**ACKNOWLEDGEMENTS**

**1. The urgency of the subject**

Antiretroviral drugs (ARV) is an effective solution to protect the health of people living with HIV and protecting the public from the spread of the epidemic. Benefits of ARV drugs is huge so Vietnam has been expanding antiretroviral drug therapy for HIV. According to statistics, by the end of October 2015 there were more than 100,000 patients are being treated with ARVs and all are free, and mostly from aid drugs. But the coming time, when no the aid is health insurance (HI) being identified as key measures to ensure the sustainability of HIV infected people are treated. However, according to the "Survey on the number of patients with health insurance are being managed in the outpatient treatment facility" of VAAC, the number of patients with health insurance accounted for a very low rate of 15% of people living with HIV/ AIDS. 51.9% including the poor group, 18.9% of the near poor groups, 29.2% were the other groups. The results of the study showed the importance of supporting health care for people with HIV / AIDS are on ARV outpatient. Currently in Vietnam in general and Hanoi in particular, not much research about this issue, so we carried out research with the aim of:

1. *To describe the current situation health insurance cards, needs and ability to meet the health care for people living with HIV on ARV treatment in Hanoi in 2012.*
2. *To evaluate the effectiveness of interventions to support health insurance for people with HIV / AIDS are on ARV outpatients in Medical Center in Thanh Xuan District - Hanoi 2013*

**2. New contributions of the thesis:**

This study is a first systematic about demographic characteristics, HIV prevalence and some contents support care, factors related to support care for patients groups of ART outpatients in Hanoi. The thesis has identified the current situation, needs and ability to meet the health care for people living with HIV receiving antiretroviral treatment in Hanoi in 2012 and the effectiveness of interventions to support health insurance for people infected HIV / AIDS on ARV treatment at medical centers contain outpatients Thanh Xuan 2013**.** The research results of the thesis help for planning interventions in the treatment of HIV and HIV-related services are paid through health insurance.

**3. The significance and practice of science thesis**

The significance : Thesis research design used cross-sectional descriptive study incorporating qualitative and quantitative techniques of data collection and analysis of accurate, reliable data thesis showed support medical care for patients with HIV / AIDS is essential and also identified a number of factors that are predictive of dropout and increase the likelihood of an outbreak back if not support take measures to if no funding from international organizations.

***The practice:*** The results of the thesis contribute to propose interventions that support health care especially supportive treatment through health insurance for people with HIV / AIDS.

Provide practical data for teaching and research premises for the next.

**4. The layout of the thesis:**

The thesis was presented on the page (not including appendices, tables of contents, the acronym) and is divided into: Background: 2 pages; Chapter 1-Overview: 35 pages; Chapter 2-Objects and methods of research: 29 pages; Chapter 3-The results: 36 pages; Chapter 4-Discussion 25 pages; Conclusion: 1.5 pages; Recommendation: 1 page. The thesis consists of 36 tables, 12 charts, Figure 5, 3 diagrams. The appendix includes 101 references (Vietnamese and English),10 appendices include a list of study sites, the guidelines depth interviews, group discussions, participate in the study, questionnaires , scoreboard.

CHAPTER 1: OVERVIEW

1.1. The concepts of HIV / AIDS and ARV

1.1.1. People living with HIV: HIV-infected people who have serum samples were positive for HIV-positive sample all three tests in three categories of bio-products with the principles and different antigen (way III).

1.1.2. The concept of health care people with HIV: Since the discovery of HIV test counseling; access to information related to HIV / AIDS-related policies and regulations, rights and obligations of people living with HIV / AIDS; nutrition; stigma and discrimination; OI approach, preventive treatment of OIs, ARV ...

1.1.3. The stages of HIV / AIDS: clinical status of people living with HIV / AIDS is divided into 4 phases.

1.1.4. The concept of the ARV: antiretroviral (ARV). 2009 Ministry of Health issued Decision 3003 / QD-BYT "Guidelines for Diagnosis and Treatment of HIV / AIDS," applies to all medical institutions of the State, private and semi-public.

1.2. The situation of HIV / AIDS and health care

1.2.1. On the world.

Up to the present time there is no drug treatment and vaccine-specific, so effective measures to minimize harm to the fullest extent of the spread of HIV and the community is redundant with 3 main goals: limiting the spread of HIV, slowing disease progression and reducing the economic impact, social impact HIV / AIDS. end of 2013, there are 35 million people are living with HIV, 39 million people died of AIDS, with 2.7 million new HIV infections, 1.8 million people died of AIDS, with 6.9 million people taking ARVs in countries with low and medium incomes, ART has brought many positive results, contributing to improved health status and quality of life for people living with HIV. By 1996, began using combination therapy regimen for at least 3 drugs (HAART). HAART not only prolong life for people with HIV, but also reduce the likelihood of HIV transmission from HIV-infected people to others, particularly transmitted through sexual contact. Care and support to reduce physical pain, mental. double helps long life and enhance the quality of life for people living with HIV / AIDS. At the end of 2012, about 1.6 million people with HIV in countries with low and medium incomes have access to ARVs compared to the end of 2011. Access to antiretroviral treatment is still not fair to only 28% of children with HIV in need of treatment have access to antiretroviral treatment, much lower than the rate of 57% of adults. Antiretroviral treatment for HIV-infected pregnant women to reduce the risk of HIV transmission from mother to child to less than 5%, and can reduce the risk of transmission to sexual partners up to 96%. Treatment retention rate in 12 months after treatment was 81% (as reported by 92 countries). This percentage dropped to 75% after 24 months of treatment (73 countries) and 67% after 60 months of treatment (46 countries).

