmar, consider sex-work illegal, which can lead to unfavorable environments for most of the HIV interventions. Similarly, Indonesia has some religious laws, which also hinder the HIV prevention efforts.[8]

A country's National Strategic Plan for HIV and AIDS (NSP) plays a central role in coordinating the response to HIV and AIDS nationally, and providing a platform to shape the country specific HIV epidemic under the guiding principle of WHO and UNAIDS strategies to meet the set goals. As member states, all countries in the SEA regions endorsed Declaration of Commitment on HIV/AIDS and issue a country progress report to UNAIDS biannually to follow their approaches, policies, and strategies on HIV. These NSPs and country progress reports provides a unique source of information to evaluate success, challenges, and gaps in the country and regional effort to fight against HIV. However, little is known about the extent to which SEA regional

countries have integrated key problems that have been addressed by global organizations and develop policies and strategies to respond those problems in their NSPs. Similarly, it is under-explored on country progress report from SEA countries to assess the extent of their progress in programmatic response to HIV/AIDS and the key issues they addressed that are critical in fulfilling the commitment made at the UNGASS for HIV response.

### 1.2 Purpose of the study

The purpose of this study is to explore the national policies, strategies, and programmatic responses on HIV/AIDS in Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Viet Nam, to review the integration of key subjects around the critical issues to control the HIV epidemic in those regions, and to examine the progress in responding to HIV in the SEA region by analyzing the contents of the country National Strategic Plan on HIV/AIDS Prevention and Control and biennial country progress report to UNAIDS from these eight SEA countries.

### 1.3 Research questions

1. To what extent did comprehensive NSPs from SEA regional countries address policies, strategies and programmatic approaches for HIV/AIDS prevention and control?

2. To what extent did SEA countries make programmatic progress on HIV/AIDS control as reported in their biennial country progress report?

3. Did all SEA countries integrate the critical issues outlined by Declaration of Commitment on HIV/AIDS and global HIV strategy in their NSPs and biennial country progress reports?

# Chapter II

# REVIEW OF THE LITERATURE

## 2.1 HIV/AIDS in Southeast Asia

The Southeast Asia region has the second highest burden of HIV in the world. In 2011, there were 3.5 million people living with HIV/AIDS in SEA compared to the 34 million cases worldwide. The prevalence of HIV in adult was 0.3% and the estimated annual HIV incidence was 210,000 in this region in 2011. Out of 1.7 million HIV deaths, 0.23 million were from SEA.[9] This region has suffered the social and economic implications of illness, disabilities, and death due to the HIV epidemic. The majority of people affected by HIV are working class adults, ages 15 and 49 years, and impoverished women and men. Moreover, the HIV epidemic negatively impacts the regions' social and economic environment by decreasing the workforce and number children in school, and increasing health care costs, which directly burdens families who have to care for the sick.[10]

Many countries in the SEA region have made progress in addressing the HIV epidemic and decreasing the burden in the last decade through increased coverage of HIV prevention, treatment, and care. The number of new HIV infections declined by 34% between 2001 and 2009. Similarly, the number of people with access to ARV treatment tripled from 2006 to 2010. In addition, the number of AIDS-related annual deaths

dropped 41% between 2005 and 2010.[3] However, responses to the HIV epidemic are irregular in this region; therefore, the burden across these countries vary. For example, new HIV infections in Cambodia, Malaysia, Myanmar and Thailand fell by more than 25%, but new HIV infection in Indonesia and Philippines increased by 25% from 2001 to 2011. The HIV prevention coverage for high-risk groups also varies among the countries. Malaysia and Indonesia reported high coverage (more than 75%) of HIV testing among IDUs. Less than 25% of MSMs in Indonesia, the Philippines and Viet Nam were covered by HIV prevention programs, but Myanmar and Thailand have high coverage HIV prevention programs for MSMs. For SWs, Myanmar had high HIV prevention coverage and Indonesia had low coverage.[11] In Cambodia, 68-95% of people who need ARV had access to treatments, while only 14-31% of people who needed ARV in Indonesia had access to treatments.[12] To improve the response to the HIV epidemic in these regions, countries need to improve many issues related to HIV control that have been addressed by experts and global organizations based on the evidence-based studies conducted globally.

## 2.2 Global, Regional and country Response on HIV/AIDS

### 2.2.1Global Strategy on HIV/AIDS

Global organizations, such as WHO and UNAIDS, are taking the lead in the global HIV epidemic response by regularly publishing guidelines and strategies that countries can adopt to keep the HIV epidemic under control. There are four strategies identified in the 2011-2015 WHO Global Health-sector Strategy for HIV/AIDS. The strategies are to optimize HIV prevention, diagnosis, treatment and care outcome,

leverage broader health outcome through HIV responses, build strong and sustainable systems, reduce vulnerability and remove structural barrier to accessing service such as stigma and discrimination. In these WHO strategic guidelines, countries are urged to understand their epidemic and respond accordingly because the characteristics of the HIV epidemic vary between regions and countries. In addition, countries need to identify their social, legal, and economic conditions that can hinder the HIV prevention and control responses. Countries also need to consider strategies for HIV response in the setting of humanitarian concern. WHO also recognizes that national responses are sometimes weak in addressing national epidemiology and focusing on vulnerable and the most-at-risk population.[13]

In this WHO strategy documents, sets of recommendation are provided for countries. One recommendation is to expand PMTCT programs to eliminate new HIV infections in children. According to WHO guidelines, revising treatment protocol and strategy by country is also recommended, in addition to starting ARV treatment early to reach universal ARV coverage to all HIV infected people. Another recommendation is that each country should identify key-affected and vulnerable populations, such as migrant workers, refugees, displaced groups, youth, etc. Each country should provide HIV prevention services to sex workers, men who have sex with men (MSM) and transgender people (TGs), and provide harm reduction services for injection drug users (IDUs). Promoting gender equality, women empowerment, health equity, and human rights by country HIV policies and strategies was also recommended to reach the universal access target. WHO also recommends that the country's policies, laws, and

regulations in all sectors should provide favorable environments for the country HIV response.

The UNAIDS Getting to Zero 2011-2015 Strategy's vision is to reach to zero new HIV infection, zero AIDS-related deaths, and zero discrimination. The three core strategic directions are to revolutionize HIV prevention, catalyze the next phase of treatment, care and support, and advance human rights and gender equality for the HIV response. The emphasis areas, which are similar to WHO strategy, includes sexual transmission in youth, MSMs and sex workers, PMTCT, drug users, universal access to ARV for those eligible for treatment, social protection in people living with HIV/AIDS (PLHA) to access essential care and service, punitive laws and practices that hinder effective HIV response, HIV-related discrimination, HIV-specific needs of women and girls, and gender-based violence. The guidelines also suggest that although global organizations provide a guiding principles and support, the country and local PLHA must take ownership to accomplish this goals.[14]

### 2.2.2 SEA regional strategy on HIV/AIDS

WHO published separate regional strategies on HIV/AIDS to address region-specific challenges and to provide guiding principles relevant to each specific region. The overarching goals and vision of the 2011-2015 Regional Health Sector Strategy on HIV are the same with the Global Health-sector Strategy for HIV/AIDS. The four strategic directions include optimizing HIV prevention, care and treatment outcome, strengthening strategic information system for HIV and research, strengthening health system for effective integration of health services and providing supportive environment to ensure equitable access to HIV services. Recommendations for the countries are based on the

additional issues from the Global strategy such as treatment of STIs, blood safety, updating treatment protocols, ARV adherence, tuberculosis co-infection, community-based care, displaced, mobile and migrant populations, prisoners, ARV drug resistant monitoring, health financing and collaboration.

### 2.2.3 Global AIDS Response Country Progress Report

In 2001, the United Nation General Assembly Special Session (UNGASS) on HIV was held to respond to the global HIV crisis to review and address the problem of global HIV/AIDS. At this session, UN member states endorsed a Declaration of Commitment on the HIV/AIDS which addressed a set of issues related to HIV epidemic and provided a set of recommendations and commitments for HIV response with a timeline. These issues included coordinated and sustained response to HIV, poverty, underdevelopment, illiteracy, conflict and natural disaster, protection of human right, gender equality, and effective prevention effort and so on. To review the progress achieved, 60$^{th}$ session of General Assembly was held in 2006 and adopted a Political Declaration on HIV/AIDS which addressed further issues such as universal access to comprehensive HIV prevention, treatment, care and support. Countries submit updates to the UNAIDS Secretariat biennially to follow up their progress in meeting the targets set out in the DoC.[15] These reports are usually prepared with the collaboration and participation of different stakeholders who participate in country HIV/AIDS response including government, civil society and international organizations and led by National HIV committee. As all SEA countries are members of the UN, the countries submit this report to UNAIDS biennially.

### 2.2.4 National Strategic Plan on HIV/AIDS

Since country ownership is required to have an effective HIV response, countries NSP on HIV/AIDS are developed to provide a framework for their national HIV/AIDS response. This country-led national planning is developed by national HIV/AIDS authorities with the contribution of global development partners such as UNAIDS, WHO, PEPFAR and the Global Fund, financially or technically. In the stages of planning and developing the document, all stakeholders participating in country HIV control such as Ministry of Health, government organizations, INGOs, community organizations and PLHA network, are involved as a collaborative participatory approach. Currently, 164 countries have NSP on HIV/AIDS.[16] NSPs are also a key platform to coordinate national response to HIV/AIDS in a single agreed framework.[17] The key role of NSPs is coordinating HIV/AIDS responses nationally. This also provides a guideline to shape the response to the different issues identified under the concept of the global HIV strategic guidelines. These are adapted to the nature of the HIV epidemic and context of each individual country. NSPs also provide a policy guideline for laws and regulation around HIV prevention and control services. The policies, strategies, approaches, and programmatic response measures outlined in NSPs are aimed to lead a country to reach the goal of ending the HIV epidemic.

### 2.4 Studies on the documents related to HIV control strategies, policies and approaches

To reach the Millennium Development Goals of stopping new HIV infection by 2015, countries need to address different issues and develop strategies and policies along with the global HIV/AIDS strategy according to the context of their own country. Until

now, there are very little studies that analyze the content of the official documents, such as National Strategic Plan for HIV/AIDS and Country AIDS Response Progress Report regarding HIV response especially in SEA region. Gruskin and Tarantola conducted a review on the key documents from UNAIDS, WHO, the World Bank, the Global Fund to Fight AIDS, TB and Malaria, PEPFAR and National HIV Strategic Plans from 14 countries to access the commitment on HIV/AIDS response made by countries on the issues of human rights and achieving universal access to HIV prevention and care. The countries included in the study are from all regions of the world, from different HIV prevalence countries, and from low, middle and high income countries. Their assessment indicated that all counties explicitly addressed human right, but most of the countries addressed Universal Access only for HIV treatment and left out HIV prevention, which is critical for controlling HIV epidemic.[18]

Persson and colleagues conducted a qualitative thematic analysis on the 2010 UNGASS Country AIDS Response Progress reports from developing regions to analyze how the countries from developing regions address the issues of human right and universal access for MSMs and people with injection drug use (PWIDs). Their analysis found that some countries demonstrated a clear commitment to human rights and universal access for MSM and PWIDs, while some countries did not address any issues related to MSMs and PWIDs, and some countries were inconsistent in addressing human rights and universal access for MSM and PWIDs in their reports.[19] Gibbs and colleagues analyzed the NSPs for HIV and AIDS from 20 countries of southern and eastern Africa to evaluate the inclusion of women, girls and, gender equality issues in their national plans. They assessed nine key components that related to women, girls and gender equality

issue and found that the majority of NSPs inadequately addressed the issues and interventions to improve this issue, and only a few NSPs mentioned significant interventions, programs, and policies to tackle this issue.[20] Although there is very limited studies that explore the county official documents essential to national HIV control, the reviewed three studies indicated that some of the countries are fail to address or inconsistent in addressing the key issues and intervention that are critical in HIV prevention and control.

