

**MINISTRY OF EDUCATION MINISTRY OF HEALTH
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National Institute of Hygiene and Epidemiology

DUONG DUC THIEN

**DEVELOPMENT AND RESULT OF PILOTING BASIC
BENEFIT PACKAGES FOR TREATMENT, MANAGEMENT
OF HYPERTENSION AND DIEBETES AT COMMUNE
HEALTH STATION IN SOC SON DISTRICT, HA NOI
IN 2017-2018**

Specialization: Public Health

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PUBLISHED WORKS RELATED TO THE THESIS

1. Duong Duc Thien, Vu Sinh Nam, Tran Thi Mai Oanh, Nguyen Tuan Viet, Nguyen Khanh Phuong (2019): Cost estimate of screening of hypertension and diabetes in basic benefit at commune health stations. *Journal of Preventive Medicine*, Vol 29, No. 13 - 2019.
2. Duong Duc Thien, Nguyen The Vinh, Tran Thi Mai Oanh, Vu Sinh Nam (2022): Results of intervention on training of hypertension and diabetes knowledge for commune health workers in Soc Son district, Hanoi, 2017 - 2018. *Journal of Preventive Medicine*, Vol 32, No. 6 - 2022.
3. Duong Duc Thien, Nguyen Hoang Giang, Tran Thi Mai Oanh (2023): Evaluation of intervention on strengthening management of hypertension and diabetes at commune health stations in Soc Son district, Hanoi, 2017 - 2018. *Vietnam Journal of Medical Science*, Vol 522, No. 1 - 2023.

INTRODUCTION

Worldwide, non-communicable diseases (NCDs) accounts for 70% of cause of death. In Vietnam, about 592.000 death cases are related to NCDs which account for 81,4% of total dead cases. In 2021, prevalence of hypertension in adult is about 26,2% or equivalent to 17 million cases; prevalence of diabetes in adult group is about 7,96%; equivalent to 4,6 million cases, prevalence of pre-diabetes is about 17,8%.

According to Circular No 33/2015/TT-BYT of Ministry of Health dated October 27, 2015, one of the functions and duties of commune health station is to prevent, treat and manage NCDs. Resolution No 20/NQ-TW of the Party's Central Committee Term XII stipulate: "Implement control and prevention of NCDs with focus on capacity of screening, early detection and disease control; strengthen management and treatment of NCDs, chronic diseases,...". Treatment and management of hypertension and diabetes at community level help to lower health care cost and reduce hospital overcrowding at tertiary and secondary level.

However, there are still about 70-80% of NCDs patients who have not been managed and treated; operational efficiency of CHSs in providing treatment and management of hypertension and diabetes at CHSs is still low; There is no clear coordination and integration between medical examination and treatment and prevention.

This thesis is compiled with the use of State-level research project's data, namely: "Research on building a package of basic health services towards the universal health care coverage based on health insurance in Vietnam" implemented by the Institute of Health

Strategy and Policy and the Department of Planning and Finance. This study was conducted with the following objectives:

1. Develop a package of basic medical services in the treatment and management of hypertension and diabetes at commune health stations in 2017.

2. Describe the current situation of providing basic medical service packages in the treatment and management of hypertension and diabetes at commune health stations in Soc Son district, Hanoi in 2017.

3. Evaluation of trial results of basic medical service packages in treatment and management of hypertension and diabetes at commune health stations in Soc Son district, Hanoi, 2017 - 2018.

New points about science and practical value of the topic

This is the first study in Vietnam related to the development of a basic health service package at the grassroots level. The specific contribution of the study is to propose a list of basic services and drugs in guiding CHSs to treat and manage hypertension and diabetes at the grassroots health level, including: screening services (opportunistic, proactive), diagnostic examination, treatment, counseling, disease management; 9 types of antihypertensive drugs and 6 types of diabetes drugs in the treatment of the disease. This is a proof to build a basic health service package for other priority health issues at the grassroots level.

The study has shown a picture of the current situation of basic health service package delivery at commune health stations and the necessary conditions to provide this service package with quality and effectiveness. Service provision for treatment and management

of hypertension and diabetes at CHSs is affected by a number of policies such as hospital autonomy, supply chain of drugs.

