RELATING FACTORS TO THE ENROLLMENT AND THE USE OF HEALTH INSURANCE FOR ANTIRETROVIRAL THERAPY IN VIETNAM

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A thesis submitted in partial fulfillment of the requirement for the degree of Master in International Health

by

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Vietnam

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Abstract

Background: As Vietnam has became a middle income country and tend to decrease of international funding sources for HIV globally, the international aid funding for HIV in Vietnam has been reduced recently and will be ended of 2017. The Government directed that ART program will be based on national health insurance funds and people living with HIV need to use health insurance for continuous using ART. However, there was a number of people living with HIV who still do not use health insurance for ART or even do not have health insurance themselves.

Objective: To identify related factors to the enrollment and the use of health insurance for ART in Vietnam.

Method: This study is a narrative literature review of published studies and researches, grey and white literature on health insurance for HIV treatment in Vietnam. The conceptual framework is developed based on the study's objectives when relating factors are analyzed from the perspective of user, provider and socio-economic and cultural factors.

Findings: Both developed and developing countries have identified requirements for the provision of health insurance to PLHIV. Health insurance paid by public sector was largely financed for HIV and AIDS care-related. In Vietnam, the coverage of health insurance among general population was much higher than those among PLHIV.

Main factors related to the enrollment and the use of HI for ART were identified from both user perspective and provider perspective. Also, socio-economic and political were considered whether they affected to those factors above.

Conclusions and Recommendations: The study has explored factors contributing to the enrollment, enrollment in and the use of health insurance of patient on ART from user and provider perspectives. Advocacy and the completeness HIV service facilities for implementing HI should be considered to increase the enrollment and use of HI among PLHIV. By using community- and individual-based approach, the policy makers will create relevant solutions. Some recommendations for better promotion of patient on ART to enroll and use their health insurance are given.

Keywords: HIV, health insurance for people living with HIV, related factors, Vietnam.

Word count: 10,808

List of Abbreviations

| AIDS | Acquired Immune Deficiency Syndrome | | | | |
|---------|---|--|--|--|--|
| ART | Antiretroviral Therapy | | | | |
| ARV | Antiretroviral merapy Antiretroviral drugs | | | | |
| CDC | Centers for Disease Control and Prevention | | | | |
| CHI | Compulsory Health Insurance | | | | |
| GDP | Gross Domestic Products | | | | |
| GF | Global Fund | | | | |
| GSO | General Statistics Office | | | | |
| FSW | Female sex worker | | | | |
| HCFP | Health care funds for the poor | | | | |
| HIV | Human Immunodeficiency virus | | | | |
| HI | Health insurance | | | | |
| HSS | | | | | |
| HTC | HIV sentinel surveillance | | | | |
| IMR | HIV Testing and Counseling | | | | |
| JAHR | Infant Mortality Rate Joint Annual Health Review | | | | |
| КР | | | | | |
| | Key population | | | | |
| LMG-TSP | Leadership, management and governance transition support | | | | |
| LMICa | project | | | | |
| LMICs | Lower-Middle Income Countries | | | | |
| MOF | Ministry of Finance | | | | |
| МОН | Ministry of Health | | | | |
| MMR | Maternal Mortality Ratio | | | | |
| MSH | Management Sciences for Health | | | | |
| MSM | Men who have sex with men | | | | |
| NCADP | The National Committee for AIDS, Drug and Prostitution | | | | |
| ND | Prevention and Control | | | | |
| NP | The national target program for HIV/AIDS prevention and control | | | | |
| OI | Opportunistic Infections | | | | |
| ООР | Out-of-pocket | | | | |
| OPC | Out-patient clinic | | | | |
| NSP | Needle and Syringe program | | | | |
| PE | Peer educator | | | | |
| PEPFAR | The U.S. President's Emergency Plan for AIDS Relief | | | | |
| PLHIV | People living with HIV | | | | |
| PMTCT | Prevent Mother to Child Transmission | | | | |
| PPY | Per patient-year | | | | |
| PWID | People who inject drugs | | | | |
| SHI | Social Health Insurance | | | | |
| UMIC | Upper-Middle Income Countries | | | | |
| U5MR | | | | | |
| | Underweight Malnutrition Rate of children under age 5 | | | | |

| USAID | U.S. Agency for International Development |
|-------|--|
| VAAC | Vietnam Authority of HIV/AIDS Control |
| VHI | Voluntary Health Insurance |
| VND | Vietnam Dong |
| VNP+ | Vietnam National Network of People living with HIV |
| VSS | Vietnam Social Security |
| WHO | World Health Organization |

Glossaries

| Health Insurance | Health Insurance (HI) is a form of insurance used in health care sector. It's not-for-profit and operated by the Government and related partners. HI is a part of social insurance, aims to pay part or all of the health care's cost for the insured when they fall sick and reduces the out-of-pocket payments (OOP) for the insured (National Assembly 2008). | | |
|--|--|--|--|
| Out-of-pocket payments | Out-of-pocket payments are health expenditures paid by the patient for health care services. Those payments are not covered in the health insurance (Thanh 2013) | | |
| 90 - 90 - 90 targets | By UNAIDS in 2014, toward the global epidemic control until 2020, 90 – 90 – 90 scenario is stand for: 1st 90: 90% of PLHIV will know their HIV status 2nd 90: 90% of people who know their HIV status are on HIV treatment 3rd 90: 90% of all people on treatment will have viral suppression(UNAIDS 2014) | | |
| Guidelines on recommendation for earlier HIV treatment | Accordingly, ART standards have been extended, included: (1) started ART for adult with CD4≤500 cells/mm3; (2) started ART regardless of CD4 cell count among KPs; (3) PLHIV have uninfected sexual partners, pregnant women, breastfeeding women, people living in rural areas, people over age 50 (Ministry of Health 2015a) | | |
| ART | Antiretroviral therapy is the treatment to PLHIV with ARV drug and relating services including OI treatment, OI prophylaxis and following up with diagnosis test of CD4 and viral load test and basic lab tests | | |

1. Background

1.1. Geographic and Demographic profiles

Vietnam is located in South East Asia, shares the borders with Laos, Cambodia in the West and with China in the North. With the long and narrow shape, Vietnam's area is nearly 331,000 square kilometers; only one forth of land is for agricultural, having approximately 91 million people living in the "S" line country (please see Figure 1). Total population in Vietnam is nearly 90 millions people with 54 ethnic groups living in (GSO 2014). 67% of the population is living in rural area.

Vietnam's population growth rate was declined

in the last 10 years. As of Population and Housing Census on 2014 by General Statistics



Figure 1 - The map of Vietnam

Office (GSO), the growth rate was declined from 1.17% in 2005 to 1.08% in 2014 (GSO 2014). The crude birth rate in the whole country was 17 per 1,000 people per year. However, Vietnam is expected to reach aging population rapidly, with nearly 9% of the population aged 60 and over.

The literate rate among population aged from 15 years old and above was 97.5% (GSO 2015). There was a considerable gap on this percentage among regions. The literacy rate in south east reached to 97.2%, with nearly 10% points higher than that of northern midlands and mountainous area (GSO 2014).

1.2. Socio economic situation and Spending for health care

Real GDP growth rates have fluctuated around an average of 5.82% per year, from a high of 6.24% in 2011 down to 5.25% in 2012, then trending upwards again to 5.42% and 5.98% in 2013 and 2014 and a forecast of 6.68% in 2015, an average annual growth of 5.9% in the period 2011-2015. GDP per capita has increased from USD 1,271 in 2010 to an estimated USD 2,200 (GSO 2015). Therefore, Vietnam has officially become a middle income country.

The state budget spending on health still increased slowly. In 2012, state budget for health spending was 8.28%, not so much changed in 2011 with 8.1% (Vietnam Ministry of Health & Health Partnership Group 2014). Although the public spending for health sector was still limited, health status of the Vietnamese people has improved recently.

The average life expectancy of Vietnamese people has improved from 72.9 years in 2010 to 73.3 years in 2015. According to WHO data comparable across countries from 1990 to 2015, life expectancy of the Vietnamese people increased 6 years. Life expectancy of Vietnamese

people in 2012 was 76 years which was higher than that of most countries in the Southeast Asia region, except for Singapore (83 years), Brunei (77 years) (United Nations 2013).