1.2.2. In Viet Nam

2014, the number of HIV cases is 216 163 cases, of AIDS patients is 67 557 and 69 449 have died of AIDS cases. National HIV prevalence rate is 248 / 100,000. In the first 3 months of 2014, the country test detected 2,012 new HIV cases, including 928 AIDS patients, including 300 who died of AIDS. 364 clinics and ARV treatment, with 86 771 patients (adults and children) receiving antiretroviral treatment, reaching 93.3% compared to the plan in 2014. Management, care, counseling people with HIV / AIDS face many difficulties due to objects often change addresses. Not yet be issued access policy and domestic drug production. AIDS diagnosis means and capacity of staff working in care and treatment of HIV / AIDS at all levels remains very weak and inadequate. Ensuring sustainable financing for HIV/AIDS, increase investment in the country and the role of HI.

***General statement on the situation of HIV / AIDS.*** HIV trend sexually transmitted starting with a higher tendency transmission through blood. Besides, the proportion of new HIV infections detected in the age group 30-39 increasingly high proportion. Warning risk of HIV transmission by sexual transmitted will be the main cause of HIV transmission in Vietnam. Forecast 2015 on 100,000 patients on ARV.

1.2.3. In Hanoi

Hanoi has implemented the program management consultant care for people with HIV / AIDS, including care and treatment, outpatients, implementing care clinics, outpatient treatment at the district-subdistricts medical centers contain mainly for the treatment of opportunistic infections and antiretroviral therapy in a systematic way. To 03.31.2014 with 20 762 cases of HIV / AIDS, there are 5077 cases were converted to cumulative AIDS, deaths because of HIV / AIDS is 3,821. HIV prevalence rate is 303 / 100,000 population, 100% county / district with HIV, 536/577 communes, wards have HIV, accounting for 92.7% rate. has implemented programs to support comprehensive care for patients with AIDS 1996, now has 31 establishments, 9 facilities in prisons, the number of patients 9,274 people, reaching 95.46% compared to the 2014 plan and put some people up 44.2% treated.

1.3. ARV treatment model in the world, Vietnam

In the US, research by Claude Ann Collins et al (2009) carried out by means of self-reported use of antiretroviral drugs in the 3 days prior to the interview shows, 55% good compliance and 45% of non-compliance. Research by J.B. Nache et al (2012), the average results of 43% of patients reporting each month missed dose ARV. Management model for HIV / AIDS for the health system to apply the most, 289 treatment facilities of the health system, the basis of treatment of the hospital system is 132 basis (accounting for 46.8%) , at the health center is 152 basis (accounting for 53.2%). The number of treatment facilities at the central level is 5 establishments (1.7%), the province is 118 establishments (41.8%), and the district is 161 establishments (57.1%). Antiretroviral therapy has been made in accordance with the national unity. Model of HIV / AIDS at facilities outside the health system. At the detention center, at 05-06 centers, social welfare establishments.

c) Pilot: *Treatment 2.0 initiative*. provide basic treatment services at the commune, ward: Model MMFED (Manpower, Material facilities, Expenditure, Demand). Research by a team of Support Fund prevention of dangerous disease HIV / AIDS in Hanoi construction.

**1.4. Health insurance in the world and in Vietnam**

1.4.1. The concept of health insurance.

As an integral part of the law on social security, health insurance is a form of insurance is applied in the field of health care and is one of the nine contents of health insurance was provided for in the Convention 102 on 28 / 6/1952 of the international Labour Organization (ILO) on minimum standards for social insurance payments.

1.4.2. Principles of Health Insurance

Ensuring risk sharing among health insurance. HI premiums are determined by a percentage of salary, wages, pensions, benefits or minimum wages of administrative regions (collectively, the minimum wage).

1.4.3. The necessity of health insurance

Patients with HIV / AIDS are being treated for opportunistic infections and antiretroviral therapy for life, patients with health insurance would reduce health care difficulties.

1.4.4. Role of Health Insurance

Help for those insured overcome financial difficulties when there are risks such as illness, disease during hospitalization for treatment of high costs affect family budgets while reducing revenue to their inability to enter the labor force participation .

***1.4.5 The study of health insurance in the world***

The study showed that people with HIV need to have health insurance in order to ensure continuity of treatment for life.

*1.4.6. Health insurance in Vietnam:* Health Insurance Act was passed in November 2008 and effective from July 1 st 2009. Health insurance now also include free care for children under 6 years of age. 2014 has about 61 million people insured, approximately 69% of the population, there are about 14.3 million poor and ethnic minorities, nearly 2 million the near poor with health insurance.