The research has estimated the cost of providing the list of basic services in the treatment and management of hypertension and diabetes at the commune level, including three components: (1) the cost of medical care per visit at CHS; (2) the cost of performing routine preventive activities of the CHS per capita; (3) The cost of screening for hypertension and diabetes at the commune level calculated by screening times; thereby determining the cost of implementing the list of basic services in the treatment and management of hypertension and diabetes at the commune level.

STRUCTURE OF THE THESIS

The thesis consists of 117 pages excluding references and appendices, 22 tables and 8 figures; specifically 2 pages of introduction, 25 pages of literature review, 29 pages of methodology; 43 pages of research results, 22 pages of discussion, 2 pages of conclusion and 1 page of recommendations.

Chapter 1. LITERATURE REVIEW

1.1. Some concepts

Primary health care (PHC) includes health care in villages, hamlets, communes, wards, townships, districts, townships; is the foundation to fulfill its role as the front line in disease prevention, health care as well as screening, early detection and control of diseases.

Package of basic health services is the package of medical services and drugs is defined under the 2014 revised Health

Insurance Law as essential medical services for health care in line with the health insurance fund's ability to pay.

NCDs also are known as chronic diseases, tend to be long-lasting, slowly progressive, and are the result of a combination of genetic, physiological, environmental, and behavioral factors. 04 main types of NCDs are cardiovascular disease, cancer, chronic respiratory disease and diabetes.

Treatment and management of non-communicable diseases is a process performed by district health facilities, including diagnosis, treatment, emergency, and counseling for people with a number of common non-communicable diseases in the direction of: instructions of the Ministry of Health and the scope of the establishment's license for medical examination and treatment.

1.2. Burden of disease in Vietnam

By 2019, NCDs are still the leading cause of death in Vietnam, larger than all other causes of death combined, with an estimated 592,000 deaths due to NCDs, accounting for 81.4% of the total number of deaths. death from any cause. In which, deaths are mainly due to cardiovascular diseases, diabetes, cancer and chronic respiratory diseases, accounting for 66.2% of all deaths from all causes. 41.5% of NCD deaths in Vietnam are aged 70 and bellow.

1.3. Policy on prevention, treatment and management of NCDs in Vietnam

On May 10, 2017, the Government issued Decision No. 622/QD-TTg on promulgating the national action plan to implement the 2030 agenda for sustainable development; Accordingly, the goal by 2030 is to reduce by 20-25% the mortality rate before age 70 due to

NCDs; focus on providing management, monitoring and ongoing care services for patients in CHSs.

On August 6, 2014, the MoH issued Decision No. 2919/QD-BYT of the Ministry of Health on "Professional documents guiding medical examination and treatment at CHSs of communes and wards", including instructions for diagnosis and treatment of hypertension, diabetes; followed by Decision No. 3756/QD-BYT dated June 21, 2018 promulgating guidelines on prevention, early detection, diagnosis, treatment and management of hypertension and diabetes for public health facilities. On December 20, 2019, the Ministry of Health issued Decision No. 5904/QD-BYT on "Guiding the diagnosis, treatment and management of some NCDs at CHSs".

1.4. Treatment and management of hypertension and diabetes at primary health care level

1.4.1. Treatment and management of hypertension and diabetes at primary health care levels internationally

Each country has its own NCD management and treatment system, corresponding to its structure of the health system. In particular, the PHC level manages the mild cases of NCDs, the more severe cases are sent to other specialists/facilities at higher levels according to professional guidance.

WHO has developed the NCDs Essential Care Package (WHO-PEN) for primary health care. The WHO-PEN package aims to provide cost-effective services, including low-cost methods for early detection and diagnosis, treatment and management of NCDs at an affordable cost.

In some countries such as Australia and the UK, primary health care relies heavily on General Practitioners to provide basic care services. People with NCDs are managed and treated by GPs, and then transferred to specialized doctors or facilities at higher levels if intensive care is needed.