Data from the 2009 Population and Housing Census showed that the maternal mortality ratio (MMR) in Vietnam had fallen to 69/100,000 births, a substantial decline compared to the 1990 ratio of 233/100,000 live births. In 2015, MMR was about 58.3/100,000 births (Vietnam Ministry of Health & Health Partnership Group 2016).

The infant mortality rate (IMR) fell from 44.4 infant deaths per 1000 live births in 1990 to 15.3 in 2010 and 14.7 in 2015. The underweight malnutrition rate of children under age 5 (U5MR) declined from 58.0 child deaths per 1000 live births in 1990 to 23.8 in 2010 and 22.1 in 2015 (Vietnam Ministry of Health & Health Partnership Group 2016).

The stunting malnutrition rate has also declined during this period, from 29.3% in 2010 to 24.2% in 2015. This represents a reduction of more than 60% as compared to 1990.

According to the Ministry of Health, Vietnam are coping with challenges for the health status, including: (i) inequity and inequality in health care by population groups and regions as the different results in health indicators; (ii) double burden of diseases with an increasing of non communicable diseases and the existence of communicable diseases.

1.3. HIV situation and service delivery of antiretroviral therapy in Vietnam

In Viet Nam, by the end of December 2015, there were reportedly 227,154 people living with HIV (PLHIV), and the country had seen a total of cumulative 86,715 AIDS-related deaths since the beginning of the epidemic with annual average death around 2,500 case (Ministry of Health 2016b). The main transmission routes are unsafe sexual relation, injecting of drugs, mother to child transmission (NCADP 2014). According to HIV case reporting, HIV transmission had changed from injection of drug to sexual intercourse in recent years. Sexual intercourse increased from 14.65% in 2005 to 56% in 2015. The HIV epidemic in Vietnam is categorized as a concentrated epidemic among three key affected populations (KAP) defined by HIV-transmission risk behaviors: people who inject drugs (PWID), female sex workers (FSW) and men who have sex with men (MSM). HIV prevalence among PWID, FSW and MSM were 9.53%, 2.39% and 7.36% respectively. Among new infections, male accounts for 69.8% while female accounts for 30.2%. The majority of people with HIV infections are in working ages (90% aged from 20-60 vears) and they are often the main breadwinner of the family (UNAIDS 2014).

Viet Nam's national antiretroviral therapy (ART) program has expanded rapidly in recent years. By the end of August 2015, there were 106,423 people on ART in Viet Nam, reaching 42% of the estimation number of

PLHIV (Ministry of Health 2016b). Viet Nam has also committed to implementing the new global "90-90-90" target so the number of PLHIV on ART is expected to be rapidly increased in the coming years.

Although ART has been started almost for 10 years with most of services subsidized by international donors like ARV drug, basic lab tests, diagnosis tests (CD4, PCR) however the coverage of ART program is has just met 50% of the total people in need of ART. One third of people currently on ART began their treatment at late stages with CD4 lower than 200 cell/mm³ (Ministry of Health 2016a)

A service delivery of ART in Vietnam can be described in the below figure 2

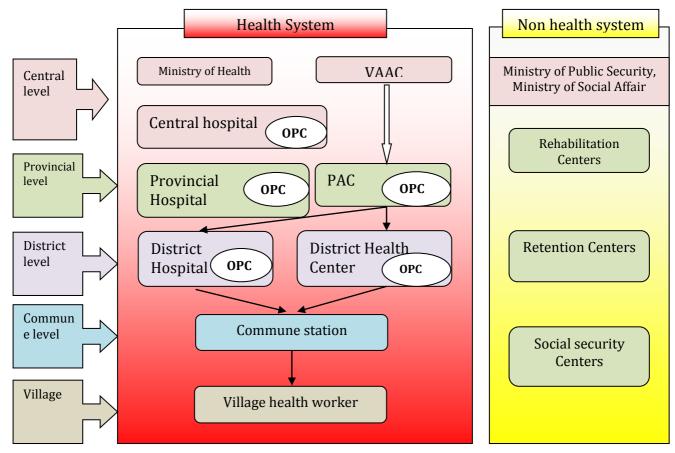


Figure 2: The service delivery of ART in Vietnam

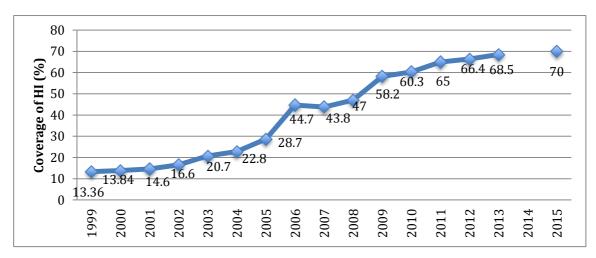


Figure 3- Coverage of health insurance in Vietnam (1999 - 2015) (Vietnam Ministry of Health & Health Partnership Group 2014)

The Law on Health insurance in 2008 has regulated five groups of the insured as the followings

- (i) The group whose insurance premium are paid by the employers and employees;
- (ii) The group of the insured whose insurance premium is paid by the social insurance organizations as retirees,
- (iii) The group of the insured whose insurance premium is paid by the State budget. This groups covers some special prioritized persons like persons performing meritorious services in the wars, war veterans; children under the age of 6;
- (iv) The group of the insured whose insurance premium is partially paid by the State budget like near poor peoples, pupils and students
- (v) Household enrollment that means people who are enrolled with their whole family members. A new and very important policy was introduced in the new Law is household enrollment. Household enrollment will provide household members with premium deduction for each member. The policy has a great impact on expansion of health insurance coverage in Vietnam (please see Figure 4)(Midori 2013)(National Assembly 2014).

The share of population covered by health insurance continued to increase on average 4.3% per year between 2010 and 2014, reaching 71% in 2014 and 75.3% in 2015 (Figure 3)(Vietnam Ministry of Health & Health Partnership Group 2014). Analysis of health insurance enrollee structure show that most of the insured belong to groups whose health insurance coverage is fully or partially subsidized by the state budget (Vietnam Ministry of Health & Health Partnership Group 2016).

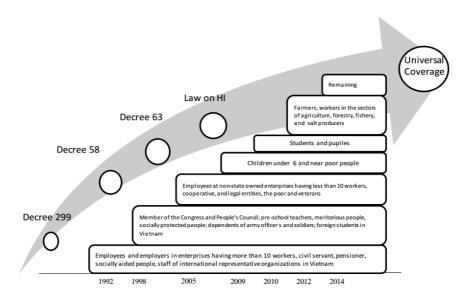


Figure 4- Timeline and roadmap of universal health insurance coverage (Midori 2013)

1.4. Health insurance policy for HIV and AIDS in Vietnam

In principle, health insurance organization will not allow peoples who is already defined as chronic illness like HIV to be enrolled. However, HIV is regarded as a social issues in Vietnam thus it has been received strong commitment from the government to be subsidized to a certain extent. When regulated by law, PLHIV has already recognized to be treated as normal people.

Policy on HI for HIV and AIDS has been regulated clearly in legal guidance. First, the insured that get infected with HIV shall have their medical examination and treatment expenses covered by the medical insurance fund. The Ministry of Health (MOH) will be responsible to regulate list of ARV to be paid by the HI funds (National Assembly 2006). Second, for further implementation guidance, The MOH issued Circular No. 15/2015/TT-BYT dated 26th June 2015 providing the guidance on medial examination and covered by health insurance for HIV-positive people and people using HIV-related health care services. It came into effect from August 15th 2015. Third, ARV drug has been listed in the Circular No 40/2014/TT-BYT dated 17th November 2014 issued by the Minister of Health, regulating drug list paid by health insurance. Currently, ARV is free for all PLHIV on HIV treatment. When the donors cut down their funding for ART program, health insurance from state budget will procure and distribute ARV to OPCs, and takes over for reimbursement of ARV. The question is whether all HIV treatment out patient sites will be eligible for providing HI services. Patient on HIV treatment should be covered by HI funds. Up to now, HI has not much involved in reimbursement for HIV treatment services. ARV drug are covered by government and donor funds. Donors funding also pay for monitoring test, such as CD4 cell count and viral load test. In provinces without donor support, PLHIV without insurance card will pay OI drugs,

para clinical services by their pocket money. Those with HI card will be paid by HI for OI drug, para clinical services if they register at HIV treatment in OPC which signed contract with HI agency (CCRD 2013a)

2. Problem statement, Justification, Objectives and Methodology

2.1. Problem Statement and Justification

In just the last two years the number of PLHIV on ART has increase about one third, reaching 17 million people, 2 million more than the set target for 2015. In the world's most affected region, eastern and southern Africa, the number of people on treatment as more than doubled since 2010, reaching nearly 10.3 million people (UNAIDS 2016).