1.4.7. *Health insurance for people with HIV / AIDS in Vietnam:*

The budget for antiretroviral treatment depends heavily on international funding sources 90%. Four basic resources for HIV / AIDS that do not originate from international projects include: Taxes, health insurance, health budgets after the debt rescheduling rich countries, preferential loans from international development banks. The health insurance fund to pay 179 billion (3%), self-paid people 1,572 billion (22%), international aid is 3,484 billion (49%). ARV is used more than 90% of drugs from international projects. Besides the other projects supported OI drugs, the treatment monitoring tests.

1.4.8. Health insurance for people with HIV / AIDS in Hanoi: In the research findings: "The situation of purchasing and using health insurance of PLHIV are managed in antiretroviral treatment clinic outpatient medical centers Hoang Mai, Hanoi 6 months of 2011".

**CHAPTER 2: RESEARCH METHODS**

2.1. Research subjects

**-** Patients treated at 10 outpatients ARV OPC to 1/6/2012, in the list are managed, monitored at the OPC, who directly support the care of patients, health workers, the relevant units concerned, from 18 years and older, qualified mental health and understanding, answered the question and agreed to participate in the study.

- Books, reports, medical records at the 4 hospitals , 6 medical centers.

2.2. Time and place of study:

From January 01/2012 to 2015, 4 hospitals and 6 health centers with antiretroviral therapy OPC 2012.

2.3. Study design: cross-sectional descriptive study combined with qualitative research and quantitative.

2.4. Sample size and sampling method

Applying the formula for calculating the sample size in the study descriptive analysis.



n is the minimum sample size.Z 1- ∝/2 trust factor with significance levelα = 0,05; z =1,96*.* p = 15 (proportion of patients with health insurance are being managed at the facility outpatients ARV Hanoi. ε = 0,1 is the relative accuracy between the parameter desired parameter and sample populations. With the desired accuracy is 95% (α = 0.05) th× Z 1- ∝/2 = 1,96, ε = 0,1. Count n = 2.177. Sample size NC 3.406.

**Intervention studies:** select patients on ARV treatment outpatients Thanh Xuan OPC to intervene 01 years time, apply the formula sample size for the study theory before the next intervention.



n: The sample size required for the intervention group, Z1- α/2 = 1,96 (corresponding to α = 0.05). Z1- β = 1,282 (corresponding to β = 0.1). P1= 0,68.( assuming the results after intervention). P2 = 0,48 (results given according to the previous study). P1 - P2 : The level of expectations for improved patient support 3 new interventions achieved clinically meaningful minimum of 13%. P = (P1 + P2) / 2 = 0.58. With a significance level of 5%, strength: 90%, one-sided tests There are n = 126 sample calculation.

**2.5. The variables / indicators:** the indicator variables and research objectives.

**2.6. Research Tools:** Table depth interview guide, stock screening interview participants, agreed to participate in research, the interview question object.

2.7. Methods of data collection

2.7.1. Quantitative Research: Making the paradigm is a list of patients on ART at 10 on the OPC standard medical record management treatment. Exclude all medical records are not eligible, the information did not meet the study objective. Statistics records of patients qualified for the study sample included. To collect basic information from the medical records of the patients were selected. Conducting interviews with eligible patients: n = 3,406.

2.7.2. Qualitative research

Using the method of observation and field diary notes, according to the in-depth interview questions prepared. Conducted 5 focus group discussions, 8-10 persons / 1 up. Depth interviews. Select intentionally, 5- 10 patients on ARV treatment outpatients. 5- 10 home patients (who directly care for patients) .1 Hospital Director, Head of OPC 3 hospital’s clinics / medical centers, 4 representatives related units.

***2.8. Handle and analyze data***

***2.8.1.*** ***Qualitative data:*** The recordings were transcribed PVS and save to your computer as a Word file, the information recorded in NKTD and the information gathered through the PVS is encoded in the theme. Then be processed and analyzed using NVivo 8 software.

***2.8.2.*** ***Quantitative data:*** Information collected is cleaned before typing 6:04 Epi Data, Data processing using SPSS 16.0 software, Use test χ2 , using a logistic regression model.

***2.9.*** ***Ethics research:*** Research was passed ethics council of Hanoi Medical University.

**CHAPTER 3: RESEARCH RESULTS**

**3.1. The basic demographic characteristics of the study groups**

The study results showed that the majority of study participants reproductive age and labor are 30-39 (67.0%); Men's doubles and women (67.4% Male = female 32.6%). Most active living alone without spouses 46.0%; have high levels of education from above (86%); Unemployed and the self-employed is 68.5%; Income mainly from 1-2 million (40.4%). Sexually transmitted = 46%, the road 41% IDU.

3.2. Current status of health insurance cards, needs and ability to meet the health care needs for people living with HIV receiving antiretroviral treatment in Hanoi in 2012.

*3.2.1. Current status of health insurance for people with HIV receiving antiretroviral treatment in Hanoi in 2012.*

Of the 3379 patients found 81.1% health insurance is necessary, however, to understand the HI of patients (14.9%) and health insurance (13.6%) is very low.