1.4.2. Management and treatment of hypertension and diabetes at commune level in Vietnam

In the period 2011-2020, NCDS prevention and control activities are carried out mainly through the National Target Program on Health, including the project on prevention and control of hypertension and diabetes. In addition, some localities also have their own intervention programs, such as interventions to strengthen the management and outpatient treatment of some chronic diseases in Bac Giang; WHO intervention on integrated care model in NCD prevention and management at CHSs in Ha Nam, community intervention project for a Healthy Heart in Ho Chi Minh. This projects focus on capacity building for health workers at the basic health level, improving the availability of drugs and medical equipment to strengthen the management and treatment of hypertension and diabetes at the commune level.

However, management and treatment at CHSs still faces many difficulties related to mechanism of integration and coordination, policies on health financing, capacity of health workers.

1.5. Developing basic benefit package

1.5.1. Building basic basic benefit package internationally

Each country has different approaches to develop basic health service package. However, packages often include diagnostic

services, treatment, preventive services, health promotion; have a list of diseases/health problems or services that need to be considered for inclusion or exclusion from the package depending on the political situation, selected health priority and ability to pay.

Developing and implementing a health service package requires political commitment and support, mobilizing social resources and the participation of many parties, including commitment to implementation, the relationship between service buyers and providers, appropriate payment methods, facilities and equipment, health worker's capacity and implementation costs.

1.5.2. Developing a package of basic health services in Vietnam

The MoH issued Circular No. 43/2013 dated December 11, 2013 detailing professional and technical division for 4 levels including central, province, district and commune. The list of drugs used in medical facilities covered by the health insurance fund has been updated several times by the MoH according to Circular No. 40/2014/TT-BYT dated November 17, 2014 followed by Circular 30/2018 /TT-BYT, which includes drugs to treat hypertension and diabetes at the commune level. The MoH issued Circular 39/2017/TT-BYT dated October 18, 2017 on the package of health services deployed at the grassroots level.

Currently, the service package has not been developed for each health issue but is determined through the development and issuance of legal documents or professional documents on technical services and drugs, but it is incomplete with regard to principles, methods and cost of implementation.

Chapter 2. RESEARCH METHODOLOGY

2.1. Research subjects

- Documents, professional guidelines on diagnosis, treatment, care and management of hypertension and diabetes of the MoH, World Health Organization and international organizations.
- List of drugs and services covered by health insurance.
- Commune health station.
- Patients with hypertension and diabetes managed at CHSs.

2.2. Time and location of the study

2.2.1. Research implementation time

The study was carried out from October 1, 2015 to September 30, 2019. For field survey activities, the study is divided into 2 phases: (i) assessing service delivery capacity of CHSs before the intervention, and (ii) piloting the basic package in the treatment and management of hypertension and diabetes at CHSs.

2.2.2. Field study site

This study was conducted in Hanoi city, which is one of six provinces selected from the National-level Research Project: "Research on building a package of basic health services towards universal health care coverage in Vietnam". Intervention activities were implemented at all 26 CHSs in Soc Son district based on the following criteria: good cooperation of the local health authorities; access by car to facilitate monitoring plan.