The WHO newest guideline on initiate ART in 2015 has updated that all PLHIV, not caring about CD4 cell count, are eligible for ART. Therefore, more and more PLHIV will be on ART. It means that the funding needed from 2015 to 2020 period in total is much higher than now (Dutta et al. 2015). To maintain a sustainable ART program, financial need requires huge resources.

In Vietnam, with the supports from the Government and international organizations, ART program has been expanded continuously and the number of PLHIV receiving ART increased rapidly from only 500 patient on ART in 2004 to 106.423 peoples in 2015 (Ministry of Health 2015b). In recent years, the MOH has issued series of decisions to update the guidance on ART as recommended by WHO. On 22nd July 2015, Decision No.3047/QD-BYT was approved, promulgating the newest Guideline on antiretroviral treatment in order to expand the number of PLHIV enroll in ART program. Vietnam also committed to achieve 90 – 90 – 90 targets until 2020. It means that Vietnam needs to achieve 90% of PLHIV are on ART in 2020 (UNAIDS 2014). The total number of PLHIV receiving ART in 2016 will be around 115,000 people. Up to 2020, this number will be nearly 195,400 people, increased about more than 10,000 patients per year (Ministry of Health 2015b).

In Vietnam, three main funding sources covering for the need are donor funds, state budget and health insurance (Ministry of Health 2015b). During the past year, the ART program has still heavily relied on international donors, both human resource and ARV drug (Ministry of Health 2015b). However, as Vietnam has become a middle income country, Vietnam will no longer receive funding from international aid for HIV. Although the international funding for ART program will be cut down in 2017, the national funding still do not have enough resources to receive ART program, Vietnam is facing the challenges of a growing shortage in resources for ART (USAID 2015).

In response to the situation, the Government issued Decision No. 1899/QD-TTg of 16/10/2013 approving the Project on Financing HIV and AIDS prevention and control activities in the period of 2013 – 2020 in which the Prime minister directed that "Gradually shifting ART program from donor based into health insurance funds". The health insurance funds have been defined as an effective way to sustain the ART program and guarantee for continuous ARV treatment for PLHIV. Besides, in order to create favorable legal framework for the health insurance

reimbursement for HIV and AIDS including ARV, the Ministry of Health issued the Circular No. 15/2015/TT-BYT of 26/6/2015 providing the guidance on medical examination and covered by health insurance for HIV-positive people and people using HIV and AIDS-related health care services.

Although the legal framework for health insurance reimbursement for ART has been adequately developed, health insurance has not yet paid for ARV drug and other services relating to ART because of the following reasons (i) low coverage of health insurance among PLHIV with 40% coverage in comparison to the 70% health insurance coverage of general population (Ministry of Health 2016a); (ii) barriers from ART service delivery which allow PLHIV who have insurance card to be accessed to ART.

This thesis aims to identify relating factors that may affect to the enrollment and the use of health insurance funds for ART HIV in Vietnam and provides some recommendations for policy makers to encourage reimbursement of health insurance funds for ART.

2.2. Study objectives

2.2.1. General objective: To identify related factors to the enrollment and the use of health insurance for ART in Vietnam.

2.2.2. Specific objectives:

- To review international experiences for the use of health insurance for ART and national studies on health insurance for ART for a comprehensive picture of health insurance.
- To explore related factors to the enrollment and the use of health insurance for ART in Vietnam from user perspectives.
- To explore related factors to the enrollment and the use of health insurance for ART in Vietnam from provider perspectives.
- To explore socio-economic, political factors to the enrollment and use of health insurance for ART in Vietnam.
- To give recommendations for policy makers to promote for enrollment and use of health insurance for ART in Vietnam.

2.3. Methodology

2.3.1. Study design

This study is a narrative literature review of published studies and researches, grey and white literature on health insurance for HIV treatment in Vietnam.

2.3.2. Search procedure

The search strategy included a search engine (Google scholar), a peer-reviewed articles (PubMed, Medline, Vrije University Library) to find

published and un-published articles, researches, studies related to health insurance for HIV treatment. To meet these objectives, the literature, data is summarized from the different websites and articles, from international organizations: World Health Organization (WHO), Joint United Nations on HIV/AIDS programs (UNAIDS), United Nations (UNFPA); from international non Population Fund governmental organizations: Family Health International (FHI360) and local non governmental organizations: Center for Community Health Research and Development (CCRD) websites; from governmental agencies: National Geographic Statistical Office (GSO), Ministry of Health (MOH), Ministry of Finance (MOF), Vietnam Authority of HIV/AIDS Control (VAAC); from international governmental agencies: U.S. Agency for International Development (USAID).

Data sources included researches and studies from 2008 to 2015 in both English and Vietnamese languages.

The key search terms were mentioned in the following table.

| Literature | Search engine/da tabase | Search terms for general information | Search terms for objective 1 | Search terms for objective 2 | Search terms for objective 3 | Search terms for objective 4 |
|--------------------|---|--|---|---|--|--|
| Peer-reviewed | PubMed, Google Scholar | Health insurance in Vietnam, coverage of health insurance, paying for health care, financial burden of out-of-pocket payments in Vietnam, health expenditures, the cost of antiretroviral therapy in Vietnam, HIV treatment gap. | HIV, factors contributing to the enrollment in health insurance, use of health insurance, stigma, discriminati on, self-stigma, | HIV, factor related to health worker in using health insurance, stigma, discrimination, | Health insurance in Vietnam, access the Universal Coverage, solutions, | Social factors, policy factors related to using health insurance |
| Grey literature | WHO, UNAIDS, MOH, MOF, USAID, VAAC | HIV, manuals, Vietnam | HIV, annual reports, Vietnam | HIV, annual reports, Vietnam | HIV, annual reports, briefs, Vietnam | HIV, annual reports, Vietnam |

2.3.3. Study limitation

The aim of the study is to explore relating factors contributing to the enrollment and use of health insurance for ART in Vietnam.

Firstly, the data might not representative for the whole population of PLHIV because those studies and researches were conducted in some areas that have high HIV prevalence in Vietnam. Moreover, at the time of the study, ARV has not yet procured and paid by health insurance funds as health insurance funds will officially paid for ARV from beginning of 2018 then it can undermine some factors incurred from ART delivery system when it is officially operated under regulation of health insurance.

Secondly, there's not much data on the use of HI among PLHIV, and also the problem when using HI for ART program. As the new Circular No.15/2015/TT-BYT providing the guidance on medical examination and covered by health insurance for PLHIV and people using HIV and AIDS-related health care services was just approved in June 26th 2015 and just pilot in some provinces. However, those findings from this studies will help policy maker to make necessary adjustment for the document in the coming time.

2.4. Conceptual framework

The conceptual framework was developed based on the real context in Vietnam (see Figure 5) to identify relating factors that may affect to the enrollment and the use of health insurance for ART in Vietnam; and provides some recommendations for policy makers to promote for the use of health insurance as sustainable sources for HIV treatment in Vietnam.

It also provided relating factors from user perspective and provider perspective; and from socio-economic and political as well. The study has clarified two main issues need to be explored is what will effect on the enrollment of PLHIV and what affects on the use of health insurance for PLHIV to access ART program.

According to the framework, perception of health insurance and decision to enroll in health insurance will be explored from user perspectives. Other factors related to enroll in and use of HI for ART program from user and provider perspectives will also be identified. These factors are also summarized with user and provider perspective. Besides, these factors will be reviewed whether they are affected by socioeconomic and political enablers.

These factors from the framework are described below (please see Figure 5).