Table 18: Reasons for not buying health insurance patients (n = 3379)

|  |  |  |
| --- | --- | --- |
| **Reasons not to buy health insurance patients** | **Quantity** | **Proportion (%)** |
| Afraid anonymity | 3115 | 92,2 |
| Fearing trouble, lost time | 3095 | 91,6 |
| Fear of stigma discrimination | 2916 | 86,3 |
| Saw no need | 638 | 18,9 |
| Do not know who are also HIV-infected having of health insurance | 2878 | 85,2 |
| No funding | 2811 | 83,2 |

The reason patients do not purchase health insurance is because 92.2% of anonymity Fear, Fear troublesome laborious 91.6%, fear of stigma discrimination 86.3%, Do not know who are also HIV positive having of health insurance 85.2%, 83.2% No funding.

Among the patients with health insurance, the rate used by the card check forms mainly as: diagnosis and treatment of common diseases 92.1%, the opportunities of infections related to HIV / AIDS 98.7%, making the 98.5% clinical tests ... with 9 patients with health insurance but do not use time.

*3.3.2. Needs, the status and the ability to meet the needs of medical care for HIV-infected people receiving antiretroviral treatment in Hanoi in 2012.*

Medical care for patients antiretroviral therapy being studied by 4 parts:

+ Support knowledge to help improve patient knowledge of health care better.

+ Support for examination and treatment of opportunistic infections

+ Support to improve health nutrition for patients

+ Social support to patients and support to reduce stigma discrimination, financial support job creation, employment assistance and legal support.

*3.2.2.1. Support a current situation needs medical care for people with HIV.*

- Demand and supply the current situation of knowledge.

Of the 3398 subjects interviewed, only. 3379 subjects answered questions about the need for providing knowledge. The knowledge that people with HIV / AIDS need to know the clinics are organized propaganda, training advice.

Table 1: Percentage of contents knowledge of HIV / AIDS are receiving antiretroviral therapy. (N = 3353)

|  |  |  |
| --- | --- | --- |
| **Content provided knowledge** | **Quantity** | **Proportion (%)** |
| Knowledge about HIV / AIDS epidemic, opportunistic infections and the road prevention | 3.120 | 93,0 |
| Knowledge of ARV drugs, side effects of medications and how to manage and effective ARV | 1.564 | 46,6 |
| Knowledge about nutrition, while dietary ARV | 1.474 | 44,0 |
| To prevent HIV transmission to their families and communities | 3315 | 93,5%; |
| Knowledge of communication skills to others | 676 | 20,6%. |
| Knowledge of guidelines and policies of the Party and State, health insurance for people with HIV / AIDS | 657 | 19,6% |

\* Demand and the state examination and treatment of opportunistic infections

*Table 2: Treatment of opportunistic infections in patients (n = 3,379)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **STT** | **Treatment of opportunistic infections** | | | **Quantity** | **Proportion (%)** |
| 1 | Do not care for opportunistic infections | | | 783 | 23,2 |
| 2 | Check but do not detect opportunistic infections | | | 935 | 27,7 |
| 3 | Examination and detection of opportunistic infections | | | 1661 | 49,1 |
| In which | Unsupported treatment | | 101 | 6,1 |
| Drugs are in part | | 74 | 4,5 |
| Full Treatment | | 1486 | 89,4 |
| In which | There are mild and medium expression | | 771 | 76,5 |
| Severe manifestations | | 390 | 23,5 |
| In which | Are transit | 365 | 93,7 |
| Not transit | 25 | 6,3 |

***- Current status of social support:***

*Table 3: Percentage of patients who had received aid in the past 2 years*

|  |  |  |
| --- | --- | --- |
| **The content of social support** | **Quantity** | **Proportion (%)** |
| Legal support | 763 | 23 |
| Consultancy support anti-discrimination | 1081 | 32 |
| Support for vocational training and employment | 743 | 22 |
| Financial support for living | 946 | 28 |
| Support health insurance card | 372 | 11 |
| Support food | 1858 | 55 |
| Other support (books, children's learning ....) | 372 | 11 |

23% legal support, counseling support anti-discrimination discrimination 32%, 22.0% employment support, financial support for living 28%, 11.0% of health insurance card support, food assistance 55.0%, another 11% support.

*Table 4: Current status of HIV / AIDS being stigmatized, discriminated (n = 3379) )*

|  |  |  |  |
| --- | --- | --- | --- |
| **Current status discrimination** | | **Quantity** | **Proportion (%)** |
| No discrimination | | 1544 | 45,7 |
| Discrimination | | 1835 | 54,3 |
| In which | HIV status publicly | 513 | 27,8 |
| Do not dare openly HIV status | 1322 | 72,1 |

Some patients are stigmatized discrimination 54.3% of which 27.8% had HIV status publicly, and 72.1% were HIV status publicly. 100% of patients who publicly stigmatized status discrimination.