2.3. Study methodology

2.3.1. Objective 1: Develop basic benefit packages for treatment, management of hypertension and diabetes at CHSs

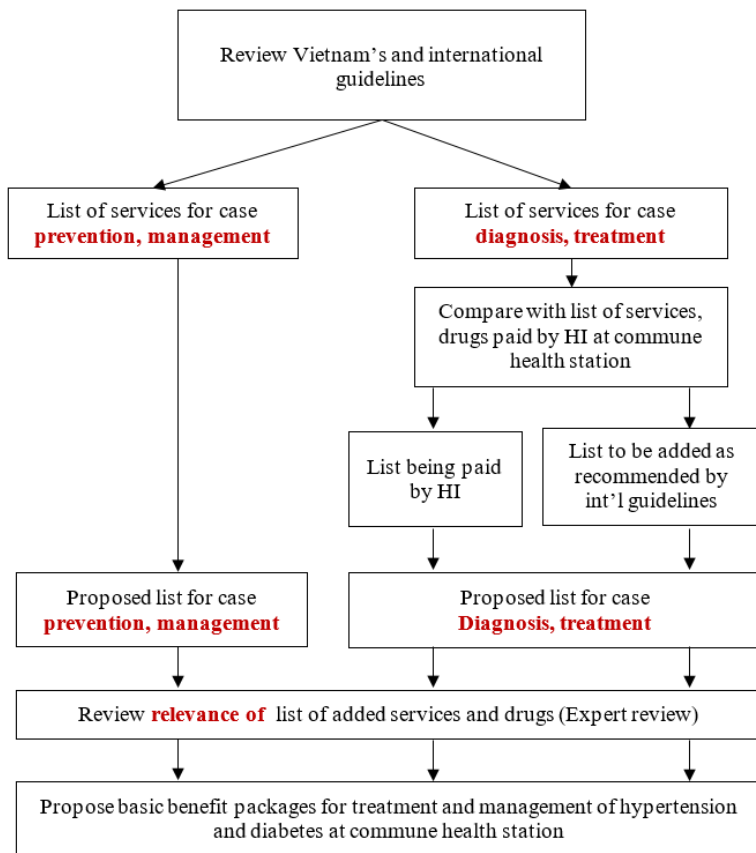


Figure 0.1. Flow of developing basic benefit packages

2.3.2. Objective 2 và Objective 3: Situational analysis of providing basic benefit packages for treatment, management of hypertension and diabetes at CHSs in Soc Son district, Hanoi in 2017 and evaluate piloting results for the 2017 - 2018 period.

The study was carried out with a series of 3 activities as follows:

- Pre-intervention assessment: Describe the current status of treatment and management of hypertension and diabetes at CHSs in Soc Son district, Hanoi in 2017.

- Development of intervention activities: Support CHSs to implement basic health education for treatment and management of hypertension and diabetes.

- Post-intervention assessment: Quantifying the change in service delivery capacity, availability of hypertension and diabetes drugs , knowledge and practice of health workers, health care costs covered by health insurance and benefits when use of treatment and management services for hypertension and diabetes at CHS.

- Time and place of implementation: The baseline survey was conducted in Soc Son district from June 2016 to June 2017. Intervention activities were implemented at all CHSs in Soc Son district from November 2017 to November 2018.

- Study design: Interventional study, pre and post comparison without a control group; quantitative and qualitative analysis.

- Cost of treatment and management of hypertension and diabetes at CHSs: Estimate the budget needed for CHS to provide treatment and management services for hypertension and diabetes including xosts for provision of preventive, health promotion and medical services; cost of providing screening services for hypertension and diabetes at CHSs to recommend for health insurance package. The topic combines approaches in cost estimation including: a top-down approach to estimate actual costs and a bottom-up approach to estimate implementation costs according to standard guidelines and ideas.

Chapter 3. RESULTS

3.1. Results for objective 1

The results revealed the following key findings:

- There are only general treatment guidelines for all levels, no specific guidelines for treatment of hypertension and diabetes at commune levels.

- Screening and counseling for patients with hypertension and diabetes are listed according to the treatment guidelines of the MoH as well as internationally but are not included in the technical classification as well as the list of services covered by health insurance at the commune level.

- Most of the drugs required for the treatment of hypertension and diabetes are already on the list of drugs covered by health insurance at the commune level, however, drugs at CHSs are mainly single drugs, not yet combined. Diabetes management and treatment at CHS has not been widely implemented.

3.2. Research results for objective 2

At the time before the intervention, 100% of CHSs reported that they carried out community hypertension screening as well as active screening for hypertension at station facilities. There are 25/26 CHSs providing periodic medicine for hypertensive patients with a period of 30 days. The number of antihypertensive drugs available at CHSs ranges from 3 to 5 drugs. The number of therapeutic drug groups is also quite diverse, mainly belonging to 3 groups: calcium channel blockers (100%), ACE inhibitors (95.8%) and diuretics (91.7%).