## 2.5 Key issues related to HIV/AIDS response in SEA region

### 2.5.1 Humanitarian emergencies

Humanitarian emergency situations, which arise from conflict or wars, natural disasters, food insecurity, have a negative impact on HIV epidemic. Many of the wars and conflict situations cause increasing vulnerability of the people in the conflict zones to HIV infection, cause mass displacement among civilians, and increase refugees in other areas.[21] Natural disasters, such as flooding, earthquake, and hurricane, also increase the vulnerability to HIV infection due to displacement, economic instability, and food insecurity. These emergencies may impact people living with HIV in the area as well as on non-HIV people in getting infection.[22]

In 2006, there were more than 185 million people in the world affected by humanitarian emergencies, including conflict, disaster, or displacement. Accordingly, an estimated 1.8 million were PLHA, representing 5.4% of PLHA living globally. This included an estimated 930,000 women and 150,000 children under 15 years of age. In South and Southeast Asia, out of the 45 million people affected by emergencies, an

estimated 90,000 PLHA, which is 2.3% of PLHA in South and Southeast Asia, were living in emergency areas.[23] Most of the regions in the Southeast Asia are areas where refugees are living for many years. Some groups are very mobile across the borders between countries. There are also groups of internally displaced people due to armed conflicts or instabilities within the country.[24]

The literature suggests that humanitarian emergencies may have an impact the HIV epidemic in many ways. War and displacement can increase HIV transmission by increasing the hardships of the people living in these regions, which can lead to them adopting risky behaviors. As a result of war, there was also an increased rate of HIV infections due to long standing vulnerabilities.[25] Conflicts may destabilize local infrastructural, economy, and social stability.[25] This can impact HIV prevalence not only in the conflict area but also in the areas where people are displaced. People living in refugee resettlement areas need to focus on daily needs of survival, which can make them unable to access HIV prevention and testing services.[27] HIV transmission may increase due to high risk sexual behaviors as a result of risky socio-cultural environments, psychological problems, drugs and alcohol abuse, reproductive and surgical problems in war time.[28] There is also increase risk of sexual violence in war torn area, which may increase the risk of HIV infection.[29,30] However, conflict situations do not always lead to increased HIV incidence. It depends on the pre-conflict HIV prevalence in the population, the duration of the conflict, and the nature of surrounding host population.[31,32]

There are many challenges in HIV prevention and control efforts in emergency areas. Emergency situations need specific responses to HIV control depending on the context. HIV interventions, such as health service for sexual violence, simplified ARV

provision and specific HIV prevention service to vulnerable population in conflict and post-conflict, need to be considered. HIV care programs must address the need of post-exposure prophylaxis where there may be prevalence of sexual violence victims.[33] Comprehensive approaches, including psychiatric and psychological care in HIV care, are also critical in these areas.[28] Conducting HIV behavioral surveillance is also a challenge and needs specific attention in refugee camps, conflict and post-conflict area, and among displacement populations.[34] Similarly, infant-feeding recommendations in PMTCT intervention also need to be modified in complex emergency situations according to the feasibility of the standard feeding practice guidelines.[35] ART provision is also a challenge in refugee camps due to increase mobility, cultural differences between health care providers and displaced people, and prioritization of patients to other survival needs. Therefore, ART programs need to be tailored according to the setting, such as the provision of extra drug supply, patient education, and simplified treatment regimens[36] to result the outcome of HIV treatment to be comparable to provision of ARV in non-emergency setting.[37,38] This blatantly shows that countries in SEA region which are consistently facing with humanitarian emergency situation need to address the humanitarian emergencies to control the HIV epidemic. Research suggests that addressing HIV adequately and early interventions in humanitarian settings has been a key in fighting HIV in Asia.[39]

### 2.5.2 Poverty and Illiteracy

Poverty and low literacy in the SEA region is one of the factors that impact the HIV epidemic. All SEA countries are LMICs and the wealth distribution is highly uneven and less social security measure for poor and unfortunate ones in the country. In 2008,

data showed that 17% of people in SEA region were living on less than $1.25 per day [40] but the actual burden of poverty may be greater than this data due to weakness in data collecting in this region. The adult literacy rate in this region ranged from 77.6% in Cambodia to 95.4% in Philippines, however the actual literacy for understanding health and HIV in this population can be much lower.[41]

Poverty and low socioeconomic condition is a major factor that increases susceptibility of HIV infection at an individual level. Individuals with poverty suffer more of the burden of HIV. HIV infection can also increase poverty by impacting household income when HIV positive people cannot work or a household member must care for the sick family member. Impoverished people are less likely to have adequate access to health information and health care services. Hardships make them more likely to adopt risky behaviors.[42] Poverty can contribute to early sexual activity in girls and encourages multiple sex partners and partnerships with older men to meet basic survival needs.[22] Typical sex is exchanged for money, business, food, transportation, housing and gifts especially for women living with poverty and illiteracy.[43] Poverty is also a barrier to access to treatment and ARV medication, especially in early stages of HIV when the health outcome and quality of life of patients can be good. This makes poor people suffer more burden of HIV than financially secure ones. Food insufficiency, which is one of the results of poverty, can have negative impact on medication adherence[43] and result in poor outcome of HIV treatment. Poverty at country and regional level is also a challenge for doing HIV researches, and establishing comprehensive HIV prevention and treatment programs for HIV control.[45]

Poverty is also associated with illiteracy and low literacy. Literatures show that low literacy is associated with low HIV knowledge. Illiteracy is a challenge in accessing to HIV education program and HIV treatment services. Education programs, which include written materials and posters, cannot be effective for illiterate people. Therefore, they need special programs such as drama-based community HIV education programs, cartoon-based educational materials, and peer-led education programs to be effective in reaching this population.[47,46,48]

However, some literatures suggest that poverty and educational level do not clearly have an association in increasing HIV transmissions. At the continent level, data shows no statistical association between poverty and HIV/AIDS prevalence and at the country level, there is a weak positive relationship between national wealth and HIV prevalence across countries.[50,49] But, it is clear that the HIV epidemic aggressively affects the world's poorest areas. The majority of HIV cases are living in low and middle-income countries. People from poor countries bare the highest burden of the HIV epidemic.[51] This clearly indicates that countries in the SEA regions highly effected by HIV, poverty, and low literacy need strategies to improve this situation.

### 2.5.3 Gender equality and Women empowerment

Gender equality is a basic human right that gives women the opportunity to live with dignity and free from fear and discrimination, such as gender-based violence, economic discrimination and reproductive health inequality.[52] Globally, 15–71% of women aged 15- 49 years experienced gender-based physical and/or sexual violence by an intimate partner at some point in their lives,[53] however, only 52% of countries who reported to the UN General Assembly included specific budgeted support for women-

focused HIV/AIDS programs in 2008.[54] The actual burden of gender inequality in SEA region is hard to estimate due to lack of data in many countries in this region. DHS 2009 data showed that the prevalence of intimate partner violence in their lifetimes was 2.7% in Cambodia, 8% in Philippine and 9.9% in Viet Nam. Prevalence of sexual violence by non-intimate partner or rape was high in this region, because rape is common in conflict areas and the majority of SEA regions have been facing conflict. Non-intimate partner violence or rape in Philippines was 8.7% and Vietnam is 10.8% in their life time.[55] The SEA region can be presumed to have other burdens of gender inequality, such as women and girls are unequal in access to education, reproductive health care, and employment opportunity, resulting in increasing vulnerability to HIV infection.

In many parts of the world, women are socially and economically disempowered, which leads to gender inequality. Some studies find improvement in women's economic status can help reduce gender inequality.[56,57] Some argue social changes are needed to empower women.[58,59] In addition, women are biologically, socially, and culturally susceptible to HIV because most of their choices and actions related to their sexual practices are limited by gender roles and culture-norms in the society.[60,61] In addition, inequality in access to reproductive health, violence against women and poverty due to economically discrimination against women, can impact the their susceptibility to HIV. Socially, women have less power to discuss sexuality and reproductive health with their partners. The power relationship between partners is important to practice safe sex and this power imbalance between partners can lead to intimate partner violence and unsafe sexual practice, which has positive association with increased HIV risk.[62] Gender inequality in society can negatively impact women's economic and social opportunity to

lead a better life. This can increase women and girls engaging in risky sexual behaviors, like sex work, can increase risk of HIV infection.[63]

Women need to have sexual and reproductive health rights to practice safe sex to protect them from getting STI and HIV. Women who are empowered with a balanced power relationship between partners can have autonomy on their reproductive health choice and can practice safe sex with their partner. Economically empowered women and girls are less likely to engage in risky sexual behaviors and sex work. Women with equal opportunities in financial decision making and negative attitudes toward gender-based violence are positively related to women seeking HIV testing, which is an entry point for HIV prevention and treatment services.[61]

Therefore, gender-based approaches need to be considered in HIV prevention and control programs. Women empowerment-based HIV prevention control program can increase women knowledge on gender-based power imbalance and negotiation skills in condom use. Global HIV policies urge to incorporate gender equality and women empowerment approaches in HIV intervention and, by integrating sexual and reproductive health services into HIV/AIDS program.[65] SEA region already had regional efforts to reduce gender inequality and to promote women empowerment in the region. Most of the UN member States in this sub region have signed the Convention on the Elimination of All Forms of Discrimination against Women.[24] Yet, countries still need to adopt strategies and programmatic response to improve gender inequality and to integrate women empowerment approaches in HIV intervention in their country strategic plan.

### 2.5.4 Psychosocial care in HIV

Universal access to HIV services such as prevention, treatment, care and support by everyone who needs it, is the foundation for the MDGs, which is to stop the spread of HIV.[5] Universal access is also a commitment made by all UN Member States countries in the 2006 UN General Assembly for rapidly scaling up the AIDS response. To reach universal access, countries needs to implement equitable, affordable, and comprehensive HIV services for every person including high-risk and marginalized population. Psychosocial care for an HIV infected and affected person is one of the components of comprehensive HIV care. However, many countries faced challenges in integrating psychosocial care in their HIV services.

There are no exact global or developing countries data on the extent of psychosocial problems in people living with HIV,[66] but the implication of this problem can be estimated. In the United State where mental health treatment and psychosocial support services are well integrated in HIV services, 13% to nearly half of the HIV positive nationally representative sample had psychiatric disorders in 1996.[67,68] HIV infected people living in SEA region are particularly effected by stigma, poverty, and inaccessible to care and treatment services which can impose the psychosocial problems. Therefore, psychosocial care and support, such as counseling, social networks, or support groups are needed to be integrated into HIV services.[66]

According to WHO, "psychosocial support address the ongoing psychological and social problems of HIV infected individuals, their partners, families and care givers".[70] Psychosocial support and care integration in HIV program is essential for every stages of HIV care, starting from HIV screening to HIV treatment and long term ARV adherence. The psychological crisis of people can begin when they go for HIV testing or screening.

The difficulty in disclosing their status to a partner or family after testing can increase their psychosocial crisis due to fear of stigma and social isolation. Psychosocial issues of patients can impact their treatment adherence, treatment participation, and quality of life. There are different stages of emotional and psychological suffering along the different stages of disease, which can sometimes lead to mental disorder and diseases. The psychosocial problem of HIV illness can affect not only the patient, but also the family and social environment of that patient. The care givers of ill patients are facing challenges in coping with giving long term care especially in poor households in which care givers and family members are responsible for income. Sometimes, young school aged children are primary care givers for family member with AIDS and they become the sole support for their psychosocial well-being.[68]

Knowledge on psychosocial needs and support to people living with HIV and their families should be considered by all health care workers in every health care setting to reduce the stigma that  negatively impacts[72] There are some models of psychosocial care for HIV infected patients in hospital or HIV clinic that can improve the treatment outcome of patients, prevent psychological illnesses, reduce stigma, improve social support, promote stability of patients' and families' lives.[73,74,75] These type of models and approaches for psychosocial care need to be considered in country HIV/AIDS response especially in SEA regional countries where people are vulnerability to psychosocial problem and mental health disorder, for effective HIV control.