*3.2.2.2. Ability to meet the health care needs for people living with HIV receiving antiretroviral treatment in Hanoi in 2012.*

- Assess the ability to support health care (according to Annex 10 transcripts*).*

***Table 32: percentage distribution capacity to meet health care support for people living with HIV / AIDS at the clinic***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***STT*** | ***Clinic*** | ***Number of persons*** | ***Responding support knowledge*** | | ***Meet nutritional support*** | | ***Support treatment response*** | | ***Meet social support*** | |
| ***Obtain*** | ***Propor-tion (%)*** | ***Obtain*** | ***Propor-tion (%)*** | ***Obtain*** | ***Propor-tion (%)*** | ***Obtain*** | ***Propor-tion (%)*** |
| 1 | Tay Ho | 656 | 183 | 27,9 | 122 | 18,5 | 281 | 42,9 | 105 | 16,0 |
| 2 | Ha Dong hospital | 646 | 142 | 22,0 | 72 | 11,1 | 199 | 30,9 | 85 | 13,2 |
| 3 | Thanh Xuan | 112 | 38 | 31,7 | 8 | 10,0 | 32 | 40,5 | 23 | 29,1 |
| 4 | Soc Son | 68 | 14 | 20,6 | 10 | 14,7 | 22 | 32,4 | 11 | 16,2 |
| 5 | Lung hospital | 160 | 42 | 26,3 | 17 | 10,6 | 66 | 41,3 | 40 | 25,0 |
| 6 | 09 hospital | 250 | 70 | 28,0 | 30 | 11,9 | 128 | 51,2 | 62 | 24,8 |
| 7 | Dong Da hospital | 696 | 172 | 24,7 | 58 | 8,3 | 205 | 29,4 | 110 | 15,8 |
| 8 | Dong Da | 169 | 65 | 38,5 | 23 | 13,5 | 65 | 38,5 | 33 | 19,5 |
| 9 | Dong Anh | 579 | 213 | 36,9 | 89 | 14,5 | 254 | 41,4 | 133 | 21,7 |
| 10 | Ba Vi | 43 | 5 | 11,6 | 11 | 25,6 | 10 | 23,3 | 3 | 7,0 |
| **Total number** | | **3379** | **944** | **27.9** | **430** | **12.7** | **1254** | **37.1** | **605** | **17.9** |

From a total of 10 clinics surveyed, the outpatient clinic in Dong Da district health centers have the hit rate on the ability to meet the highest knowledge (38.46%). The rate reached about the ability to satisfy the lowest knowledge in Ba Vi district health centers (11.63%), the nutrition clinic at Ba Vi has hit rate on the ability to meet the greatest nutrition (25 , 6%). OPC lowest Dong Da Hospital 8.3%, the ability to meet the examination and treatment of the 09 largest OPC Hospital (51.2%) and the lowest is OPC Bridge Ba Vi district health centers (23.3%) . care, social support OPC Thanh Xuan highest (29.11%); Next is the Lung Hospital in Hanoi & Hospital 09 (25% & 24.8%) and the rate is the lowest assessed Outpatient Clinic Bavi district health center only 7.0%.

***3.2.2.3. Some factors related to health care support***

- There is a relationship between media knowledge, staff provide knowledge and ability to meet the supply of knowledge (χ 2 = 134,57, p<0.001). (χ 2= 26,25, p<0,001).

- There is a relationship between HIV status publicly to meet nutritional needs (p<0,01 và χ 2 = 0,95).

- There is a relationship between discriminatory attitudes, discrimination by health workers with the ability to meet the care and treatment (χ 2= 2,95, p<0,05).

- There is an association between levels of education, HIV status publicly patients with the ability to meet the social care needs (χ 2 = 103,52 với P <0.001), (χ 2 = 39,03 và p<0,001).

**3.3.** **Effective interventions to support health insurance for people with HIV / AIDS in Thanh Xuan District 2013:**

**3.3.1. Reason for selection:** Based on the theoretical model in Annex 9 MMFED standards and the results of the analysis at the OPC, OPC Thanh Xuan chose to intervene 3 contents. Support knowledge, buying health insurance card, nutrition, duration 1 year.

**3.3.2. Contents of intervention**

* Make a list of patients on ART to support health insurance.
* Proceed to buy health insurance for patients is supported.
* Track the results of the use of health insurance cards are supported patients.

**Support for health insurance**

**Nutritional Support**

* Support liver tonic
* Support Vitamin B3
* Basic knowledge about HIV / AIDS
* Nutrition for People Living with HIV
* Treatment of infections at home opportunities
* Knowledge of health insurance, opportunities to practice and apply health insurance to care and treatment
* Skills of persuasion, knowledge of the law

**Support knowledge**

- Support Knowledge for people living with HIV to help them better understanding of the issues related to HIV / AIDS on health insurance and organizing seminars to help them share the same difficulties to find ways to solve.

- Support for health insurance so they can explore conditions and better medical treatment and gives them a sense of purchasing and using health insurance card.

- Support to improve health drugs: Due to advanced medicine can not be allocated from the state health insurance assistance, so we can raise the status of the drug to patients in order to reduce the side effects of ARVs, with 2 drugs : Bogaren, increased liver detoxification and 3 B vitamins reduce skin diseases ... ..

- Seminar on the industry at all levels to increase support for HIV prevention, care and treatment given to HIV and related diseases on the list of those covered by health insurance.