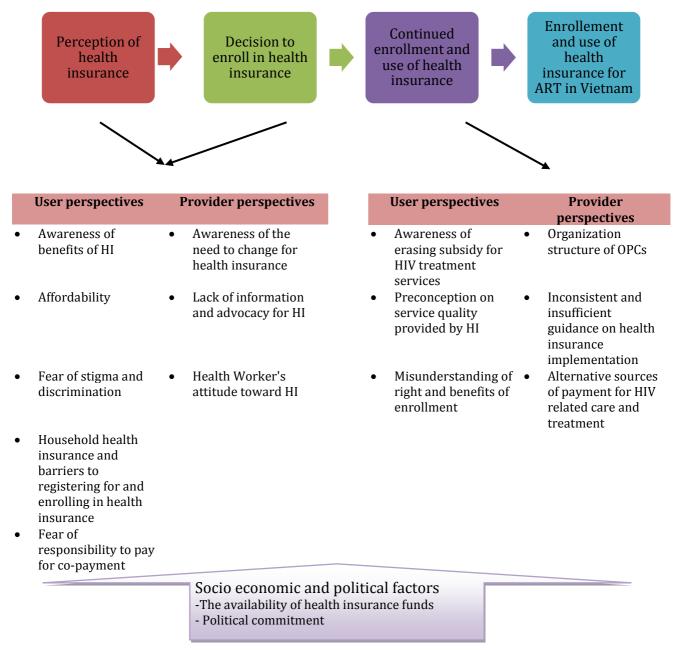


Figure 5 - Conceptual framework

3. Study findings

3.1. International experiences in using health insurance as an alternative options for ART and studies on health insurance for ART in Vietnam

International experiences in using health insurance as an alternative option for ART

A report from Leadership, management and governance transition support project (LMG-TSP) by Management Sciences for Health (MSH) in 2013 is named as "Options and challenges for the financial sustainability of Antiretroviral Medicines in LMICs" has point out some point relating to the use of HI for ART as the followings:

Social Health Insurance (SHI) is a key way of achieving access for all people to good, quality services without causing financial hardship. Even if there is significant national HI coverage in a country, the package may be small or the reimbursement rates far lower than the costs.

Developing countries often depend on international aid funding for ART, therefore, the use of SHI in financing ART is more challenging. From provider perspective, ART program for PLHIV is funded by external resources, including other monitoring test. Furthermore, capacity to pay and co-pay among PLHIV is also a barrier. Because PLHIV mainly are from key populations, such as PWID and FSW, who normally do not have stable job and money to pay, even if they have HI card, it is quite difficult for them to pay any co-payment. From the supply side, some SHI management agencies have raised concern over the high cost of including ART services into health insurance benefit package as it could eat up all the funds for other communicable diseases. In such cases cost projections are important so that decisions can be based on evidence rather than "off the cuff".

A review of integrating HIV and AIDS services into insurance schemes and including PLHIV as identified several requirements which included:

- Policy and regulatory environment: Many countries approved specific regulation on health insurance to PLHIV in encouraging PLHIV using HI, requiring HI to cover HIV and AIDS related services.
- Financing and cost experience: Routine data collection is critical to managing costs and ensuring premiums are accurate (which is not always the case).
- Well-designed insurance models: A variety of models can be used to extend coverage to PLHIV – what is most important is that the model pays attention to the key elements that determine success, such as size and diversity of risk pool, accurate risk analysis, incentives, and cost containment.
- Maximizing risk pools: Insurance for PLHIV should be part of large risk pools.

• Benefit package: It is possible to leverage government-provided services, thereby reducing some costs of the insurance scheme; but consideration needs to be made in places when those services are not available.

Private insurance in ART program also play an important role but still have some challenges. Even with the tend of decreasing ARV drug, private insurance companies are in business to make money and as a consequence try to eliminate bad risks by excluding persons with HIV. For example:

- The USA insurance companies using HIV testing in order to eliminate poor risks from pay pools.
- South African companies offering lower premiums to people with low HIV and AIDS risk features to remain competitive.
- Some cost-conscious employers in the USA trying to exclude AIDS patients from group insurance policies.

They concluded that even in the USA, where private insurance is most extensive, at that time HIV and AIDS care was largely financed through the public sector.

Studies on health insurance for ART in Vietnam

Over the last 5 years, having seen the clear transition of funding for HIV treatment from donors mechanism to the national HI fund, a number of studies have been conducted by international donors and management agency as well to explore the awareness, perceptions, factors related to health care needs and how their health seeking behaviors among HIV patients will be affected in the context above. However most studies recently just explore for the coverage of health insurance and some mentions for the cost of delivery ART under the health insurance as well as some basic projection.

In 2010, according to USAID, among 1,200 PLHIV in 17 provinces, there're only 30% of them had HI. 64% of PLHIV had HI for the poor, 28% are from voluntary HI, only 6% from compulsory HI and 2% from other groups. This was the first study on PLHIV having HI in Vietnam. It provided the initial information for developing HI policies for PLHIV, including estimation and projections on budgeting for HIV program (Messersmith et al. 2012).

From 2011 to 2015, World Bank project funded for HIV program also conducted a study on the coverage of health insurance among PLHIV at three selected provinces (Hanoi, Haiphong and Ho Chi Minh City). The proportion of having HI among PLHIV was 30% (Ministry of Health 2016b).

In 2012, VAAC conducted a quick nationwide survey on the coverage of HI among PLHIV. The data showed that only 15% of PLHIV had HI.

HIV patients were largely paid for basic tests, ARV drugs, OI drugs so that

they did not present their HI. Furthermore, the OPCs at that moment had not set up for managing HIV patient having HI (VAAC 2015).

In 2013, CCRD conducted a quantitative research on health insurance among HIV patients in Dong Thap and Ninh Binh provinces, to identify the health insurance coverage, registration information, treatment and payment of HIV patients at the OPCs. This research also mentioned about the use of HI among PLHIV from program managers perspectives, staff working at insurance agencies and staff working at OPCs. One of the findings was that the coverage of HI among PLHIV in provinces which received funding from international donors was lower than those provinces without funding support from international donors (CCRD 2013b).

In 2015, USAID conducted a qualitative research using questionnaires in 07 provinces (Binh Thuan, Dien Bien, Ho Chi Minh city, Ha Noi, Lai Chau, Long An and Thanh Hoa). The tool used in the 2012 Living Standards Measurement Survey (LSMS) formed the basis for the income and expenditure proportions of the survey. The payment for HIV and AIDS related services resulted in 2.5% catastrophic payment. If patients had to pay 20% of cost of ART under health insurance, the catastrophic payment rate would increase to 8% and if patients without health insurance had to pay the full costs of ART, the catastrophic payment rate among all patients would be 24% (VAAC 2015).

After the donors had announced their cutting down support for ARV treatment in 2017, MOH begun to collect data on ARV patient who having HI. In 2014, the revised Law on Health Insurance took effect. Furthermore, in this year, the Government gave efforts to increase the HI coverage and develop the policy on HI per household.

In 2016, in order to develop the procurement plan for ARV using the national HI fund by 2017, VAAC continued to collect data on the number of PLHIV having HI with more detailed information on each person, such as the health insurance card number, validity period, name of registered health care facility and type of HI. The health insurance coverage among patient on ART is recorded at 40%. 30% of these peoples are poor people who are exempt from copayment, 25% are near poor who just have to pay for 5% of copayment and the rest are people who have to pay for 20% copayment (Ministry of Health 2016a).

Under the regulation of health insurance law, health insurance will not pay for services if it has been paid by other funding sources. During the past time, OPCs nationwide has not recorded well information relating to health insurance status of their patients because all services under the OPCs is subsidized by international projects. When OPCs recognize the importance of having adequate information which will serve for budgeting funds from health insurance then the data of those who have health insurance card has been improved that answer the question why the coverage raise from 30% in 2012 to 40% in 2014. The result showed that

the proportion of PLHIV having HI in some mountainous provinces such as Dien Bien and Son La were only 40% and 50% respectively, much lower than these proportion in general population (achieving nearly 90%). These number in Hanoi and Ho Chi Minh City were still low, only 30%. In contrast, Da Nang and Thai Nguyen have the high proportion with 87% and 80% respectively (Ministry of Health 2015b).

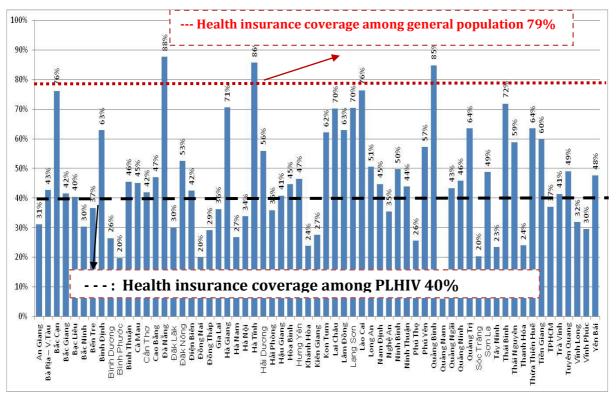


Figure 6- Health insurance coverage among PLHIV by all provinces (Ministry of Health 2015b).