### 2.5.5 Access to medication and Universal ART coverage

Access to HIV medications for those who need them is critical for controlling the HIV epidemic as well as a fundamental human right. However, access to HIV medication

by all needy people and ARV coverage for all people infected with HIV is still low in developing countries and unreachable to universal.[76] Globally, 54% of HIV infected people were receiving ARV in 2011.[76] In low- and middle- income countries, only 47% of HIV infected people were receiving ARV as per the latest WHO criteria, and in Southeast Asia region, only 39% of those were receiving ARV in 2010.[1] The medications and ARV is especially harder to access by marginalized people, such as drug users in detention centers[75] and illegal immigrants.[76] The unmet need of medications and ARV in Southeast Asia regions is a compounding factor of weakness in socioeconomic development, human resources, health system, and addressing of human right in the issue of access to medication.[79]

Access to HIV medications, such as ART and other necessary treatments for opportunistic infection, is necessary for people living with HIV and their family to enjoy the highest attainable standard of physical and mental health. This is the aim of WHO's Health for All.[78] Test and Treat strategy have been adopted by many countries for early testing and treatment of HIV with ART to reduce the infectiousness of HIV positive people. Early accessible to HIV treatments can also prevent HIV related morbidity and mortality and increase survival which can also reduce unnecessary resource utilization. In the era of HAART, HIV treatment is one of the prevention approaches to control HIV epidemic. The viral load can be undetectable in HIV infected people on HAART, with good adherence, which can reduce the risk of further transmission to population. ARV treatment is used to suppress the viral load[79] and can reduce the risk of sexual transmission.[83,84] Treatment with necessary ARV and care in HIV positive pregnant women also prevents the viral transmission to baby from 15-45% to less than 5% risk of

transmission.[82] Research indicates that increased coverage of ART to all HIV infection can ultimately reduce the number of new HIV infections by 62% with the adherence rate of 78.5% in 25 years.[86] The universal access to ARV has an association in reducing stigma among HIV infected people because they seem as healthy as uninfected people due to receiving the necessary treatments.[84] Therefore, countries in SEA need to address the strategies and programmatic response to improve access to HIV medication as a fundamental of human right and to reach universal ARV coverage to end the HIV epidemic in this region.

### 2.5.6 ARV drug resistance

While scaling up ARV treatment for HIV infected people, monitoring and prevention of developing ARV drug resistant HIV strain is essential in effective HIV control. Over the last decade, scaling up ARV treatment globally including low- and middle income countries have gained unprecedented achievement reaching 8 million people taking ARV globally in 2011 from 1.3 million in 2005.[1] Along with this achievement, the developing and transmission of ARV-resistant HIV strains is inevitable. The implication of developing ARV drug resistance is a challenge for controlling the HIV epidemic. Transmission and acquiring ARV drug resistant HIV can reduce the effectiveness of ARV in population and can increase morbidity and mortality. Switching to second-line ARV from first-line ARV due to resistance can increase the financial burden within the health care system.[85] In addition, patients on second-line ARV are more likely to have drug toxicity and to face burdens of taking many drugs.

WHO reported in 2012 HIV Drug Resistant Report that the prevalence of resistance to any ARV drugs in LMIC was 6.6% in 2009 and was increasing. In addition,

28% of countries surveyed by WHO for drug resistance had moderate levels of prevalence for drug resistance, between 5% and 15% in 2010. A study done in Hong Kong, Malaysia and Thailand reported that the prevalence of HIV-1 resistant to more than one ARV drug was 13.8% in 2009.[86] The rate of resistance to any drug in treatment naïve patients was 5.7% in SEA.[87] However, WHO emphasized that increasing coverage of ARV is not necessarily related with increasing ARV resistance.[88] ARV drug resistance surveillance and monitoring systems are required to address HIV strategies to identify the early warning indicators of ARV resistance in populations to implement early interventions to prevent further transmission of ARV resistant HIV strains. However, many countries lack in ARV resistance surveillance systems. The Global Fund to Fight AIDS found that only 22% of the total granted program monitored ARV resistance although they are encouraged to use funds for ARV drug resistance monitoring.[89]

Development of ARV drug resistance to both first- and second-line drugs or transmission ARV resistance HIV are high in LMICs.[93,90] These countries did not have enough resources to do annual monitoring of viral load, which can help early switching to second line ARV in case of first line ARV failure and can reduce transmission of drug resistant HIV by 80%.[94] There is no resource to screen of first line ARV resistant in ARV naïve patients before starting of first line ARV in these countries. In addition, most of HIV infected people in developing countries start ARV in very late stages when patients are more likely to develop resistance. The combination of ARV drugs for first-line treatment that are currently being used in LMICs are shown to be associated with high treatment failure in some studies.[95,96] Using suboptimal ARV treatment in pregnant women and babies in those countries can be one of the factors leading to ARV drug

resistance. Optimal ARV adherence of people is also an important factor to prevent developing resistance. Poor adherence is common in people living in poor areas with limited resources where there are transportation, psychosocial, discrimination and food insecurity problems accessing ARV regularly.[97] Another challenge includes limited supplies of ARV in HIV clinics due to resource limitations and instabilities within the country which make logistically difficult.[98] Inadequate infrastructure for HIV treatment program, such as weakness in adherence support and supply management for chronic HIV care in LMIC, can increase the HIV drug resistance at the population level. All the above mentioned issues need to be address in national HIV/AIDs response plan to strengthen programmatic response to prevent developing and transmission of ARV resistant HIV in SEA region to keep HIV epidemic under control.

### 2.5.7 Punitive laws hindering the HIV response

There are a wide range of criminalization laws that can hinder HIV prevention responses and treatment services, which are essential in control of global HIV epidemic. Most of the laws prevent high-risk groups, such as sex workers, men sex with men (MSM) and drugs user, to attend HIV prevention and treatment services. In some countries, same-sex sexual activities are criminalized and results in hindering MSM seeking HIV prevention services. Many activities related to sex work or prostitution including sex work in private, soliciting, operating brothels, and human trafficking are illegal in most of the countries. Personal possession of illegal drugs, illegal drugs use, trafficking and production are faced by different punishments range of from detention to death penalty.[96] In many part of the world, sex workers, men sex with men and drug users are the major drivers of the epidemic.[99] Therefore, it is a major challenge to AIDS

response to the legal environment forcing those without access to HIV prevention and care programs.

Southeast Asia is one of the regions where there is high burden of HIV in sex workers. HIV prevalence of sex workers in LMIC can range from 17.8% to 30.7%[100] and in SEA region, it ranges from 0.43% in Laos PDR to 18.1% in Myanmar.[10] Sex workers in this region face many punitive laws that have been adopted in their countries constitutions and laws. In Cambodia, the constitution prohibits sex work as exploitation and most countries have criminalized all activities related to sex work. So, there are many incidences of sex workers being assaulted, arrested, detained, and penalized imprisonment which makes it difficult to get them access to HIV prevention services, impossible to practice safe sex, and difficult to protect their sexual health and human rights. Ultimately, this hinders HIV epidemic control.[101]

The research indicates that an estimated 5% of the global population has experienced using illegal drug in their life time.[100] It was extrapolated that there were approximately 15.9 million injection drug users in the world in 2007 and an estimated 3 million of them were HIV positive.[103] In the SEA region, illegal drug use and injection drug use is a significant issue, although the actual prevalence of illegal drug use is difficult to estimate.[104,102] HIV prevalence in injection drug user group is the highest among any groups, ranging from 18.4% in Vietnam to 53% in Philippines.[12] All countries in SEA region practice punitive law for drug control but the degree of punishment and enforcement practice varies. Any amount of drug possession is punishable by imprisonment and/or compulsory detoxification treatment in many countries. Some countries have mandatory drug testing in specific group of people, such as students and

military. Some countries forgo imprisonment for first time drug offences and issue jail time with compulsory treatment for second time offenders. In some countries, the War on Drugs approach leads to severe enforcement on drug possession and trafficking and results in increased number of arrests and abuses in detention.[102] In some countries where harm reduction policies are officially adopted, there are still conflicting practices, such as enforcing the drug controls law, identifying drug user who come to needle exchange program and arresting them for compulsory detention by street level policing. This results in an unfavorable environment for HIV prevention and harm reduction program in SEA region.[106,107]

Criminalization of sex workers and anti-prostitution laws prevent access to HIV prevention programs, reproductive health services, and condom usage. In many countries, although governments encourage the 100% condom promotion for sex workers, many sex workers fail to use and carry condoms due to fear of confiscation by police because condoms are evident as illegal sex work conduct. As sex work is illegal, sex worker who are being abused by their customer or brothel owners are less likely to report and have less power to choose safer sexual practice. In some countries, many sex workers are in prison, detention, and rehabilitation centers. This unnecessary detention and imprisonment can also increase HIV transmission, abuse encounter, and human rights violation.[108,109] Some sex work venues and brothels are raided by authority causing sex workers to frequently migrate to avoid arrest. This prevents HIV health education prevention programs from reaching those mobile sex workers and makes it difficult to track and monitor for SIT and HIV treatment.

Drug control laws can hinder HIV prevention efforts especially in countries where HIV epidemic is driven by IDUs. Criminalization of drug use can prevent drug users from accessing evidence-based HIV prevention programs and harm reduction programs, such as needle exchange services, safe injecting facilities, methadone replacement program, and peer education programs [110]. Incarceration of drug users can increase high risk injection behaviors among them, prevent access to drug use cessation program, such as methadone treatment program, and increase spread of HIV among them and their social network when they are released.[111,112,113,114] Drug control laws also prevent HIV positive IDUs from live saving HIV treatment program.[115] This indicated that countries in SEA region need to improve the laws and policies that negatively affect the HIV control.

### 2.6 Summary of reviewed Literatures

SEA region still find itself in high burden of HIV/AIDS according to the data. To reduce this burden in SEA region, the country ownership in responding to HIV epidemic with integrated strategic plan and programmatic response under the framework of global and regional HIV strategies which are set out by global and international organizations is critical. In addition, as all countries in SEA endorsed DoC on HIV at UNGASS, to fulfill this commitment, countries need to address the critical issues in HIV control which are outlined in DoC. The critical issues that are outlined in DoC and global HIV strategy included poverty, illiteracy, conflict and natural disaster, protection of human right, gender equality, universal access to comprehensive HIV prevention, treatment, care and support, ARV drug resistant, and laws and policies in HIV response. As shown in literature review, most of the countries faced these critical issues in their countries and

had challenges in responding those issues around HIV epidemic and control. However, evidences have suggested that these key issues are needed to be improved for effective HIV control in the region.

NSP document serves as a platform to guide the nation for an integrated single framework response to all these critical issues around country HIV/AIDS control. In addition, country progress report to UNAIDS serves as a narrative of country progress in programmatic response to these key subjects. However, there is very limited study on how SEA countries integrated these key issues in their NSPs and how they reported their programmatic progress in their country progress report to reflect the countries HIV policies, strategies and programmatic response on these issues. The aim of this thesis is to fill the gaps of knowledge on the inclusion of key HIV control policies, strategies, and programmatic response relating to issues that were reviewed in the previous sections, in the NSPs and country progress report from SEA countries to understand the HIV/AIDS response in SEA region.

# Chapter III

# METHODS AND PROCEDURES

## 3.1 Methods

This study seeks to inform knowledge around national HIV policy, strategies and programmatic response in SEA countries for better understanding of the SEA regional HIV response by investigating the contents of country NSPs and progress report from countries. Analyzing contents of the country NSPs and progress report can provide better understanding to what extent countries addressed, have policies, strategies, and programs in responding critical issues that are addressed by literatures and guided by global HIV strategy to fulfill the commitments made in UNGASS. This study utilized thematic content analysis using general inductive approach to analyze the documents.