***3.3.3. Results intervene.***

***3.3.3.1.*** ***General information about the object intervention***: the highest number of 30-39 years old (70.3%), 20-29 years (16.7%), accounting for 56.13% male and 43.87% female, most junior high school (36.8%) and high school (50.3%), 9.7% had graduated from secondary, college, university and graduate, freelance (49, 0%), accounting for 7.7% unemployment. Spread from sex (54.2%), needles (41.3%), other 4.5%, health insurance card number is 16.

**3.3.3.2. Effective interventions**

***\* Effectiveness of patient knowledge***

**Chart: Effective interventions to support knowledge**

The percentage of correct understanding increased from 74.5% knowledge up 98.1%, 10.9% for health insurance increased to 91.8%, the State Party's policies related to HIV / AIDS increased from 5.5% to 62.7%.

***\* Effective use of health insurance cards examination and treatment.***

***Chart 3:12: Comparing the number of physician visits***

Before interfering with 12.7% (16 people), health insurance card, after the intervention, 100% of patients with health insurance. The number increased from 1.8 times examination 4% to 18.1%, of patients do not seek medical care decreased from 24.5% to 0.9%.

***Chart 3.13 compares the fund before and after intervention***

Costs for medical care decreased, averaging> = 400,000 VND for one visit from the 17.3% decline decreased 0.9%. Average pay <100,000 VND for each visit increased from 2.7% to 80.9% after intervention. Funding amount patients pay for medical decreased only 1 patient pay from 300.000 to 400.0000 đ, 80.9% of patients pay less than 100,000 đ exam.

***\* The effect of the drug support improve health:***

**Table 5: Perception of patients after the drug is supported improve health.**

|  |  |  |  |
| --- | --- | --- | --- |
| TT | Content | Quantity | Proportion % |
| 1 | Very necessary | 126 | 100 |
| 2 | Body feel better | 120 | 97,3 |
| 3 | Patients with an average weight gain ranged from 2-3kg | 63 | 60.0 |
| 4 | Patients said they eat and sleep better after using drugs | 116 | 91.0 |
| 5 | Patients feel decreased incidence of opportunistic infections, | 39 | 35.5 |
| 6 | Patients reduce the signs of rashes, | 19 | 15.0 |
| 7 | Patients reduce limb numbness after using drugs from | 14 | 11.0 |
| 8 | Reduce side effects of ARVs unwanted. (Nausea, hair loss ..) | 25 | 26.0 |

100% necessary Patients, 97.3% feel better. 60% Gain Weight, 91% eat better sleep, the liver enzyme changes the index expressed better.

**3.3.3.5. Organize workshops:** Organizing workshops for all levels of industry, health workers, social workers care about problems on balanced for people with HIV / AIDS, ensure people living with HIV / AIDS continue to treat opportunistic infections and ARV treatment, health insurance coverage for people living with HIV in health care systems. Ensure financial support prevention care for HIV / AIDS.

**"***We will mobilize resources to support care for people with HIV / AIDS support particularly health insurance for people with HIV / AIDS have difficult circumstances ..."*People's Committee officials.

CHAPTER 4: DISCUSS

4.1. The basic demographic characteristics of the study groups

Research results on the demographic characteristics of the subjects in our study were similar to studies of Hanoi Medical University, studied the Global Fund, VAAC. The rate of HIV transmission through unprotected sex accounts for 54.2% higher compared with the 2014 report of the VAAC is 48.5%, probably due to female ratio is higher there male patients, through IDU 41.5%, other 4.5%. The above results reflect the kind of service to change the proportion of women infected with HIV through sexually and growing.

**4.2. Current status of health insurance card, the demand situation and the ability to meet the health care needs for people living with HIV receiving antiretroviral treatment in Hanoi in 2012.**

***4.2.1. Current status of health insurance for people with HIV / AIDS are on ARV.***

The percentage of patients with health insurance cards is 13.6%, this figure is very low compared to the percentage of people participating health insurance Hanoi city is 68.91% in 2013. The reason for the disease people do not buy health insurance is afraid to be identified "*Buying health insurance is scared of being identified missed, why because of medical or health insurance card they ask this bottle"* 26 male patients, fear of troublesome *"troublesome procedures to buy health insurance is a household, people's identity card and must be purchased in wards have been the household registration system, visit the waiting drugs less, there is much room discrimination keeps people have health insurance card, and the person does not have health insurance "*32 female patients years old, had no money and did not deem it necessary *"My family said it's also difficult to 100,000 VND how few hundred thousand to buy the card, health insurance card renewal examination and the patient just sneezing runny nose, so I do not buy"* 28 female patients fresh. Understanding health insurance was not correct *"They understand about health insurance is not right here we will strengthen advocacy for health insurance and training to patients about health insurance"* OPC officials Tay Ho.