3.2. Related factors contributing to the enrollment and the use of health insurance for HIV treatment in Vietnam from user perspectives

Awareness of the benefits of health insurance

Patient on ART have a certain demand for medical services, including ART, associated monitoring tests and treatment for OI. The average expenditures was 398,000 VND. The average payment was 220,000 VND for HIV and AIDS related services including OI treatment, OI prophylasis and following up with diagnosis test of CD4 and viral load test and basic lab tests (VAAC 2015).

Some PLHIV expressed their awareness of the benefits of health insurance coverage for care and treatment, based on their own experience of having been ill, their expectations of becoming ill, and their understanding of how insurance works:

- "I have chronic ailments and illnesses, so I had to buy health insurance in case I have to go to hospital."
- "If I don't have health insurance and one day I'm hospitalized, I'll have to pay a lot of money. And ordinary people like me, we don't have much income, so without health insurance it's very difficult for us to cover all our medication expenses. So we should buy health insurance." (VAAC 2015)

However, others demonstrated a lack of knowledge of the benefits of health insurance or a misunderstanding of how it works, including its function of reducing the financial burden of long-term treatment. PLHIV responded that they never heard about HI for PLHIV. Moreover, PLHIV are afraid that when using HI, they have to show the ID card and they could not able to work because of using ARV (VAAC 2015).

In addition, those interviewees who had infrequently used health care services do not understand the need for health insurance. They believe that if they are healthy, they do not need health care, so they do not need to buy health insurance. 20% of PLHIV find that do not need the health insurance (HFG 2015a).

Affordability for enrollment of HI

Many PLHIV face economic difficulties, particularly those who are unemployed (perhaps due to the disclosure of their HIV status), or have low-income and/or unstable jobs (CCRD 2013b). Some PLHIV who have been sick for a long time and unable to work with 100% their abilities. They also have to pay the considerable costs of care and treatment, worsening existing economic difficulties and making it difficult to afford HI. The premium for enrollment in one year is only VND 600.000 equivalent to USD 30 however if comparing this cost to unstable income of PLHIV, it is really a considerable expenses (accounting for 30% of their monthly income). Such economic challenges are one of the main barriers preventing PL HIV from buying social health insurance.

Among PLHIV who is in ART program, nearly 10% are in prison. After their release, it takes times for them to re-integrate into society. Most are unable to find a stable job then there is almost no chance for them to enroll in health insurance by the way of official employers. They are also unaffordable for HI card under voluntary HI scheme.

27% PLHIV in a study by USAIDS at 7 provinces reported that they did not have HI for reasons related to affordability of the premium. 13% of the respondents cited reasons related to difficulties involved in obtaining or keeping HI. The reasons included not knowing where to procure health insurance, difficulty with filling paperwork etc. (HFG 2015b)

Fear of stigma and discrimination

Stories of stigma, self-stigma and the fear of being stigmatized and discriminated against were common PLHIV who are willing to enroll in health insurance. Respondents agreed that stigma and discrimination

towards PLHIV have decreased. However, they also mentioned their feeling of stigmatized from their families, health facilities and workplaces as well.

- "If people discover that a household in their village has a member living with HIV, the household will be shunned and no one will visit. That's what my patient told me. He said: 'Oh my God, I beg you, Madame, please don't send me to my village! If you send me back and the health staff there visit my home twice a month, I will run away from home." Health worker focus-group discussion Dong Thap
- "I was put in a separate room, on my own, and the nurses hid behind the door, peeking in, and looking at me as if I were a monster." Woman living with HIV – in-depth interview – Dong Thap
- "After my health check for a job, the interviewer asked me if I knew that I had the disease. I told her I did know, but that I could work normally, and she said that people like me would... that is, she didn't give a straight answer but said, softly, something like, 'Well, when we have a vacancy, we'll call you'. But they never will". Woman living with HIV focus-group discussion Ha Nam (HFG 2015a)

The stigma and discrimination exists even from health staff when PLHIV went to health facilities, they were treated so rude by the health staff. Also in workplaces, they felt being stigmatized when disclosing their HIV status, and they could not find a job. The stigma and discrimination also affects families of PLHIV. If people discover that a household has a member living with HIV, no one will visit them (VAAC 2015). PLHIV attributed this stigma and discrimination in part to the fact that some people have an incomplete understanding of HIV transmission routes, or believe the stereotype that HIV infection is associated with unhealthy behaviors and lifestyles. Because stigma is still common, PLHIV also selfstigma and greatly fear being stigmatized by others (VNP+ 2014). Many PLHIV who are on ART are afraid that their HIV status will be disclosed. It is observed that some PLHIV wear face masks, not only as required for hygiene reasons during medical appointments, but for the whole time they are at HIV care and treatment facilities. This helps them to avoid engaging with other people, even other PLHIV; they hide behind their masks and turn their faces away. They even wears masks when being interviewed in private room. For that reasons, PLHIV are afraid of using HI for receiving ART because they have to present their individual information and worry their confidential information will be disclosure. Stigma and discrimination clearly affects PLHIV to enroll and use HI, and their accessibility to health services (VAAC 2015).

Household health insurance and barriers to registering for and enrolling in health insurance

The regulations that require a member of an insured household to prove that the remaining household members also have HI cause significant problems. There are usually four members in a family, and also more. Some of the family members do not have HI. If they are under difficult economic circumstances, it's a challenge for PLHIV to enroll all their families' members to Hi scheme. Besides, it also increases cost to buy HI. It is especially true in rural areas, where households tend to have a lot of members. As under regulation by Law if they are enrolled by a whole family member, the first member will pay for the whole premium when the second just has to pay 70% premium, the third has to pay to for 60% premium, the rest will pay for only 50%. A 5 member household will need around 2 million VND (nearly USD 100) a year for their whole family member enrollment. These issues create barriers for anyone who wants to enroll in HI, but may have an even greater impact on PLHIV, who are likely to experience greater financial difficulties (CCRD 2013a) (VAAC 2015).

Fear of responsibility to pay for co-payment

The study also find that one of the factors affecting the enrollment in HI is their fear of responsibility to pay for co-payment. For HIV-related expenditures, a co-payment rate of 20% of ART excluding ARV would result in about 1% of respondents incurring catastrophic expenditures for HIV-related health services (not including transportation costs) using expenditures in excess of 40% of non-subsistence expenditures as the metric of financial hardship. A co-payment rate of 20% including ARV would result in about 7% of respondents incurring catastrophic expenditures for HIV-related health services. If patients had to pay the full costs of ART (including first line ART), 46% of respondents would incur catastrophic expenditures. Note that the 32% of respondents who were exempt from making payments under the NSHI scheme due to their status as a minority, having a poor card, military/police, war service, etc. are assumed in these scenarios to not incur co-payments in any of these scenarios, although we included any payments made for HIV-related care reported in this survey. Moreover, nearly 67% of PLHIV who not in "exempt from co-payment" incur catastrophic expenditures if they had to pay the full ART cost. This is due to (i) some respondents in the 'exempt co-payment' category were reported to incur catastrophic expenditures in this survey at this level, and (ii) the vast majority of the remainder of patients would incur catastrophic expenditures under this metric if they had to pay the full costs of ART (HFG 2015a).

Awareness of erasing subsidy for HIV treatment

PLHIV who currently on ART program are aware the need of finding other fund pay for their treatment. PLHIV responded that enrolling in HI

provides a solution that can enable them to maintain treatment and ensure that it is both lifelong and continuous.

Preconception on services provided by health insurance: Using social health insurance: complicated administrative procedures and lengthy processing times

The process of actually using HI can be both inconvenient and time-consuming. A lot of procedures have to be completed at every visit before care and treatment are provided, and they take a long time. It means that people are likely to have negative perceptions of HI enrollment. The whole process from fill the registration form, provide needed documents to receive HI card will take about one to two months (Ministry of Health 2015c) (Huyên & Song 2014).

In addition, it takes more time when PLHIV using HI for medication. All patients when visit the health service need to follow the direction of the doctor. They need to do necessary tests or other diagnosis, wait for 2-3 hours to get the results, then bring them to the doctor to get medication and consultation. The whole process can take from 2-3 hours, so many insured people do not even use their HI cards.