Thematic content analysis is a commonly used qualitative analysis method in health research and is the most basic type of qualitative analysis. The content of the data are being interpreted or analyzed to develop themes or categories. The data sources can include interview notes, ethnographic observation, multimedia files and documents.[114] Document sources can include public records, private documents, research publications, archive research data, mass media sources, government report and sometimes, grey literatures. Using documents as a data sources is unobtrusive in collecting and analyzing data although all questions of the research cannot be answered.[117]

In this thematic content analysis method, themes or categories are developed by using general inductive approach. General inductive approach is a systematic procedure to analyze the qualitative data in a simple straightforward approach by developing themes or categories which are most relevant to research questions by close reading of the text and consideration of meaning of the text. According to Thomas, inductive approaches are "approaches that primarily use detailed reading of raw data to derive concepts, themes, or a model through interpretations made from the raw data". This method allows researchers to find themes or meaning related to research question or themes that derive from the frequent and significant ideas from the raw data, instead of finding themes already being set with prior theories or framework.[115]

By using general inductive approach, key themes or categories are identified by examining contents of the data which called open coding. A coding scheme or template was developed after identifying themes. Coding scheme or template is a list of code names or categories to organize the data. A code name is a name of a particular theme or categories which has assigned definition or description. The definition or description of the code is used for deciding the theme of the content that the code will apply to. Simple thematic content analysis can allow researchers to develop categories and compare and contrast those categories across data sources being analyzed. As this method is a basic qualitative analysis method, this can be an initial step for continuing to do further more complex qualitative analysis which researchers can analyze how the codes, categories or themes are related each other and can develop a model or theory.

### 3.2 Data Sources

The data sources for this study are sixteen National Strategic Plans on HIV/AIDS and eight Global AIDS Response Progress Reports submitted to UNAIDS from SEA countries. WHO defined Southeast Asia Region includes Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste. The United Nations considers Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor Leste and Viet Nam as SEA countries. For this analysis, eight countries with documentation available online were included. These countries are Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Viet Nam. NSPs documents were retrieved from AIDSTAR-One website (www.aidstar-one.com/focus_areas/prevention/resources/national_strategic_plans) or hivpolicy.org website (www.hivpolicy.org). Country Global AIDS Response Progress Reports were available on UNAIDS website (www.unaids.org). These publicly available documents are the special sources which can be used to identify the individual country's efforts, visions, successes, shortcomings, and future directions to fight against HIV epidemic.

Following are the list of documents analyzed:

Cambodia

- Country Progress Report Monitoring the Progress towards the Implementation of the Declaration of Commitment on HIV and AIDS 2010-2011
- Revised National Strategic Plan II for a Comprehensive & Multi-Sectorial Response to HIV/AIDS 2008-2010

- The National Strategic Plan for Comprehensive & Multi-Sectorial Response to HIV/AIDS III 2011-2015

Lao PDR

- AIDS Response Progress Country Report 2010-2011
- National Strategy and Action Plan on HIV/AIDS/STI 2006-2010
- National Strategic and Action Plan on HIV/AIDS/STI Control and Prevention 2011-2015

Malaysia

- Global AIDS Response Country Progress Report 2010-2011
- National Strategic Plan on HIV/AIDS 2006-2010
- National Strategic Plan on HIV and AIDS 2011-2015

Myanmar

- Global AIDS Response Progress Report 2010-2011
- National Strategic Plan on HIV and AIDS 2006-2010
- National Strategic Plan on HIV and AIDS 2011-2015

Philippine

- Global AIDS Response Progress Report 2010-2011
- Strategic Plan on HIV and AIDS 2005-2010
- Strategic Plan on HIV and AIDS 2011-2016

Indonesia

- Country Report on the Follow up to the Declaration of Commitment on HIV/AIDS 2010-2011
- National AIDS Commission 2007-2010 HIV and AIDS Response Strategies
- National HIV and AIDS Strategy and Action Plan 2010 – 2014

Thailand

- AIDS Response Progress Report 2010-2011
- The National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation 2007-2011
- National AIDS Strategy for 2012-2016

Vietnam

- AIDS Response Progress Report 2010-2011
- National Strategy on HIV/AIDS Prevention and Control 2004-2010
- National Strategy on HIV/AIDS Prevention and Control 2011-2020

### 3.3 Development of thematic categories and coding

Thematic categories related to the research questions were developed step by step from the documents.

**Step 1 Open Coding** –I used the step by step inductive category development according to Mayring 2000[119] (see Fig.1). The research question of this study which is to analyze the inclusion of the critical issues related to HIV/AIDS responses of individual country in their NSPs and progress report was considered to development of themes or categories. Open coding was used to develop initial themes and categories by detail reading of three

documents (previous and current NSPs and a country progress Report) from a country without a priori assumption or formulated theoretical based definition of the categories. An initial analysis template was developed based on categories or themes that reflected from main ideas of the issues discussed in the analyzed documents and from the literature review of Declaration of Commitment on HIV and global strategy on HIV/AIDS. The template includes categories and their definition or description of the themes to be coded for individual category. From the initial development of codes, more than 50 categories were developed.

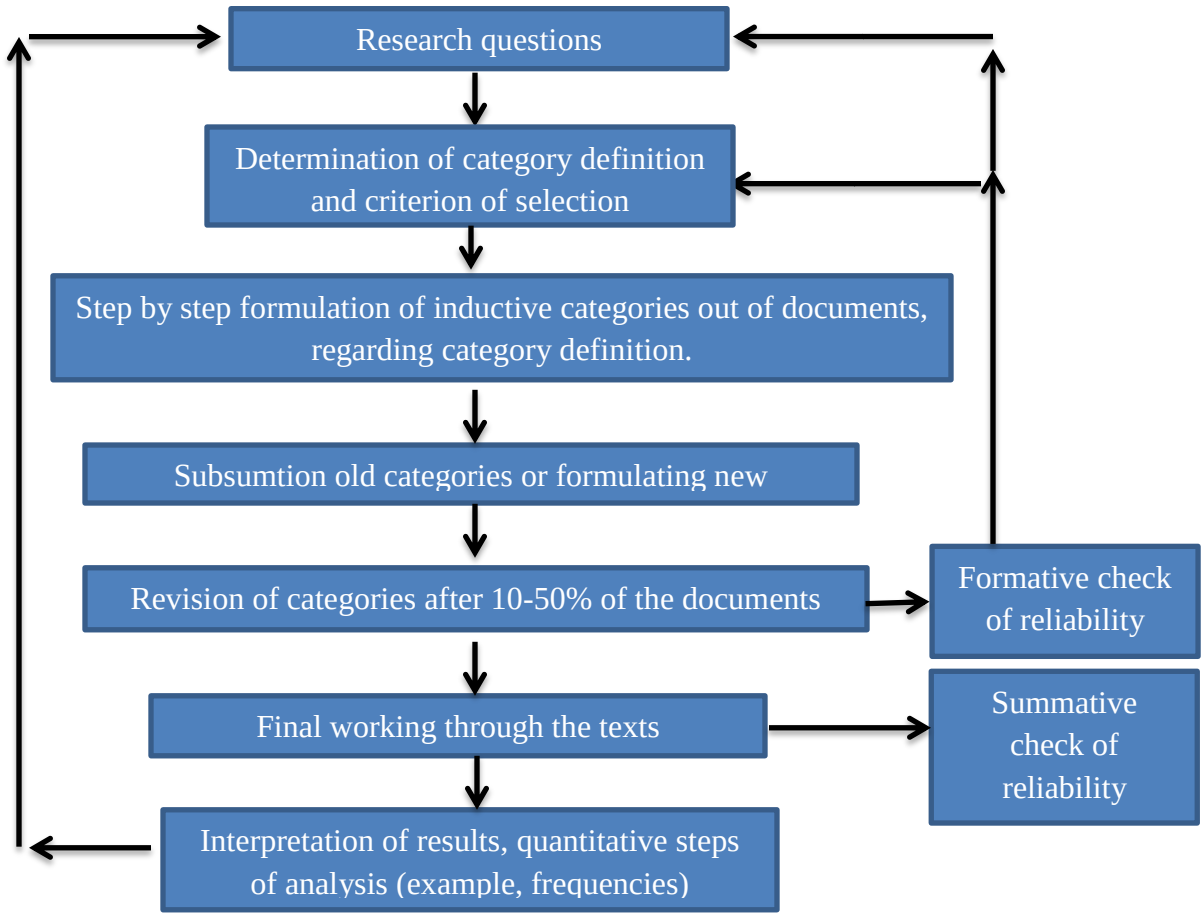


Fig. 1: Step model of inductive category development. Adapted from Mayring 2000. [119]

In coding the theme of the text, I used the theme and main idea of context information as latent content, instead of using primary content, which is a theme of the text itself. For example, “Behavioral surveillance system” was coded when the document mentions about behavioral surveillance system for high risk population/youth population/general population to understand the transmission of HIV and to inform effective prevention. In addition, three subcategories were developed under each overarching category. When the document only addressed the important of the issue of given category, only the category name was coded. For example, “blood safety” was coded if the document addressed the important of testing HIV in all medically used blood product, which is a fundamental for HIV prevention. When the document mentions that the country has strategies to improve the safety of the blood product, “Blood Safety Strategies” was coded. When the document described that the country already had blood safety programs, those were coded as “Blood safety program”. See Appendix 1.

**Step 2 Refinement of list of categories** - Then, coding continued for each document. While coding throughout these documents, new categories were formulated inductively out of documents and the definition or descriptions for new categories were developed. For example, originally there was no category called- “Psychosocial care” because it was already included in the definition of initial category – “Comprehensive care”. During document review, it became apparent that not every document was explicit about “Psychosocial care”, although they mentioned “Comprehensive care”. Subsumtion to old categories regarding category definition was done when more definitions could fit into old categories. For example, I had the category – “HIV laws and policies”, which is defined “HIV laws and policies which help HIV prevention and control and may include

but not limited to laws which protect HIV affected people and improve prevention, law and regulations which protect key effected population and vulnerable population". After coding several documents, "law on non-discrimination to HIV affected people and workplace HIV policies" was added to the "HIV laws and policies" category. Revisions and refinement of categories were made throughout the coding process. Some categories were combined if they have similar meanings or were linked under a superordinate category. For example, two categories were combined - "Male sex workers" and "Female sex workers" as "Sex workers" because most countries mentions same prevention approaches and programs for both male and female sex workers. When category name and definition were changed or refined during coding process, validity of previous coding was always checked after each change. NVivo10 qualitative analysis software (http://www.qsrinternational.com) was used for coding and organizing documents.

**Step 3 Coding the documents** – Final coding template was developed with name of categories and descriptions after finished coding half of the documents. Appendix 1 shows all categories and subcategories identified through the coding process. They provide a frame for coding of the rest of the documents. Each category was coded if the content in the document indicated the theme or ideas that were consistent of the description of the category.

**Step 4 Grouping –** After coding the documents, categories were grouped under the main category track according to the related area of intervention in HIV control. These included "Epidemiology and prevention", "Policy environment", "Social and economic environment" and "Treatment and care". Appendix 2

### 3.4 Analysis

A comprehensive database with all categories was extracted. All categories and subcategories were organized across their respective countries. Different issues and categories covered by countries in their previous and current NSP documents and their country progress reports were compared and analyzed. Regional overview of results for categories are presented, rather than focusing on specific countries, to understand how keys subjects in HIV control have been conceptualized and operationalized as policies, strategies and approaches regionally.

# CHAPTER IV

# RESULTS

Twenty-eight main categories with their sub-categories emerged from coding and analyzing of the NSPs and country progress report documents from eight SEA countries. Appendix 1 provides the name of the themes/categories, their definitions or descriptions, and samples of content coding.

## 4.1. Inclusion of key issues in Countries National Strategic Plan on HIV/AIDS

Finding from the analysis of NSPs revealed that the inclusion of key issues and strategies to response HIV epidemic in NSPs documents varied across countries and are presented in Table 4.1 and 4.2. There were deficiencies in addressing and strategies to response following key issues in the SEA countries NSPs on HIV. All countries NSPs significantly failed to mention the key topics in policy, social and economic environment around HIV control such as women empowerment, illiteracy, armed conflicts, natural disaster and humanitarian emergencies. Three out of eight countries including Myanmar, Thailand and Vietnam did not present any strategies or policies to improve prevention program for transgendered population. Half of the countries did not have integrated poverty reduction approaches in their HIV strategies. NSPs from three countries including Laos PDR, Thailand and Vietnam failed to mention specific measures to improve psychosocial care in HIV treatment and care program. Five out of eight

countries did not have a significant focus and had measures for the issue on access to medication as a fundamental human right and universal ART coverage.