***4.2.2. Needs and status and needs medical care of HIV / AIDS on ART.***

*4.2.2.1. Demand and the state of medical care of HIV / AIDS on ART.*

Ignorance, not equipped with the knowledge about HIV / AIDS and issues related to HIV / AIDS adequately, lack of information is a cause of deep impede people living with HIV / AIDS to the health care service. Needs, wishes to provide the knowledge, up to 95.3% of people living with HIV / AIDS are on ARV saw demand and this percentage is much higher compared to studies in Brazil is the need provided demand knowledge of ARVs accounted for 68.2% of patients are needed, and only 0.5% felt less necessary. According to study results, only less than 5% is not answered and saw no need to supply and lower results compared to studies in Brazil 12.3% of patients do not want to know any what. Proportion of providing knowledge to patients in outpatient clinics accounted for 90.6% of doctors are much higher compared to studies in Brazil is 70.8% and is much higher than researchers Ha Thi Minh Duc, Le Vinh was 56.4%. In the study by Ha Thi Minh Duc, Le Vinh, there are 45 patients (23.1%) said they obtained information through magazines, 38 (19.5%) is through television. In the study by the authors at a hospital in Brazil, it shows that out of 195 respondents, 110 (70.8%) received information from the doctors at the start of treatment. The proportion of patients to receive information from your doctor is highly suitable for ARV patients are doctor periodic health checks and medicine 1 month / 1 times. However, despite the electronic media (internet, television), the groups and associations that affect health but experts still seems to be the safest source of reliable and largest of the information medicines for patients. HIV-infected people need to have a diet, adequate nutrition can improve conditions create highly effective antiretroviral treatment, however, the poverty rate in this group of high-nutrition should support them as necessary however, only 552 patients (16.2%) is nutritional support workers mainly received by artifacts such as rice, oil, milk 84.5%. The number of people receiving cash assistance only 3.41%. This rate is much higher than the study of Tran Bich Tra and colleagues.

The study results also showed that the model club activities / self-help groups of people living with HIV / AIDS are still not widespread, there is little activity OPC Club / self-help groups of people living with HIV / AIDS and there are fewer people with HIV / AIDS known the existence of this business model. When answering the questions: *Outpatient Clinic where he / she treated with CLB / self-help groups do?* 2117 people there were pretty high percentage 63.14% of the total 3353 respondents to this question said they "*do not know*", only 657 people proportion 19.59% reported to have said the club / self-help groups are active. However support job training and career counseling suitable job placement for people with HIV / AIDS are treated in the OPC in Hanoi really has not been met there are currently no other organization was up to guide vocational training and job placement suitable for people with HIV / AIDS.

Other services the patient will have to pay health insurance is so essential to the patient. According to a discussion group, subjects said "*health insurance for everyone, it is important for HIV-infected people is even more important because it is needed to serve partially paid medical care, he was serious illness will be hospitalized, will be somewhat better, should have supported advocacy organization for health insurance help* "\_ 30-year-old female patient

*4.2.2.2 Ability to meet the health care needs of people living with HIV / AIDS on ARV treatment in outpatient clinics*

An assessment of the needs to be provided with knowledge: the 3,379 respondents, only 27.94% to reach 21 points or more and are rated up to meet the demand for knowledge. In particular, the number of outpatient clinics Dong Da district health centers have the hit rate on the ability to meet the greatest knowledge (38.46%). The rate reached about the ability to satisfy the lowest knowledge in Ba Vi district health centers (11.63%) lower than the study of Ha Thi Minh Duc (practical knowledge about ARV adherence HIV / AIDS outpatient clinics in district 10, Ho Chi Minh city in 2009) share the true knowledge about compliance with antiretroviral therapy 69% of patients in which correct knowledge about side effects of medicines of 64% , the proportion of patients with the right knowledge on how to take medication and medication on time to reach> 99%.

An assessment of the needs nutritional support: in 3379 respondents, only 13.02% scored 8 or more and are rated up to meet nutritional needs. In it, the clinic Bavi completion rate on the ability to meet the greatest nutrition (25.59%) is lower than the demand for nutritional support: 44% in the study by J Uwimana (*at Ruwanda*).

Assess the needs assistance with medical care: the 3,379 respondents, only 37.35% scored 8 or more and are rated up to meet the demand for medical care. In particular, hospital outpatient clinic with 09 hit rate on the ability to meet the health care is the largest (51.20%), lowest in Ba Vi district health centers (23.26%) compared with the model US Medicaid 50% of patients with HIV / AIDS and 90% of adult children living with HIV / AIDS in the United States are receiving care Medicaid program and other 5% of patients receiving medical care, the study lower.

An assessment of the needs of social assistance: Education deeply affects the ability to effectively meet the needs of social care for people with HIV / AIDS. Low education levels are predictive factors that limit people with HIV / AIDS access to and use of social care services, self-stigma, fear, self-isolate themselves makes people with HIV / AIDS conceal illness, low self-esteem did not dare to face the life was made for people with HIV / AIDS do not have enough courage and confidence to come to the social care services. There is a difference of assessment to meet the needs of social care between the patient groups according to level of education. Education group graduated from high school and older are to meet the needs of higher social care groups have low levels of education have not graduated from high school. In the 3379 interview participants in the study results (17.90% only reached 12 points or more and is judged to be on the needs of social care. In particular, outpatient clinics health center bar spring is the proportion of patients assessed for care, social support was highest (29.11%); Next is Lung Hospital in Hanoi & Hospital 09 (25% & 24.80%) and the proportion rated reaching the lowest price outpatient clinic Bavi district health center is only 6.98%) lower than that of Nguyen Van Kinh study.