- "I pay for my blood tests out of my own pocket, so that I can be finished quickly and go home. If I use my health insurance card, I have to sign in here and there, and it takes me so much time. I pay myself to save time: I have a long way to travel to get home."
- "I know a couple who are teachers, and they never use their health insurance cards. They only go to private clinics here or in Ha Noi for their treatment. They say that they have to go through such complicated procedures in the public hospital here, and the diagnosis isn't even accurate. I also know lots of other people do the same." (UNAIDS 2015)

In addition, errors and loss of documentation occur which affect people's ability to use their social health insurance card:

- °During the process, mistakes do happen. For example, a patient received a properly signed and stamped referral card. Unfortunately, it wasn't recorded at the commune level so it couldn't be recorded at the district level. As a result, the patient couldn't use their health insurance card." Health insurance official (UNAIDS 2015)
- "Health insurance can of course help to reduce the expense of medications, but the medicines provided are of inferior quality. Health insurance users have told me so. Probably the hospital only provides the cheap drugs, not the expensive ones. So we can only get weaker drugs, we don't get given medicines that can actually help treat us."
- "The medications covered by health insurance weren't good enough.

- I had to buy medicines, antibiotics, at the pharmacy."
- "Generally speaking, using health insurance always takes more time than paying out of pocket for healthcare"
- "Even when you are taken to the emergency room at the provincial hospital, they ask first whether or not you have health insurance. They seem to treat people with health insurance and those without health insurance differently". (UNAIDS 2015)

Misleading and inaccurate information on benefits of health insurance

Some health facilities have posted misleading guidelines on social health insurance coverage. This resulted from their misunderstanding in the Law on Health insurance of 2008 when the article 23 regulated that administration violation will not be paid by health insurance. It is understood that administration violation are PLHIV who mostly are IDUs, FSW. Some health facilities posted a notice that "HIV related services will not paid by health insurance" The poster is not removed even when the new Law on Health insurance revise this regulation.

"Every time I went to the clinic for my ARVs or a health check, I saw that notice which said health insurance is not applicable to people living with HIV." Woman living with HIV - focus-group discussion – Ha Nam (UNAIDS 2015)

This has caused unnecessary confusion among PLHIV. Also PLHIV who currently in HI program choose not to use HI for ART program and other HIV related services. Such inaccurate information has led to misperceptions about the benefits of HI for PLHIV, and affected their decision to enroll.

3.3. Related factors contributing to the enrollment and the use of health insurance for HIV treatment in Vietnam from provider perspectives

Awareness of the need to change from donor based into health insurance based HIV treatment services

The PLHIV tends to use health services 1.6 times higher than normal people (A 2010 study conducted by Abt associates). PLHIV on ART program utilized outpatient care 1.1 times in the last 30 days of the survey. 13% of respondents reported an inpatient admission in the last 12 months. Among those with an inpatient admission in the last 12 months, the average number of admissions was 1.3 which translates into 0.17 inpatient admittances per ART client per year. The inpatient

admittance rate for HIV related reasons (including OIs) is 0.05 admissions per patient per year (HFG 2015a).

Health staffs at OPC are noticed that ART will be paid by state budget through HI. However they are blind of when HI will official reimbursement for ATT services and for which items because project support services for their facilities do not officially inform them. They are aware of the fact that they play an important role in providing consultation and advocacy for PLHIV to enroll in HI. However, health staff at OPCs had not been provided any information to consult PLHIV.

Lack of information for advocacy for the enrollment of health insurance

Guidance on how to conduct information, communication and advocacy campaigns on HI enrollment has been disseminated to provinces by VAAC, provincial and commune authorities. However, there are not enough funds or training available for staff. The lack of knowledge about the benefits of HI among PLHIV can therefore be partly attributed to inadequate and inaccurate communications from the authorities (VAAC 2015).

In the absence of resources, HI advocacy largely depends on the willingness, commitment and flexibility of individual HI collaborators at the grassroots level.

Generally speaking, either information about HI is posted on notice boards in health facilities, meaning that people have to be at the facility to see it and they have to digest it on their own; or the sale of HI is announced by local HI sales agents via the commune loudspeaker system (which is increasingly ignored).

Finally, the selection of commune HI agents is not optimal. Some work within the commune health station or within commune Department of Labor, Invalids and Social Affairs offices, but most agents work from commune post offices. While this provides a way to diversify the marketing of social health insurance, those HI agents who are not officially authorized commune staff are limited in their ability to reach out to people, and to provide follow-up support with the application documents.

These limitations in communications, advocacy and marketing activities about social health insurance negatively affect the knowledge and perception of social health insurance among people in general and PLHIV in particular.

Health workers' attitudes and the quality of care and treatment services

The PLHIV respondents described very different attitudes among health workers. Health staff who currently work at OPCs are reported to be friendly and helpful to PLHIV. However, among health staff who work at other health facilities, non HIV related services, are reported to be apathetic, they showed their stigma and discrimination towards PLHIV. This could prove a barrier to access to treatment when ART is only

provided via HI, and many OPCs merge into district and provincial hospitals, as PLHIV may have concerns about encountering negative attitudes there (VAAC 2015).

Meanwhile, private care and treatment centers are highly appreciated for their facilities and the attitude of staff. However, their quality is a matter of concern (VAAC 2015). A small part of people can afford ART at private clinics and they are those who can afford for services there. Because of stigma and discrimination, PLHIV who have higher and stable incomes would select private facilities to receiving ART than go to public facilities, even ART's free. As there is no survey on reviewing the cost for ART services provided at private clinics then it is hard to make any comparison at this moment. The future study will take into account this limitation.

Organization structure of treatment sites to be eligible for providing HIV and AIDS treatment services through health insurance

OPCs are located in health facilities that come under the "preventive" element of Viet Nam's health system and are subject to different regulations and standards than facilities classified as "curative" (or "medical"). VAAC statistics show that this is true of up to 50% of HIV OPCs across the country. In order to sign contracts with VSS, and therefore be eligible to provide HIV-related care and treatment that is covered by HI, these facilities need to meet the (higher) standards for health facilities classified as "curative"/"medical" as prescribed by the 2009 Law on Medical Examination and Treatment and related legislation. However, because these HIV OPCs currently conform to the different standards required for "preventive" health workers and health facilities, this will not be easy.

- "According to the Law on Medical Examination and Treatment, people who provide care and treatment services or who prescribe medicines must have a medical practice certificate. But you need to have been practicing for 18 months in a recognized care and treatment facility to be granted a certificate, and the head of a center must have been practicing for 36 months ... and according to the guidance on granting these certificates in Circular 41an HIV OPC is not a recognized care and treatment facility." (Ministry of Health, Circular 41/2011/TT-BYT. Guiding the grant of practice certificates to medical examination and treatment practitioners and operation licenses to medical examination and treatment establishments. 2012)
- "According to the Law [on Medical Examination and Treatment], recognized care and treatment facilities must have an official ["curative"] name. So "preventive" centers now have to acquire "curative" names [by setting up specialized HIV clinics]. [But] it's difficult to set up a specialized clinic; it's difficult to get medical

- practice certificates for staff."
- "The Provincial AIDS Centre wants to set up a specialized clinic for HIV-related care and treatment and opiate addiction treatment. But we've encountered problems – so we made a proposal to the Provincial Department of Home Affairs and the Provincial People's Committee to restructure the Provincial AIDS Centre and enable the establishment of a specialized clinic within the center... The process [the changes required to achieve eligibility for health insurance payments] is one the whole country has to undertake according to a set timeline, but in fact I think that timeline is impossible." (UNAIDS 2015)

Insured PLHIV who are currently receiving treatment at "preventive" facilities will face interruptions to their care and treatment, because they will need to be referred to a "curative" health facility that is recognized under current legislation as providing HIV care and treatment services covered by HI. The study participants were unanimously critical of this scenario.