The following issues were consistently included in most of the analyzed NSPs. All key areas in HIV epidemiology and prevention, except transgender population, consistently appeared in most of the country's NSPs. All countries NSPs consistently present the strategies to improve laws and policies which can protect HIV-affected people and improve prevention, laws and regulations which protect key-affected population and vulnerable population, laws on non-discrimination to HIV affected people or workplace HIV policies. All NSPs were significantly explicit about having the strategies to improve comprehensive care, PMTCT and universal access to HIV care for HIV infected people. Seven out of eight countries presented strategies to improve gender equality, human right and PLHA network for HIV response, and to prevent developing of ARV drug resistant HIV in population.

Analysis also revealed that there was a discrepancy in addressing the issues and having strategies for that issue in some countries NSPs. For example, a number of NSPs were explicit about the importance of particular issues in HIV control, but failed to mention the specific strategies and programmatic responses to tackle the issue. All NSPs document referred to human rights, but the Malaysia NSP 2006-2010 failed to mention improving human rights in the country:

"*People infected with HIV retain the right to participate in the socio-economic activity, without prejudice and discrimination. They have the same right to health care and community support as other members of the community*."

However, the Thailand NSP 2007-2011 clearly outlined the measures and strategies on how to improve human right issues:

"*Strategy 3: AIDS rights protection*

*Successful vision*

*1. The rights of HIV infected persons and AIDs patients and affected persons from within the various population groups are protected and treated on an equal basis with others in the wider community……..*

*Indicators and targets*

*1. Percentage of AIDS prevention and alleviation service providers that have an awareness and understanding of the practical actions on AIDS- related rights.....*

*3. Develop an annual report on the AIDS rights situation with active participation of all sectors, including the networks of people living with HIV.*

*Measures*

*1. Review and develop the existing knowledge on rights to improve laws and regulations which will be more relevant to current situations.*

*2. Disseminate knowledge to improve the understanding of human rights among all personnel and population groups.*

*3. Develop networks and mechanisms to promote and protect human rights at various levels……."*

Similarly, gender equality and strategies to improve gender equality were clearly noted in all NSPs, except Laos. The Lao PDR NSP 2011-2015 only mentioned the importance of gender equality in HIV prevention and control in the guiding principles for the national response:

*"Women are biologically more susceptible than men to sexual HIV transmission; Women are less likely to be able to negotiate conditions of sex or the use of condoms by their sexual partners due to the power constructs of the relationships between themselves and their male partner. Women may also have more limited access to services and are more likely to suffer stigma due to HIV infection. Research also indicates relatively high levels of sexual violence against women. For these reasons, a gender analysis framework must be applied to all planning, service delivery and research processes……"*

However, strategy and programmatic actions to achieve the aforementioned statement was not presented in the document.

### 4.2. Inclusion of key issues in Countries Global AIDS Response Progress Report 2010-2011

Findings from analysis of the country progress report are presented in Table 4.3 and 4.5. There were gaps in addressing following key issues in the SEA countries' progress report. Significantly, programs for improving illiteracy and poverty, programs that integrate HIV care during armed conflicts, natural disaster and humanitarian emergencies were consistently not noted in all countries reports except Indonesia, which mentioned that poverty reduction programs existed. Surprisingly, only one of the report

mentioned that country has program to combat stigma although the important of reducing stigma and discrimination around HIV infected people in controlling HIV epidemic was acknowledged in many country reports. Similarly, none of the reports were explicit about the programmatic responses that improve access to medication as a fundamental human right. Two reports from Myanmar and Vietnam did not identify that they have any kind of HIV prevention program for TG population. Only two countries such as Thailand and Vietnam were explicit about that they have HIV prevention program for youth. Only Indonesia and Malaysia reported that they had intervention programs focused on women empowerment. Significantly, only a report from Vietnam mentioned having programs focused on gender equality. Six countries excluding Laos PRD and Philippines did not report that psychosocial care was integrated in HIV care. Six out of eight countries did not achieve high PMTCT coverage. Only two reports from Myanmar and Vietnam mentioned that their countries have programs that clearly focus on attaining the universal access to HIV care goal. Half of the countries revealed that they have programmatic response to reach universal ARV coverage and to prevent development ARV drug resistant HIV in population.

The following issues were consistently included in the country progress report from SEA countries. There was no variation across the countries in the region in existing programmatic response to improve civil society involvement and to all issues in epidemiology and prevention category except youth and TG population. Almost all reports referred to human rights as an important issue for HIV control. More than half of the reports identified that their countries have comprehensive care program for HIV.

Analysis also showed that the policy environment around HIV prevention and control was very different within the region. Around half of the countries reported identify the existence of the laws that hinder HIV prevention, such as laws control sex work and drug use. More than half of them reported that they have HIV law and policies to improve HIV prevention and control work in their countries.

Table 4.1 Categories addressed (✓) in previous and current National Strategic Plan on HIV/AIDS of each country

| | Categories | Cambodia | | Indonesia | | Laos PDR | | Malaysia | | Myanmar | | Philippines | | Thailand | | Vietnam | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2008-2010 | 2011-2015 | 2007-2010 | 2010-2014 | 2006-2010 | 2011-2015 | 2006-2010 | 2011-2015 | 2006-2010 | 2011-2015 | 2005-2010 | 2011-2015 | 2007-2011 | 2012-2016 | 2004-2010 | 2011-2020 |
| Epidemiology and Prevention | Behavioral surveillance strategies | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| | Blood safety strategies | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | High risk group or key affected population | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Strategies for youth | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| | Strategies for transgender population | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | ✓ | | | | |
| | Strategies for PWID | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Policy | HIV law and policies | ✓ | | | | | | | | | | | | | | ✓ | |
| | HIV law and policies strategies | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Social and economic environment | Human right | | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | | | |
| | Human right strategies | ✓ | | ✓ | ✓ | ✓ | | | | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Empowerment of women | ✓ | | | | | | | | | | | | | | | |
| | Strategies to empower women | | | | | | | | | | | | | | | | |
| | Gender equality | | ✓ | | ✓ | | ✓ | ✓ | | | ✓ | | ✓ | | | | |
| | Gender equality Strategies | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Illiteracy | | | | | | | | | | | | | | | | |
| | Poverty | ✓ | ✓ | | | | | ✓ | | ✓ | | | ✓ | | | | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Poverty reduction strategies | | | | | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | | ✓ | ✓ |
| | Armed conflicts, natural disaster and Humanitarian emergencies | | | | | | | | | | | | | | | | |
| | Stigma | | | | | | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | |
| | Strategy to combat Stigma | ✓ | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Civil society involvement | | | | ✓ | | ✓ | | ✓ | | | ✓ | | | | | |
| | Civil society involvement strategies | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Coordination | | ✓ | | ✓ | | | | ✓ | ✓ | | ✓ | | | | ✓ | |
| | Strategies to establish coordination | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ |
| | Strategies to improve PLHA network | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | | | | ✓ |
| Treatment and care | Comprehensive Care | | | | | | ✓ | | ✓ | | | | | | | | |
| | Comprehensive care strategies | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Psychosocial care strategies | | ✓ | | ✓ | | | | ✓ | ✓ | ✓ | | ✓ | | | | |
| | PMTCT coverage strategies | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| | Access to medication strategies | | ✓ | | | | | | | | | ✓ | ✓ | ✓ | ✓ | | |
| | Universal ART coverage strategies | | | | ✓ | | | | | | | | | ✓ | | | ✓ |
| | Universal Access to HIV care strategies | ✓ | ✓ | ✓ | | ✓ | | | | ✓ | | | ✓ | ✓ | ✓ | | |
| | ARV drug resistant | ✓ | ✓ | | | | ✓ | | | | ✓ | | | | | | |
| | Strategies to prevent ARV drug resistance | | ✓ | ✓ | | | ✓ | | | ✓ | ✓ | | ✓ | ✓ | | | ✓ |

Table 4.2 Percentage of countries address to each issue in their National Strategic Plan on HIV/AIDS

| | Previous National HIV/AIDS strategies | Current National HIV/AIDS strategies |
|---|---|---|
| | % Yes | % Yes |
| Dose country has strategies to improve Behavioral surveillance system? | 62.5 | 100 |
| Dose country has strategies to improve blood safety issue? | 87.5 | 87.5 |
| Does country has strategies for prevention programs for high risk group or key affected population? | 100 | 100 |
| Does country has strategies for prevention of HIV in youth population? | 75 | 100 |
| Does country has strategies for prevention of HIV in transgendered population? | 25 | 62.5 |
| Does country has strategies for harm reduction programs for PWIDs? | 62.5 | 100 |
| Does country has strategies to improve HIV law and policies? | 87.5 | 100 |
| Does country has strategies to improve human right? | 62.5 | 62.5 |
| Does country has strategies to empower women? | 0 | 0 |
| Dose country has strategies to improve gender equality? | 62.5 | 87.5 |
| Dose country incorporates strategies to reduce illiteracy? | 0 | 0 |
| Does country incorporates strategies to reduce poverty? | 37.5 | 62.5 |
| Does country address armed conflicts, natural disaster and Humanitarian emergencies? | 0 | 0 |
| Does country has strategies to combat Stigma? | 87.5 | 87.5 |
| Does country has strategies to improve civil society involvement? | 87.5 | 100 |
| Does country has strategies to improve or establish coordination? | 62.5 | 100 |
| Does country has strategy to improve PLHA network? | 50 | 62.5 |
| Does country has strategies to improve comprehensive care? | 75 | 75 |
| Does country has strategies to improve psychosocial care? | 12.5 | 62.5 |
| Does country has strategies to improve PMTCT coverage? | 75 | 100 |

| | | |
|---|---|---|
| Does country has strategies to improve access to medication as a fundamental right of human? | 25 | 37.5 |
| Does country has strategies to reach universal ART coverage? | 12.5 | 25 |
| Does the country have strategies to reach universal Access to HIV care? | 62.5 | 75 |
| Does country has strategies to prevent ARV drug resistant? | 37.5 | 62.5 |

Table 4.3 Categories addressed (✓) in Countries AIDS Response Progress Report 2010-2011

| | Categories | Cambodia | Indonesia | Laos | Malaysia | Myanmar | Philippine | Thailand | Vietnam |
|---|---|---|---|---|---|---|---|---|---|
| Epidemiology and Prevention | Behavioral surveillance system | | | ✓ | | | ✓ | | |
| | Established Behavioral surveillance | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Blood safety | | | ✓ | | | | | |
| | Blood safety program | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Programs for high risk group or key affected population | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Program for youth | | | | | | | ✓ | ✓ |
| | Program for Sex worker | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Program for transgender population | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | |
| | Harm reduction program for PWIDs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Policy | Laws control Drug use | ✓ | ✓ | | ✓ | | | | ✓ |
| | Laws control sex work | ✓ | ✓ | ✓ | ✓ | | | | ✓ |
| | HIV Law and policies | ✓ | ✓ | ✓ | | | ✓ | | ✓ |
| Social and economic environment | Human right | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| | Empowerment of Women | | | | | | ✓ | | ✓ |
| | Women empowerment program | | ✓ | | ✓ | | | | |
| | Gender equality | | ✓ | | ✓ | | | ✓ | |
| | Programs for Gender equality | | | | | | | | ✓ |
| | Illiteracy | | | | | | | | |
| | Poverty | | | | | | | | |
| | Poverty reduction program | | ✓ | | | | | | |
| | Armed conflicts, natural disaster or humanitarian emergencies | | | | | | | | |
| | Stigma | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ |
| | Program to combat stigma | | ✓ | | | | | | |
| | Civil society involvement | | ✓ | | ✓ | | | | ✓ |
| | Established Civil society involvement | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Coordination | | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| | Well established coordination | ✓ | | ✓ | ✓ | ✓ | | | ✓ |
| | PLHA network | | | ✓ | | | | | |
| | Established PLHA network | | | | | | ✓ | ✓ | ✓ |
| | Resources and funding constraint | ✓ | ✓ | | ✓ | | ✓ | | |
| Treatment and care | Comprehensive Care | | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | Comprehensive care program | | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| | Psychosocial care | | | ✓ | | | ✓ | | |
| | PMTCT - high coverage | ✓ | | | | | | ✓ | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Access to medication | | | | | | | | |
| | Universal ART coverage program | | ✓ | | ✓ | | ✓ | ✓ | |
| | Universal Access to HIV care | | | | | ✓ | | | ✓ |
| | ARV drug resistant program | ✓ | ✓ | | | | ✓ | ✓ | |