This study have similarities in the relationship between knowledge, openness, with helpers and responsive health care, but another factor in the relation of sociology of population compared to studies Ha Thi Minh Duc (in patients with helpers in treatment, adherence rate higher than the corresponding rate in patients with no help, this difference was statistically significant with p = 0.03.

Relationship between adherence practice with ART: There is an association between nutritional practices (meal, vegetables, fruits of all kinds) with compliance with statistical significance with p <0 , 05, prevention counseling during antiretroviral therapy helps Patients recognize the need for continuous treatment to prolong life.

**4.3.** **Evaluate the effectiveness of interventions to support health insurance insurance card for people with HIV / AIDS on ARV treatment at health centers in 2013, Thanh Xuan District.**

***4.3.1. General information about the object interfere.***

The equivalent index other studies spread through intercourse but 54.2% higher than 41% and NC whole city through sharing needles used NC 41.3% lower than 46% the whole city. Some Patients may be due to women's higher Thanh Xuan than male Patients with health insurance so is 12.7% lower than the full research results TP 13.6%, lower than the survey by the VAAC 2012 is 15%.

***4.3.2. Effective interventions:***

***Support knowledge:*** Proportion of correct understanding of the knowledge to be increased significantly, which helps patients with consciousness in health care, helping them increase self-confidence and self-respect, they know what they're questions , so that they do the right effective.

***Regarding health insurance card support:*** When patients with health insurance increased more medical appointments, health is improved, funds to pay for each visit to help reduce the burden of reducing the financial impact to the patient's good to patients access to health services in the health care increases. Through the examination of health insurance also helps them feel more confident about a medical evaluation at the state health facilities.

***Advanced support physical medicine:*** The testing index changes are better expressed, the average weight of the patients increased significantly. ARV treatment is life-long, multi-chemotherapy, there are some side effects such as malnutrition, hepatotoxic drugs should be supported in order to increase the effectiveness of treatment, at the time supported the uninsured for the treatment of HIV / AIDS, so as a result of this support as a prerequisite to bring these drugs into the category level when HIV treatment drugs through the health insurance car.d

**CONCLUDE**

**1.** **Current status of health insurance card, the demand situation and the ability to meet the health care needs for people living with HIV receiving antiretroviral treatment in Hanoi in 2012.**

Needs support 100% health insurance card, health insurance card number of patients 13.6% low, reasons not to buy health insurance is afraid of anonymity, fearing trouble, saw no need, misconceptions about health insurance. Mainly used in medical health insurance card OI 86%, mainly patients receiving knowledge from doctors 90.1%.

Some patients were examined for infectious diseases 49.2% chance, of 89.46% of patients were examined with untreated and severe when there are signs of 93.7% is transit time. Wishing to participate in activities at this place is necessary but very low participation rate accounted for 19.6%. Stigma and discrimination with patients occurs in 98.1% higher community, there is still discrimination in households (193 people) and health facilities (36 people). The rate low public identity 100% identity publicly patients have been stigmatized and discriminated.

***Ability to meet the health care needs for people living with HIV / AIDS at the Outpatient Clinic:***

The ability is assessed to be low, the lowest nutritional support 440/3379 (13.0%), followed by needs social support 605/3379 (17.9%), to support is gain knowledge 944/3379 (27.4%) and the highest was supported care and treatment 1262/3379 examination (37.3%).

**2. Evaluate the effectiveness of interventions to support health insurance for people with HIV / AIDS are on ARV Outpatient Medical Center in Thanh Xuan District - Hanoi 2013.**

Effective post-intervention assessment: Raising awareness about health care for patients. Improve knowledge about health insurance and hospital visits in funding to pay for diagnosis and treatment reduces.

**RECOMMENDATIONS**

1. Supporting and encouraging buy/issuing cards to people with HIV / AIDS antiretroviral therapy.

2. Providing knowledge on the use of health insurance cards in care and treatment.

3. Supporting knowledge, communication reduces stigma, discrimination HIV/AIDS treatment for health workers in CS, families and communities.

4. Strengthening the related research in a broader health insurance.

5. Requesting the competent authorities carried out the entire population of social insurance, health insurance, especially for people living with HIV / AIDS, enabling patients with HIV / AIDS like other chronic infections.

6. Promoting internal resources, increased funding from the national budget, local, health insurance in 2017 toward 100% of ART patients were examined and treated by health insurance.

**LIST OF SCIENTIFIC RESEARCHES RELATING**

**TO THE THESIS**

1. Nguyen Van Dung, Nguyen Thị Lieu, Nguyen Minh Hanh and partner (2013), Needs and health care situation of people living with HIV / AIDS are on ARV in Hanoi Journal of Medical Practice, collection 878, skull 8, Page 80.

2. Nguyen Khac Hien, Nguyen Thi Lieu, Le Thu Nga et al (2016). Supporting effective health insurance cards for patients receiving antiretroviral therapy at an outpatient medical center Thanh Xuan district, Hanoi Medical Practice Magazine, No. 5/2016, Page 159.