Inconsistent and insufficient guidance on social health insurance coverage of care and treatment for PLHIV

The current guidance on HI poses some challenges to the use of HI for HIV-related care and treatment. Circular No. 37/2014/TT-BYT guides registration for primary medical care and treatment, as well as referrals to secondary and tertiary care support covered by HI. According to this Circular, all insured people are entitled to register for primary medical treatment at either commune or district health facilities, regardless of administrative boundaries. This means that insured PLHIV who are receiving their ART at district health centers or district hospitals can continue to receive care there and be covered by their social health insurance coverage. However, according to Circular 37, insured PLHIV who receive their ART at provincial hospitals, but are registered for their primary care at commune- or district-level facilities – which constitutes the majority, because of their registered place of residence – will have to be officially referred by these lower-level facilities every year if their ART is to be covered by social health insurance. This referral requirement which specifically mentions HIV as one of the chronic diseases the requirement is applicable to – is not consistent with specific guidance on social health insurance for PLHIV. Circular No. 15/2015/TT-BYT stipulates that PLHIV can register for both HIV-related care and treatment and primary health care at either the district or provincial level of the health system, and be covered by social health insurance. This removes the need for referral, since insured people living with HIV can register for their primary health care at the provincial level. According to paragraph 2, Article 4, of Circular 15:

"Where there is demand, insured people living with HIV are entitled to register for primary care and treatment, covered by social health

insurance, at a health facility which provides HIV-related care and treatment, at district level or provincial level." (Ministry of Health. Circular No. 15/2015/TT-BYT on care and treatment covered by social health insurance for insured people living with HIV and those who use medical services related to HIV.2015)

Although Circular 15 has been in effect since August 2015, local health officials and social health insurance officials, when asked about this issue, maintained that it is very difficult for insured PLHIV to register for primary care and treatment at hospitals higher than district level.

Local health workers and social health insurance officials also emphasized that further guidance on other aspects of the implementation of Circular 15 is needed, in particular regarding the decentralization of HIV-related medical services covered by social health insurance; the lists of drugs covered by social health insurance at the commune, district and provincial levels; and the conditions for the inclusion of HIV-related care and treatment services in contracts between VSS and general hospitals.

Alternative sources of payment for HIV-related care and treatment

Currently, ARV medications, CD4 cell counts and viral load tests are provided free of charge because they are supported by international donors. If an HIV-related care and treatment facility can find sources of funding and is capable of administering other necessary routine tests (biochemical and urine tests and X-rays), it will also provide these services free of charge. If not, PLHIV are referred to another care and treatment facility for these routine tests. And the fees for all routine tests are paid by health insurance if they are insured already. In Dong Thap, from 2014, the routine tests are paid by PLHIV, not covered by HI.

- Recently the Global Fund project cut the funding for diagnostic follow-up tests, except viral load tests. Therefore, patients now have to pay for their own treatment follow-up."
- "PLHIV have to pay for most medicines for opportunistic infections out of their own pockets."

3.4. Socio economic and political factor of enrollment and the use of health insurance for ART

The health insurance agency perspective

The contribution of social HI to total health expenditure remains relatively low compared to the HI coverage rate in term of population coverage. While 66% of the population was covered by health insurance in 2012, only 15.8% of total health spending came from health insurance in that year. The underlying reasons for this include: (i) health insurance does not cover most preventive medicine, public health and health promotion service delivery costs, which account for 17.2% of total health expenditures; (ii) health insurance does not cover self medication costs

for insured individuals; (iii) the insured still have to pay some items when using medical services. However, even considering the eligible expenditures to be reimbursed by health insurance.

A health insurance fund in Vietnam is originated from state budget because 90% of health insurance funds is mobilized from the government. The government contribute funds through health insurance to subsidize for prioritized groups like poor, near poor, children under six, military force, security force etc. HIV has been regarded as a special group so it is undeniable that the government can allocate funds to secure ART for PLHIV.

The latest projection of health insurance funds for ARV drug is estimated at VND 500 billion a year which is only account for 3% of total funds for health insurance drug. Which is under control of Vietnam Social Security who is assigned to manage health insurance funds (VAAC 2016-2020 plan).

Political commitment from the Government toward HIV and AIDS prevention and control including ART

Recognized the quick diminishing of donor funds for ART, the Government of Vietnam has issued some important policies as a Decision to require a shift of ART from donor based to health insurance based program. Besides, instead of giving power to OPCs to procure ARV drug by themselves as regulated by health insurance, the Government allow Ministry of Health to proceed pooling procurement of ART at the national level to distribute drug to OPCs with the aim of maintaining drug quality and saving cost for ARV drug. Moreover, the Government decides to grant HI card for all patient on ART and all provinces should meet the criteria that 100% PLHIV will be covered by HI. In addition to this policy, the government also requests all provinces to allocate adequate funds to support for co payment of ARV to patient on ART who have HI card.

The Government is revising the guidance on the implementation of HI law. Therefore, PLHIV has been listed as one of the premium group. It shows a strong commitment of the government to secure PLHIV for ART program.

4. Discussion

4.1. International experiences in using health insurance as an alternative options for ART and studies on health insurance for ART in Vietnam

The findings from literature review of lessons learnt from low and middle income countries show that ARV drug world wide is almost free. If ART is paid by health insurance, the government still secure policies to secure equal access ART among patient groups (patient with health insurance and patient without insurance). In Vietnam in the context of there is a mixture of different funding sources for HIV like international donors, state budget, it is very important to advocate the government and local authorities to secure adequate funds for co payment of ARV then the patient almost get free ARV drug. It helps patient to adhere to the ART to avoid any potential drug resistance so they will not shift to more expensive regimen.

4.2. Related factors contributing to the enrollment and the use of health insurance for HIV treatment in Vietnam from user perspectives

Awareness of the benefits of health insurance

PLHIV are aware of the importance having HI. They totally understand that if enrolling in HI, HI fund is only paid for medical costs related to HIV but also paid for other diseases. PLHIV were received compliance counseling before using ARV and also received information on the need of having HI, especially among PLHIV. However, PLHIV living in mountainous provinces had limited understanding about the need of having HI, unless they are already insured in the group with premium covered by government funds such as poor, near poor and citizen with medium income.

Affordability

PLHIV is always recorgnized of the "vulnerable" group, who mainly comes from IDUs, FSWs with regarding nearly exhausted economies in Vietnam, although specific data is not available on the socioeconomic status of PLHIV.

It is estimated that 37% of ART clients had income below the poverty line. This compares with a reported 5.8% of the population of Vietnam as a whole in 2014. In Ho Chi Minh City and Ha Noi, 33% of ART clients had income below the poverty line, while 43% of respondents in other provinces had income below the poverty line. Overall, 61% of ART clients reported that they currently had full-time, part-time, or self-employment, while 21% reported that they were not working (whether seeking work or not). The remainder reported they were homemakers, students, or

retired. The average annual expenditures (including the respondents' share of household expenditures) were 29,234 thousand VND. Expenditures for health (including condoms and HI) constituted 4.5% of expenditures (HFG 2015a).

Fear of Stigma and Discrimination

All questions of PLHIV at the OPCs when they are consulted by health staff for HI policy is if they continue to be treated at the OPC they are registering for hiring their status of HIV positive (VNP+ 2014). All patient tends to be treated at the OPC far away from their residence to hire their HIV infection. Some people would rather pay treatment by their pocket money than HI (CCRD 2013b). The reason is that they are so scared of disclosure from health staff, from leaking information while examination and care. Though PLHIV has been educated that they should not be scared of being disclosure as it is responsibility of health facility to hire their status. As stigma and discrimination still exist among health staff then it is very difficult to remove fears of HIV(VNP+ 2014).

Household health insurance and barriers from the policy

The policy is created toward universal coverage however during the implementation it creates barriers for general population not only PLHIV. With current living standard at urban and rural area, it is quite hard to force all family member to buy premiums at a time. They estimate that if there is a 05 member household, the premium is estimated at VND 2,000,000 (USD equivalent to USD 85). The payment of premium at one time is a challenge for vulnerable group who find it hard to earn for living (VAAC 2015).

Fear of responsibility for co-payment

For nearly ten years of being subsidized free ARV from donor supported programs, PLHIV is familiar with strong reliance on donor subsidy. They don't want to pay for any HIV treatment serivces or even small amount of premium. They are regarded to be vunnerable group who hardly afford premium so they should be covered all for all HIV treatment services. When being forced to pay for co payment, PLHIV can discontinue for ART which may result drug resistance and patient must change to higher regimen (HFG 2015a).

Awareness of erasing subsidy for HIV treatment services

Almost of PLHIV still decide to enroll in and use of health insurance as a sustanable financing option for the continuous of ART. They know that they are no longer subsidized for free ART then they try to afford for

health insurance enrollment to be protected from pulverization resulted from catatrophic payment for health expenditures. The PLHIV receives clear message for the need to be enrolled in health insurance as an alternative financial sources for their sustainable ART.

Preconception on service quality provided by health insurance

Quality of health services provided by health insurance is more and more improved in general. It keeps patients has a strong belief of being enrolled in health isnurance they will have a change to get continuous ART. The use of health insurance is not only an options for HIV treatment services but also for other diseases. They will get on well with the fact that they are normal patient they should be treated as normal patient and follow the process of examination and care of health insurance like other patient. Regarded as normal patient, their fear of being discriminated will be disappeared.