Table 4.4 Percentage of countries presents each key issue for HIV control in their AIDS Response Progress Report 2010-2011

| Categories | % Yes |
|---|---|
| Does country address the important of behavioral surveillance system in HIV prevention and control? | 25 |
| Does country has established behavioral surveillance system? | 87.5 |
| Does country address blood safety issue? | 12.5 |
| Does country had blood safety program? | 100 |
| Does country has program focusing on the need of HIV prevention and intervention programs for high risk group or key affected population? | 100 |
| Does country has a prevention program targeted to youth? | 25 |
| Does country has HIV prevention program for Sex workers? | 100 |
| Does country has behavioral and social network surveillance or prevention program focus on TG population? | 75 |
| Does country has harm reduction program or policies for PWIDs? | 100 |
| Does country had laws control Drug use? | 50 |
| Does country has laws control sex work? | 62.5 |
| Does country has HIV laws and policies that can help HIV prevention and control? | 62.5 |
| Does country addresses human right as an essential element of HIV prevention and control? | 87.5 |
| Does country address the important of Women empowerment? | 25 |
| Does country has women empowerment program? | 25 |
| Does country address the important of gender equality? | 37.5 |
| Does country has programs to promote gender equality? | 12.5 |
| Does country address the problem of illiteracy? | 0 |
| Does country address the problem of poverty? | 0 |
| Does country has poverty reduction program? | 12.5 |
| Does country address armed conflicts, natural disaster and Humanitarian emergencies? | 0 |
| Does country address stigma and discrimination as a barrier in HIV prevention and control? | 75 |
| Dose country has program to combat stigma? | 12.5 |
| Does country acknowledges the civil society involvement? | 37.5 |
| Does country has established civil society involvement? | 100 |
| Does country describe coordination between government, non-government, civil society and international organization? | 62.5 |
| Does country has well established coordination system? | 62.5 |
| Does country address important role of PLHA network? | 12.5 |
| Does country has established PLHA network? | 37.5 |
| Does country mention resources and funding constraint? | 50 |
| Does country address the important of comprehensive care? | 62.5 |

| | |
|---|---|
| Does country has comprehensive care program? | 62.5 |
| Does country integrate psychosocial care in HIV care? | 25 |
| Does country has high PMTCT coverage? | 25 |
| Dose country address access to medication as a fundamental right of human? | 0 |
| Does country has Universal ART coverage program? | 50 |
| Does country target to universal Access to HIV care? | 25 |
| Does country has program to prevent ARV drug resistant? | 50 |

# CHAPTER V

# DISCUSSION AND CONCLUSION

## 5.1 Summary of Qualitative finding and Discussion

Analyzing the content of NSPs and country progress reports from eight SEA countries using thematic content analysis method suggested that there are some key areas that countries inadequately tackle or inconsistently addressing especially in the policy, social and economic environment for effective HIV intervention. It also revealed that the existence of the programmatic responses around these issues is not reported in their country progress report. The discussion here will be focus on where the gaps are in HIV control policies, strategies and programmatic response in SEA countries from the result of analysis and why the case may be. The key areas that most of the SEA countries had gaps in their HIV response are humanitarian emergencies situation, poverty, illiteracy, women empowerment, gender equality, psychosocial care, access to medication, universal ARV coverage, and ARV drug resistant prevention. Most of the issues that SEA countries need improvement in their NSPs and progress report are mainly shaped by country political, social, cultural and economic ramifications.

All SEA countries are hit by at least one form of humanitarian emergency situations, such flood in Indonesia, civil wars in Myanmar, displaced population along the border of most countries and refugee camps in almost all countries. As literature showed, this situation can increase HIV epidemic or worsen the implication of HIV epidemic. However, all countries in this region fail to include any policy, strategy or

programmatic response to HIV in humanitarian emergency situation. Most of the countries in this region are politically not transparent or delayed to communicate about the existence of humanitarian emergencies situations in their countries which may lead them to non-inclusion of key subjects about humanitarian emergencies in their internationally submitted report.

The SEA region mostly includes low- and –middle income countries which are facing poverty in many areas within individual country. In addition, the wealth distributions within these countries are very uneven. Even though Thailand is an upper middle-income country, there are disparities among regions and most of the populations in rural area are struck by poverty. Literatures showed that poverty and low literacy are contributing factor in ineffective response to HIV epidemic. Half of the countries included poverty reduction strategy in their NSP, but only one country has actual programmatic response mentioned in its progress report. Low literacy is also a problem in this region for effective HIV response, but still, the whole region did not have specific planning to improve this issue. Most of the countries in this region are politically and economically unstable with weak infrastructure for country development, which results in insufficient responses to poverty and illiteracy as well as failing to address and integrate poverty reduction and literacy improvement programs in HIV response.

Few countries have a significant response to HIV as a women-centered and gender-based approach in this region. Culturally defined gender role create women to become socially and economically less empower in this region. In one of the countries in this region, Cambodia, depict the role of women with a proverb of “Men are gold; women are silver" and "Men are gold; women are cloth”.[118] This marked gender

discrimination in this society creates women as second class status with inequality in gender role which brings many implications especially in the health status of women and children. As discussed in literature review, gender inequality in this social structure finally brings the population in this region prone to HIV infection. In addition to this, countries failure to integrate women empowerment program lead to worsen the HIV burden.

Most of the population living in this region has been suffering social, economic and health challenges along with conflict, political instability and high burden of disease. This results in people vulnerable to psychological and mental health problems. Therefore, the need of psychosocial care and support are enormous especially in HIV care. Studies have been shown that emotional social support can protect HIV-related stigma, psychological stress and depressive illness.[121,122] Countries failure to address psychosocial care can undermine the HIV response especially in this era of HAART when HIV becomes a chronic disease. However, 75% of countries in this region fail to integrate the psychosocial care program in comprehensive HIV care. The region has been facing challenges in overall mental health care response for general population,[123] not only for the HIV infected people, due to ineffective response by health system, stigma, public misconception about mental health illness. This little attention on mental health and psychological illness result in little response to psychosocial care and support which is also the case in HIV care program.

Although the United Nations addressed in the Political Declaration on HIV and AIDS that “access to safe, effective, affordable, good quality medicines and commodities in the context of epidemics such as HIV is fundamental to the full realization of the right

of everyone to enjoy the highest attainable standard of physical and mental health",[124] countries in SEA region are still facing the challenges in creating political and economic commitment for everyone to access to medication they need. This is especially true for marginalized and institutionalized population. Although all documents appear overwhelming about human right, the region still lack key programmatic planning to ensure everyone can access to medication as their basic human right. In addition, only two reports mention the programmatic response to target to universal access to HIV care. This results in undermining the scaling up of ART treatment to reach universal ART coverage. Funding and human resource constraints in health care, low coverage of HIV program especially for marginalized population and countries prioritizing on HIV response are all critical challenges for this subject.

Emerging of ARV drug resistant HIV have been shown in SEA region, but only half of the countries in this region has specific response to prevent further developing of drug resistant HIV. This low level response can be a serious threat to all countries in SEA in the long run because HIV infected and risk populations are mobile across the countries especially in border areas which can pose drug resistant HIV readily transmitted within the region. However, most of the countries in these regions do not have strong surveillance system to monitor drug resistant due to funding, human resource and facilities limitation. Most of the HIV response in this region relied on external funding from international donors which make their HV response vulnerable in the time of global economic crisis. This may indicate the need of countries own government investment in responding to HIV epidemic.

Half of the countries mention the existent of punitive laws for sex workers and illegal drugs user which can be an obstacle for HIV control. Sex workers are culturally and socially unacceptable in most countries in this region and considered them as "social evils". This context creates the laws to illegalize sex workers and business associated with sex works. Although HIV policies try to craft the laws that allow HIV prevention and treatment programs operate, most of the countries in this region are facing challenges to overcome this punitive laws that control sex work due to social and political context along with corrupted legal system. This is also true for the illegal drug use. SEA region is one of the regions which have high prevalence of illegal drug use and drug production. Countries had drug control laws that result drug users inaccessible to HIV prevention program which is inconsistent with harm reduction policies that most of the countries have already been adopted.

Although there is very limited study on how comprehensive SEA countries outline these key issue in their NSPs and the extent of programmatic progress they made that mentioned in the country progress report, some of the findings from this analysis are consistent with previous studies which showed that NSPs and other core documents related to HIV control fail to uphold the key issues of HIV control framework and inadequately outline the strategies, policies and programmatic response in achieving the commitment they made in UNGASS and to reach the MDGs to stop new HIV infection by 2015. Although it is hard to conclude that countries are not adequately tackle the aforementioned key issues on the ground by analyzing the contents that they presented in these documents. However, this two documents analyzed (NAPs and country progress report) included an official strategic plan that guided the country HIV response, and a

formal report for the country progress that submitted to UNAIDS. It is reasonable to conclude that there were gaps in strategic planning and programmatic response on the ground to some of the key issues in policy, social and economic environment around HIV/AIDS response that have not been included in these documents. These gaps need to be urgently addressed by all the stakeholders that participate in HIV/AIDS response in individual country level as well as regional level. Political, social and economic commitment need to be made to adequately response to these key issues guided by international research and global HIV strategies to reach MDGs to stop HIV in 2015, and to fulfill the commitments made at the United Nations General Assembly Special Session on HIV/AIDS.

### 5.2 Study Implications and future directions

This study can be an initial stage to inform the SEA regional countries in their deficiencies in addressing key issues, which were highlighted in UNGASS and global HIV strategies in responding to HIV epidemic to reach to MDGs and allow them to address these critical issues in the process of developing new NSPs. This study can also give opportunities to analyze wider scope of documents from these countries including documents that are only circulated within countries government or authorities, and are not publicly available online. This analysis can be a foundation to expand scope of assessments by interviewing key informants to assess the statements made on the documents and actual implementation within the countries.

## 5.3 Limitations

One of the study limitations is that in this purposive sample, only eight countries from SEA region are included. Another limitation is the use of only publicly available documents from each country and attempt to triangulation with key informants interview have not been feasible. The third limitation is that this study did not attempt to assess how NSPs were being implemented. The quality of the policy, strategies and programmatic response in NSPs, and the extent of the success or progress in the country progress report are not analyzed. From a methodological standpoint, inter-coder reliability check is not feasible during the coding process.

## 5.4 Conclusion

Analyzing contents of the official documents related to HIV/AIDS response in SEA countries provided a valuable insight of the countries status on policies, strategies and programmatic response to HIV/AIDS. Although SEA region made a dramatic progress in HIV control over the last decade, this analysis identified that most of the SEA countries fail to uphold the strategic plans and programmatic responses for the key issue such as humanitarian emergencies, gender equality, poverty, illiteracy, law control sex workers and drug use, access to medication and ARV drug resistant. These political, social and economic issues around controlling HIV epidemic need to be urgently addressed to align with the global HIV strategy to reach the MDGs. New technologies and approaches are important for HIV intervention to stop the HIV epidemic completely, but addressing policy, economic and social environment around HIV epidemic and

control in SEA region is a key for those HIV intervention strategies and programs to thrive for the effective HIV control.

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## APPENDICES

Appendix 1.

Results of Thematic Coding Categories for Content Analysis of National Strategic Plans and Global HIV/AIDS Response Progress Reports from Eight Southeast Asia Countries

| Categories | Subcategories | Definitions/Descriptions | Sample coding |
|---|---|---|---|
| 1. Behavioral surveillance system | | Surveillance of behavioral of high risk population, youth population or general population to understand the transmission of HIV among those populations to inform effective prevention | *"Obtain reliable evidence for HIV programming through monitoring, evaluation and research. ……Operations research to improve interventions especially HIV/TB interventions and other interventions with subgroups of EWs[Entertainment workers], subgroups of MSM and TG, mobile population, PLHIV (particularly adolescents and young people) and prevention and treatment programming for people within prisons. Integration of behavioural and biological surveillance (IBBS) to improve the utility of the information obtained …."* |

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| | Behavioral surveillance strategies | The document mentions that the country has strategies to improve Behavioral surveillance system in HIV prevention and control. | *"… incorporate the use of behavioural surveillance studies into the existing system. Through discussions and consensus meetings among local experts, it was recommended that monitoring HIV risk behaviour could play a vital role in determining the future direction in the spread of HIV within the different most-at-risk populations. Behavioural Surveillance Surveys were adapted for this purpose beginning in 2004 which was later followed by the use of Integrated Bio-Behavioural Surveillance (IBBS) studies."* |
| | Established Behavioral surveillance system | The document mentions that country has established Behavioral surveillance system. | *"Two significant achievements have been accomplished within the last two years towards enhancing the quality and strategic information for the country…, second, the formation of HIV Technical and Behavioural Research unit that manages the Integrated Biological and Behavioural Surveillance Study (IBBS) and other HIV technical research in the HIV/STI Section of Ministry of Health."* |
| 2. Blood safety | | Testing HIV in all medically used blood product which is a fundamental for HIV prevention. | *"Continuous efforts are being made to screen each donated blood unit for HIV and hepatitis B and C."* |

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| | Blood safety strategies | The document mentions that the country has strategies to improve blood safety issue. | *"Safe blood supply*<br>*Objectives 1. To screen donated blood for HIV using quality- controlled methods*<br>*2. To appropriately use blood and blood components for patient treatment*<br>*Measures l Improve screening process of blood donors and blood units so that standards are met. Use IT to manage the database l Establish the system for appropriate use of blood and blood component including options to reduce the use of blood and blood component transfusion."* |
| | Blood safety program | The document mentions that country had blood safety program. | *"Strong measures are in place to ensure blood supply safety where upon testing of blood products is consistently conducted."* |
| 3. High risk group or key affected population | Strategies for high risk group or key affected population | The document mentions that country has strategies for HIV prevention in high risk group or key affected population which include Sex-workers (SWs), Men Sex with Men (MSM), and People With Injecting Drug Use (PWID). | *"Scaling-up of prevention of sexual transmission of HIV infection will be carried out through promotion of condom use for all unsafe sexual contact and wide provision in easily accessible locations of treatment for sexually transmitted infections. These actions will contribute to slowing and ultimately reversing of the spread of HIV infection by reducing the number of unsafe sexual transactions and reducing STI prevalence, as well as reducing HIV prevalence among sex workers, clients of sex workers, injecting drug users, MSM, waria, PLHIV, and sex partners of key populations."* |

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| | Program for high risk group or key affected population | The document mentions that country has program focusing on the need of HIV prevention and intervention for high risk group or key affected population. | *"The major programmatic focus in recent years remains the prevention of HIV transmission in key populations at higher risk, especially sex workers, men who have sex with men, and injecting drug users."* |
| 4. Youth | Strategies for youth | The document mentions that country has strategies to prevent HIV in youth population of age15-24 year. | *"Training for adolescents to protect themselves against HIV infection.  Training of peer educators on HIV and AIDS for adolescents...  Increase availability of youth-friendly health clinics where young people can receive comprehensive health- and HIV-related IEC and services."* |
| | Program for youth | The document mentions that country has prevention programs targeted to youth. | *"....there were several achievements in prevention of HIV among youth including development of a national policy and associated strategy for reproductive health, which includes expansion of youth-friendly services, delivery of sex education in community, strengthening of life skills through school-based education."* |

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| 5. Sex worker | Program for sex workers | Country has HIV prevention program for sex workers. | *"In addition, there have been efforts to expand harm-reduction approaches to sex work. On 10 May 2010, the Prime Minister issued Decision 679/QD-TTg to approve the Programme of Action on Sex Work 2010-2015, while focused on the enforcement of anti-prostitution ordinance, includes a range of harm-reduction approaches targeting female sex workers (FSWs), including the provision of condoms, access to HIV and STI treatment and other health services, and social-protection measures for sex workers. Voluntary and community based efforts to help FSWs build alternative livelihoods are also key parts of the Programme of Action."* |
| 6. Transgender population (TG) | Strategies for Transgender population | The document mentions that country has strategies for HIV prevention in transgendered population or the behavioral and social network surveillance for TG population. | *"The Comprehensive Package of Services for MSM and TG …… Developing a Comprehensive Package of Services to Reduce HIV among Men who have Sex with Men (MSM) and Transgender (TG) Populations in Asia and the Pacific……. Prior to the implementation of the comprehensive response, an assessment of available resources and the readiness of the community in terms of responsibilities and accountabilities is necessary……..Moreover, services must be age- appropriate, conscious of, and sensitive to the different needs of the various MSM and Transgender (TG) populations and ……..specific activities and the components of each element must be determined based on the capacity and needs identified on the ground….."* |

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| | Program for Transgender population | The document mentions that country has behavioral and social network surveillance or prevention program focus on TG population. | *"First Round HIV/STI Prevalence and Behavioural Tracking Survey among transgender (TG) in Vientiane Capital and Savannakhet" in 2010.9These surveys found a complex pattern of sexual behaviours in this population (see section 2.2)."* |
| 7. People with Injection drug use (PWIDs) | Strategies for PWIDs | The document mentions that the country has strategies for harm reduction programs for PWIDs. Harm reduction is any interventions to reduce the harm of PWID getting HIV such as needle exchange program, safe injecting facilities and behavioral change intervention. | *"Implementation of harm reduction activities in prevention of HIV transmission a) Communicate, advertise for harm reduction services - Communicate on prevention of HIV/AIDS transmission services on the mass media: + Organize press conferences, forums, seminars or special talks on harm reduction interventions (needle and syringe programs, condom programs, opioid substitution treatment) on central, provincial and district TV, radio with the participation of policy makers, representatives of agencies, unions and civil society organizations and beneficiaries. + Communicate on channels such as radio, television, local media, panel, posters, leaflets and brochures + Organise meetings, marches. - Direct communication…."* |

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| | Program for PWIDs | The document mentions that country has harm reduction program or policies for PWIDs. | *"Viet Nam's new National Strategy on HIV/AIDS Prevention and Control to 2020, with a vision to 2030, the 2006 Law on HIV and Decree 108/2007/ND-CP, dated 26/6/2007, of the Government 108 detail the implementation of the Law on HIV and specifically support the scaling-up of comprehensive harm-reduction interventions to reduce the transmission of HIV among people with high-risk behaviours. These include the Needle and Syringe Programme (NSP), the 100% Condom Use Programme (100% CUP) and opioid substitution with methadone maintenance therapy (MMT)."* |
| 8. Laws control Drug use | | The document mentions that the country has laws that control drug use or other form of laws which hinder the harm reduction activities for PWID. | *"…the Law on Drug Control, which has been revised, and the Village/Commune Safety Policy which was newly introduced have served to make people who use drugs increasingly more difficult to access and have made service provision for their benefit very difficult due to misunderstanding of law enforcement officers, especially at the commune level."* |
| 9. Laws control sex work | | The document mentions that the country illegalizes the commercial sex work, or country has laws that hinder the HIV intervention program for sex workers. | *"Some local bylaws in certain districts and municipals forbid prostitution, which complicates efforts to control the spread of HIV / AIDS and is not in line with the national policy."* |

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| 10. HIV Law and policies | | HIV laws and policies include laws and policies which protect HIV affected people and improve prevention, law and regulations which protect HIV key effected population and vulnerable population, law on non-discrimination to HIV affected people or workplace HIV policies | *"The Law on HIV/AIDS Prevention and Control No. 64/2006/QH11 (hereafter, the Law on HIV) passed in 2006 provides provides the legal foundation for a strong, multisectoral response to HIV, and for the protection of the rights of PLHIV. In recent years, the Government and National Assembly have enacted, supplemented or amended numerous policies and legal documents, creating a stronger and more consistent legal framework for prevention and control activities."* |
| | HIV law and policies strategies | The document mentions that country has strategies to improve HIV law and policies. | *"Support relevant ministries to develop supportive sectoral policies on the basis of the national AIDS law and national AIDS policy, for example the ministries of health, education, Labour and social welfare  Advocacy and capacity building of social service providers to eliminate discriminatory practices and increase access of services for PLHIV and marginalised groups like sex workers, men who have sex with men, drug users,migrant workers, ethnic groups etc."* |
| 11. Human right | | Any right based approach to reduce stigma, discrimination and violence related to HIV which is an essential element of HIV prevention, care, support and treatment. | "*People infected with HIV retain the right to participate in the socio-economic activity, without prejudice and discrimination. They have the same right to health care and community support as other members of the community*." |

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| | Human right strategies | The document mentions that country has strategies to improve human right related to HIV. | *"Develop legal counseling centers for PLHIV and people vulnerable to HIV infection to protect them from human rights violations including those violation relating to stigma and discrimination - Raise awareness among health workers about PLHIV's rights to health……"* |
| 12. Empowerment of Women | | Promotion and protection of women's full enjoyment of all human right, elimination of all form of discrimination and any form of violence against women or promotion of ability of women and girls to protect themselves from HIV. | *"Many people in Cambodia have little control over their behavioural choices. This is especially true for the poor, women and young people. Empowering people to increase their control over behaviour is a crucial aspect of Cambodia's response to HIV and AIDS."* |
| | Strategies to empower women | The document mentions that country has strategies to empower women. | |
| | Women empowerment program | The document mentions that country has women empowerment program. | *"Program to empower women*<br>*Women's economic empowerment (e.g. access to credit, access to land, training)…"* |

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| 13. Gender equality | | Equal legal, social status, and access to health care service (sexual and reproductive), free from sexual violence which is a fundamental element in the reduction of the vulnerability of women and girls to HIV/AIDS. | *"Women are biologically more susceptible than men to sexual HIV transmission; Women are less likely to be able to negotiate conditions of sex or the use of condoms by their sexual partners due to the power constructs of the relationships between themselves and their male partner. Women may also have more limited access to services and are more likely to suffer stigma due to HIV infection. Research also indicates relatively high levels of sexual violence against women. For these reasons, a gender analysis framework must be applied to all planning, service delivery and research processes……"* |
| | Gender equality Strategies | The document mentions that country has strategies to improve gender equality. | *"To more successfully reduce HIV over the long term in Cambodia, the national response under NSP III will address the gender norms and inequalities that drive HIV risk. Gender-responsive approaches will be integrated into the activities that support the goals, objectives and strategies of the National Strategic Plan. Sex-disaggregated data will be used for monitoring and evaluation. Understanding of the links between gender, HIV and uptake of services will be built into trainings, programs and policies."* |
| | Programs for Gender equality | The document mentions that country has programs to promote gender equality | *"In 2010-2011, a measure of progress for women living with, at risk of or affected by HIV has been achieved as a result of efforts to mainstream HIV into gender equality programmes."* |

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| 14. Illiteracy | | Illiteracy or low literacy on HIV prevention knowledge which is a contributing factor to the spread of HIV and need to incorporated literacy approach in HIV prevention | |
| | Strategy for Illiteracy | The document mentions that country incorporates strategies to reduce illiteracy in National HIV strategy | |
| 15. Poverty | | The document address the problem of poverty as a contributing factor to the spread of HIV and the need of incorporates poverty reduction program in HIV prevention | *"Poverty is an important determinant that increases vulnerability to HIV infection, while being HIV positive may affect people's ability to earn an income, resulting in increased poverty. Cambodia's national response to HIV and AIDS integrated into the National Strategic Development Plan (NSDP) 2006-2010 and will be integrated into next NSDP 2011-2013."* |
| | Poverty reduction strategy | The document mentions that the country incorporates strategies to reduce poverty in National HIV strategy. | *"Develop models of sustainable livelihood for poor people with HIV/AIDS, IDU and FSW. - Develop employment policies for PLHIV and monitor corporate social responsibilities on PLHIV employment and against stigma and discrimination in recruitment... Develop preferential micro-credits for PLHIV. - Implement activities to supervise the enforcement of HIV Law regarding employment…"* |