Misunderstanding of rights and benefits of enrollment

Misunderstanding of rights and benefits for the enrollment which is created from guiding documents has been gradually removed. The legal framework to promote for health insurance reimbursement for HI treatment is more and more finalized. These documents create favorable approach for HIV to be treated timely and adequately.

Fear of responsibility to pay for co-payment

Like other normal insured people, PLHIV will have to payment for their co payment for HIV treatment related services. Vulnerable group will find it hard to payment for co payment. However, they should know that if they are belong to poor and near poor group, they almost do not have to pay for co payment. With total cost of VND 2.6 million (equivalent to USD 30) for patient for one year for ARV, the copayment will be maximum of VND 420.000 USD (equivalent to USD 20) which will be not so difficult to be afford. The question is they are no longer to think as special group who will get special favors from society. They should pay for co payment as right and responsibility of a citizen regulated by law.

4.3. Related factors contributing to the enrollment and the use of health insurance for HIV treatment in Vietnam from provider perspectives

Awareness of the need to change for health insurance

The Government of Vietnam specifies the need of changing from donor based treatment into health insurance based treatment with different options to expand health insurance coverage for HIV treatment by issuance the Decision of No 1899/QD-TTg dated October 15, 2013 of Prime Minister. Followed the Decision, The Ministry of Health requests local authorities to deliver strong messages for HIV out patient treatment sites of the need to change from donor based patient management into health insurance based mechanism. The examination and care for PLHIV should be changed followed the current regulations of health insurance. It includes the change of organiation structure of out patient treatment sites, re-arrangement of personned working for treatment sities by taking advantages of health staff at the facilities and integrating examination of PLHIV with the current examination process of the health facilities.

Lack of information and advocacy for HI

The lack of information and advocacy for health insurance result from long term existance of subsidizing ART program from donor programs. When there is clear roadmap of diminishing of donor funds, it is essential for promote health insurance options especial advocacy campain for health insurance for PLHIV. The PLHIV should be well educated with comprehensive package of health insurance benefits, right and responsibilities of PLHIV enrolled in health insurance.

Health Worker's attitude toward HI

When awareness of health worker changes toward health insurance promotion, health workers should remove their discrimination of PLHIVin term of examination and care. The patient should follow examination and care like other normal patient. They register and being treatment like insured patient without any fears of being disclosure. The health worker should also remove their perception of heavy reliance on donor funds.

Organization structure of OPCs

The current organization structure of OPCs is one of the barrier for providing HI for PLHIV. When 50% of current OPCs are preventive based health facilities, it will be a challenge for them to be eligible for signing contract with local health insurance agencies to provide health insurance paid HIV treatment services. In order to solve this situation, there is two options: (i) Preventive-based health facilities established HIV and AIDS specialized out patient clinics which meet criteria for a curative treatment site or (ii) moving patient on ART at the preventive based OPCs into curative based OPCs to gurantee that PLHIV will be paid by health insurance for their HIV treatment services.

Inconsitent and insufficient guidance on health insurance implementation

Inconsistent and insufficient guidance on heath insurance implementation may affect the continuous enrollment or use of health insurance. Messages to discriminate PLHIV by taking out of HIV treatment services out of health insurance package or guidances on implementation of health insurance for HIV will be soon promulgated to guarantee the implementation of guidance timely and adequately.

Alternative sources of payment for HIV-related care and treament

With the limited funds from the government, the diminishing of donor funds for HIV, health insurance is definitely to be the adequate alternative source for HIV treatment services. For expansion of health insurance reimbursement, four important conditions should be guaranteed (i) PLHIV should be enrolled in; (ii) Enabling policy environment for PLHIV enroll in HI should be created; (iii) Health insurance will cover HIV treatment and care services and (iv) Examination and care paid by HI at OPC will be eligible. Right the four conditions are done, health insurance will truly a sustainable financing options for HIV treatment.

The literature review of studies on health insurance for PLHIV is really challenging while there is few studies on projection of health insurance resources for HIV treatment only, which none of them mention to the behaviors of PLHIV on the enrollment and use of health insurance.

HI management information system for PLHIV is still a challenge, for some reasons as follows:

- In the previous official HIV program report, there is no data and indicators required that collect HI status among PLHIV.
- Also, when PLHIV come to OPCs, they do not have to present their HI card because all treatment costs are supported by donors. It leads to the hidden HI card among patients when receiving ARV.
- PLHIV do not want to disclosure their identity; and also have to copay for services which was regulated by Health Insurance Law (paragraph 2, Article 4).
- HI card only valid in one year for each person, and every year people need to renew their HI card. Therefore, at the time of collecting data, their HI card might be no longer valid.

4.4. Socio economic and political factor of enrollment and the use of health insurance for ART program

The availability of funding is the most concerned in all countries when ART is decided to be covered by HI funds. However it depends on the funding of the structure of the funds. In Vietnam, the legal framework for the reimbursement of health insurance funds for ART has already made and in comparison to the funds capacity, it is not really a challenge for the funds to allocate around 3% of its total budget for drug for ARV drug. The question is how we can take advantage of this funds toward cost

effective. The pooling procurement of ARV drug is really an adequate strategies for sustainable financing for ART.

Almost countries has strong commitment to eliminate HIV from the communities. With the commitment to the "90-90-90 target", the Government of Vietnam recognize that elimination of HIV is not only to eliminate a chronic disease but also to eliminate a social issue. The Government approved HIV prevention and control as a National Target Program with its annual funds stable and adequate for HIV prevention and control. Provinces also committees to secure funds for HIV when HIV indicator is integrated into socio economics development program in the localities.

5. Conclusions and recommendations

5.1. Conclusions

The study has explored factors contributing to the enrollment and the use of health insurance among PLHIV on ART program. Main factors from service user may affect the enrollment are lack of (i) awareness of for the benefit of health insurance, (ii) affordability for the premium; (iii) fear of stigma and discrimination; (iv) barriers from household enrollment. Main factors from service provider may affect the enrollment are (i) awareness of the need to change health insurance; (ii) lack of information and advocacy for health insurance; (iii) health worker's attitude to health insurance. For service user, factors contribute to enroll in and use of health insurance are awareness of erasing subsidy for HIV and AIDS treatment services; (ii) Preconception on service quality provided by HI; (iii) Misunderstanding of right and benefits of enrollment; (iv) Fear of responsibility to pay for co-payment. For service provider, factors may prevent PLHIV from enrollment in and use of health insurance are (i) Organization structure of OPCs; (ii) Inconsistent and insufficient guidance on health insurance implementation; and (iii) Alternative sources of payment for HIV related care and treatment.

All over the factors were listed above, in my opinion, lack of information users on health insurance is one of the most important factors determination enrollment and use of services for PLHIV among user perspective. They don't have enough information to understand about their rights and their beneficial when enrolling the HI to receive ART. Comprehensive information package on HIV programs has seen as the high effective way to improve the understanding on HIV, both for service users and health providers.

In conclusion, of those major influencing factors, socio-economic and political commitment to support for ART are very important. The commitment of the government to secure free ARV drug for all patient on ART will help to reduce the AIDS deaths and transmission of HIV to the

community. By using community- and individual-based approach, the policy makers will create relevant solutions.

5.2. Recommendations

From findings of the study, the study would like to give some recommendations for better promotion of patient on ART HIV and AIDS to enroll and use of health insurance are:

Service provider:

- To provide adequate consultation skills for health staff in order to encourage PLHIV to enroll in and use health insurance card for accessing ART program.
- To provide comprehensive package of information relating to examination and care especially potential questions and answers from PLHIV aiming at creating belief for HIV on the quality and benefit of health insurance for HIV treatment services.

Policy level

- To coordinate with People's Committees and Health Department at provinces in signing contract with local HI agencies to be ready for the reimbursement of ART and its related HIV services.
- To promulgate guidance and support for PLHIV enroll in HI, without requiring all their family members to enroll with
- To coordinate with MOF and Vietnam Health Insurance Agency to enable financial mechanism for receiving funds from state budget and supporting PLHIV enroll in ART program.
- To coordinate with MOF in order to allocate adequate funds for supporting co-payment for ART for those who have health insurance card.
- To promulgate curative functions for preventive based ART facilities in order to sign contract with local HI agency.

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