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| | Poverty reduction program | The document mentions that country has poverty reduction program. | *"Presidential regulation 15/2010 on Accelerating Poverty Reduction is another example of the national commitment for poverty reduction and the development of national programs for social protection. In 2010, of 25.2 million poor households of Indonesian, 70% have received subsidized rice and 3.2% have received conditional cash transfers. Details of provisions to the poor targeting and benefit individuals and community are presented in Table 11"* |
| 16. Armed conflicts, natural disaster or humanitarian emergencies | | The document describe armed conflicts, natural disaster or humanitarian emergency that can exacerbate the spread of HIV epidemic and the need of HIV awareness, prevention, care and treatment actions during armed conflict, natural disaster or humanitarian emergencies. | |
| 17. Stigma | | The document mentions that the county addresses stigma and discrimination as a barrier in HIV prevention and control | *"Eliminating stigma and discrimination related to AIDS is a primary development to help all groups of the population access prevention and treatment on an equal basis. Through a strategy which is effective and efficient, Thailand should be able to make great progress toward the other two Zero targets of zero new HIV infections and Zero AIDS-related deaths. As new infections declines, more resources will be available to treat the existing caseload of PLHIV."* |

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| | Strategy to combat Stigma | The document mentions that the country has strategies to combat stigma related to HIV. | *"Work with education sector; media and faith-based organizations to promote zero-tolerance policy for stigma and discrimination towards key population groups and people living with HIV. Develop mechanisms to monitor occurrences of discrimination and provide assistance where needed…"* |
| | Program to combat stigma | The document mentions that country has program to combat stigma related to HIV. | |
| 18. Civil society involvement | | Civil societies include non-governmental organizations, community based organizations, faith-based organization and PLHA network. Coded if the document acknowledge the civil society involvement in HIV response which is crucial to the development of effective response to the HIV epidemic. | *"Civil society, including non-government organisations, community groups, People Living With HIV and those affected by HIV and AIDS, will support and complement the Government in the prevention of HIV, as well as care and support for those living with HIV and those affected."* |

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| | Strategies to improve Civil society involvement | The document mentions that country has strategies to improve civil society involvement. | *"Improvement of the technical capacity and organizational development of CSOs and networks. • Strengthening of the coordination role and structure of service organization networks. • Inclusion of civil society representatives in key national and sub-national forums…• Creation of an enabling environment for civil society participation and involvement, including reduction in administrative procedure but the civil society must ensure the capacity of its representative to response to the goal…"* |
| | Established Civil society involvement | The document mentions that country has established civil society involvement in HIV control. | *"The last two years have witnessed strong and progressive involvement of civil society in the National AIDS Response, especially in the areas of prevention, care and supports. Highlights are the proposal of LNP+ as a member of NCCA; participation and involvement of civil society in the development process of the NSAP and the HIV Law; participation of KAP informal networks in outreach prevention interventions; involvement of civil society, especially in the care and support services provided to PLIHV and those affected by AIDS; surveys and research."* |

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| 19. Coordination | | The document describe coordination between government, non-government, civil society and international organization as a crucial for successful HIV control work or has strategies for better coordination. | *"To produce the best outcomes, coordination among stakeholders including implementing partners should be increased at all levels."* |
| | Strategies for coordination | The document mentions country has strategies to improve or establish coordination. | *"All coordination related to implementation of the AIDS National Strategy and Action Plan including coordination of planning, implementation, monitoring and evaluation as well as harmonization and synchronization for a given area is done by the respective AIDS Commission Secretariat. The work is carried out through coordination meetings convened for all relevant partners either regularly or on an ad hoc basis by the AIDS Commission Secretariat… The outcome of the meeting is provided to all partners to coordination for appropriate follow up. Ideally, at the subsequent meeting, reports on implementation of follow up are given by participants and discussed."* |

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| | Well established coordination | The document mentions that country has well established coordination system | *"Multisectoral collaboration in the implementation of HIV prevention and control activities has been strengthened over the past two years. Ministries and sectors worked with each other and with mass organizations, civil society and international organizations to ensure the provision of prevention, treatment and care services and public awareness of HIV."* |
| 20. PLHA network | | The document mentions the important role of PLHA network in HIV prevention | *"In line with the principles of Greater Involvement of People Living with HIV or Affected by AIDS (GIPA), people living with HIV and affected by AIDS have an active and meaningful role in HIV and AIDS response…"* |
| | PLHA network strategies | The document mentions that country has strategy to improve PLHA network. | *"Provide technical, organisational and financial support to PLHIV self-help groups in all provinces and to the national network of PLHIV groups*  *Ensure the involvement of PLHIV groups in the design, implementation and evaluation of treatment, care and support services, including development of service standards*  *Promote positive health among PLHIV to avoid further infection and transmission."* |
| | Established PLHA network | The document mentions that country has established PLHA network | *"…particularly the Thai Network of PLHIV (TNP+) have played significant roles in providing psychosocial support to PLHIV and their families through the holistic care centers, which work closely with hospitals."* |

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| 21. Resources and funding constraint | | Country mentions inadequate budget or funding for HIV control and gap in resources | *"….in a context of declining financial resources for development in general and for HIV and AIDS more specifically, a major challenge ahead is to find ways to ensure long term, sustainable and predictable funding for the national response, in order to be able to consolidate the outstanding results achieved so far. This will mean that more will need to be done with less, by better prioritisation and focusing interventions and overall by becoming more cost effective in delivering vital services for all those in need."* |
| 22. Comprehensive Care | | Comprehensive care for HIV includes prevention services, treatment, care and support. Comprehensive care should also address physical, spiritual, psychosocial, socio-economic and legal aspect of living with HIV and palliative care services. | *"The HIV and AIDS response will be comprehensive and focus on promoting healthy practices, disease prevention, as well as treatment, care and support for People Living with HIV and people affected by HIV and AIDS."* |

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| | Comprehensive care strategies | The document mentions that country has comprehensive care strategies. | *"Comprehensive care and support activities a) Activities to increase accessibility and early treatment: - Implement activities of information and education on benefits of early HIV/AIDS care and treatment. - Establish successful referral system between VCT, PMTCT, STI, TB/HIV, home-based and communication-based care services and care and treatment establishments to provide timely treatment to patients. - Develop models of care and treatment services …- Scale up provision of CD4 tests to ensure the quality so that patients who are eligible for ARV treatment can receive immediate treatment."* |
| | Comprehensive care program | The document mentions that country has comprehensive care program for HIV. | *"One important sustainability measure in ensuring continuous access to treatment, care and support services of PLHIV is the provision of medical and financial support through the Philhealth Outpatient HIV and AIDS Treatment (OHAT) Package …"* |
| 23. Psychosocial care | | The document mentions the important of psychosocial care in HIV care. Psychosocial care refers care for the ongoing psychological and social problems of HIV infected individuals, their partners, families and caregivers. | *"One common need was reflected across the different groups of PLHIV: the need for psychosocial intervention. The conflicting and intense emotions, cognitive disruptions, and behavioral reactions must be taken care of. The need to have a professional listen and understand people living with HIV emerges even before their diagnosis and will continue throughout the rest of their lives."* |

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| | Psychosocial care strategy | The document mention that the country has strategies to improve psychosocial care integration in HIV care | *"Increasing access and availability of care and support programmes for People Living with HIV (PLHIV) and those affected which address physical, mental, social, spiritual, religious and economical aspects."* |
| 24. Prevention of mother to child transmission (PMTCT) | PMTCT coverage strategy | The document mentions that the country has strategies to improve PMTCT coverage. | *"The maternal and child health (MCH) centre to further implement the PMTCT guidelines as part of the essential antenatal care package (including rapid HIV testing at antenatal service sites)*<br>*HIV prevention interventions for sex workers and other most-at-risk women to incorporate family planning, reproductive health and PMTCT services*<br>*The MCH centre to increase male involvement in PMTCT, and in antenatal care in general."* |
| | PMTCT - high coverage | The document mentions that the country has high PMTCT coverage (more than 50 % of HIV infected pregnant women get ARV prophylaxis for both mother and infant) | *"Among ANC clients who are HIV+, the proportion who receive ARV prophylaxis, and the proportion of HIV- exposed infants receiving ARV prophylaxis both continue to exceed 90%."* |
| 25. Access to medication | | An access to safe, effective, affordable, good quality medicine as a fundamental element to the right of everyone. | |

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| | Access to medication strategy | The document mentions that the country has strategies to improve access to medication by everyone who needs. | *"NSP III is based on the rights (and empowerment) of individuals and communities to access stigma-free HIV prevention programmes, as well as care and treatment services without fear of harassment, violence or arrest."* |
| 26. Universal ARV coverage | Universal ART coverage program | The document mentions that country has program to provide ARV treatment to all HIV positive people according to WHO CD4 criteria. | *"…two significant achievements have accomplished, firstly, the availability and provision of first line ARV treatment at no cost for those who need it and secondly, the availability of ARV treatment for incarcerated populations specifically for HIV+ prisoners as well as inmates in drug rehabilitation centres. Currently, the second line regime is also heavily subsidised by the government…"* |
| | Universal ART coverage strategy | The document mentions that country has strategies to reach universal ART coverage to all HIV positive people according to WHO CD4 criteria. | *"Develop policies to access affordable ARVs. - Encourage pharmaceutical companies to cede copyright license to domestic pharmaceuticals companies or operate under the forms of joint ventures or branch companies in Vietnam to produce ARVs, providing the drug not only for Vietnam, but also for other countries in the region…. - The State allocates budget to ensure the national security of ARV drugs..."* |
| 27. Universal Access to HIV care | | The document mentions that country has program target to universal Access to HIV care. Universal access to HIV care refer to all people including high risk and marginalized population can access to HIV prevention, treatment and care program without any barriers. | *"The concept of universal access, namely, access to care and medication for all who need them, forms the basis for the programs in this area, which also cover infected infants and children. The management of drugs and reagents will be improved so as to support the establishment of universal access."* |

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| | Universal access to HIV care strategy | The document mentions that the country have strategies to reach universal Access to HIV care | *"Universal Access: Ensure that citizens have broad access to promotive, preventive, and curative health services, thus necessitating a minimum of 80-percent coverage of the target population in terms of prevention programs and at least 60-percent coverage of the target population in terms of disseminating correct knowledge and behavior to reverse the epidemic and stop HIV transmission. This will be done through the integration of comprehensive packages into the programs of key development sectors."* |
| 28. ARV drug resistant | ARV drug resistant prevention strategies | The document mentions that country has strategies to prevent ARV drug resistant by providing quality care to improve adherence or monitoring drug resistant development. | *"Improve capacity on treatment adherence of health workers by training courses, workshops, conferences. - Implement measures to improve treatment quality including coherence surveillance, prevention and HIV drug resistance at treatment establishments."* |
| | ARV drug resistant prevention program | The document mentions that the Country has program to prevent ARV drug resistant | *"In the past two years, NCHADS continued to strengthen the monitoring of HIV drug resistance, with 32 sites monitoring OI/ART early warning indicators."* |

Appendix 2 Grouping of Main Category Tracks

| Main Categories Track | Categories |
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| Epidemiology and prevention | Behavioral surveillance system |
| | Blood safety |
| | High risk group or key affected population |
| | Youth |
| | Sex Workers |
| | Transgender population |
| | People with Injection drug use |
| Policy environment | HIV Law and policies |
| | Laws control Drug use |
| | Laws control sex work |
| Social and economic environment | Human right |
| | Empowerment of Women |
| | Gender equality |
| | Illiteracy |
| | Poverty |
| | Armed conflicts, natural disaster or humanitarian emergencies |
| | Stigma |
| | Civil society involvement |
| | Coordination |
| | PLHA network |
| | Resources and funding constraint |
| Treatment and care | Comprehensive Care |
| | Psychosocial care |
| | Prevention of mother to child transmission (PMTCT) |
| | Access to medication |
| | Universal ARV coverage |
| | Universal Access to HIV care |
| | ARV drug resistant prevention |