Table 0.6. Availability of hypertension drugs at CHS in Soc Son district, pre-intervention

Indicator*	2017 (n=25)
Average quantity of hypertension drugs available at CHSs (minimum - maximum value)	4,6 (3 - 5)
% CHSs have hypertension drug on the proposed list	
- 2 drugs	8,3
- 3 drugs	91,7
% CHSs with calcium channel blockers	100
% CHSs has yeast to change drug regimen	95,8
% CHSs has a diuretic	91,7
% CHSs with beta sympathomimetic drugs	4,2
% CHSs has angiotensin II blocker	0

For diabetes management and treatment: Only Mai Dinh and Phu Linh has piloted periodic drug dispensing (Metformin and Gliclazide). The number of diabetes patients being treated at these 2 CHSs is 78 and 19 patients, respectively. The maximum number of days of periodic drug supply is 30 days.

3.3. Research results for target

3.3.1. Changes in service provision for treatment and management of hypertension and diabetes

After the intervention, routine treatment for hypertensive patients is still maintained at 25/26 CHSs in Soc Son district. In which, the number of hypertensive patients who visit and receive monthly medical treatment has increased year by year, with an average of 163 patients/CHS in 2017, 190 patients/CHSs in 2018 and 222 patients/ respectively. The number of days of periodic dispensing of drugs to hypertensive patients is still 30 days.

Table 0.7. Average number of hypertension patients managed on the list and periodically dispensed drugs at CHS

Indicator*	2017	2018	2019
Number of hypertension patients managed on the list at CHS (mean, minimum - maximum)	265,6 (115-628)	306,5 (121-643)	366,2 (131-666)
Number of hypertension patients treated monthly at CHS (mean, minimum - maximum)	163,2 (30-357)	190 (30-436)	222 (30-501)

The number of CHSs in Soc Son district that have implemented diabetes management and treatment increased significantly. In the first 6 months of 2019, all CHSs in Soc Son have managed the list of diabetes patients (increasing by 4 stations) and 17/26 CHSs have regular diabetes medicine (increasing by 15 stations).

Table 0.8. Average number of diabetes patients managed on the list and periodically dispensed drugs pre and post intervention

	2017		2018		2019	
	n	Mean (min-max)	n	Mean (min-max)	n	Mean (min-max)
Number of patients with diabetes managed on the list at CHS	22	71,3 (10-150)	25	83,7 (12-155)	26	108,2 (9-205)
Number of patients with diabetes receiving monthly treatment at CHSs	2	48,5 (19-78)	9	28 (5-105)	17	39,4 (6-182)

3.3.2. Changes in the availability of drugs to treat hypertension and diabetes

The quantity and diversity of antihypertensive drugs in CHSs were maintained at a relatively good level both before and after the intervention. On average, 1 CHS has about 5 antihypertensive drugs, from 2 to all 9 drugs in the proposed list of the study.

Table 0.9. Changes in the availability of hypertension drugs at CHSs in Soc Son district before and after intervention

	Pre (n=24)	Post (n=24)	P value **
Hypertension drugs available at CHSs (min - max)	4,6 (3 - 5)	4,6 (2 - 9)	0,3427
% CHSs have hypertension drug on the proposed list			
- No drug	0	0	0,5027
- 1 drug	0	4,2	
- 2 drugs	8,3	8,3	
- 3 drugs	91,7	70,8	
- 4 drug and above	0	16,7	
% CHSs with calcium channel blockers	100,0	100,0	---
% CHSs with ACE inhibitors	95,8	91,7	0,5637
% CHSs with diuretics	91,7	91,7	1,0000
% CHSs with drugs affecting sympathetic nervous system	0	16,7	0,0455
% of CHSs with beta-blockers	4,2	12,5	0,3173

For drugs to treat diabetes at CHSs: Although the treatment of diabetes at the commune level in Soc Son district is still at the initial stage, the results show a positive improvement in the availability of antidiabetic drugs at CHS. There have been 17/26 CHSs that have

periodically dispensed drugs for diabetes patients (increased by 15 CHSs), of which all 17 CHSs are available with both Metformin and Gliclazide, only Phu Linh Commune has insulin for injection.

3.3.3. Changes in knowledge and practice of doctors

For the practice of diagnosing diseases, most of the medical staff can rely on the necessary medical information to make an accurate diagnosis according to the treatment guidelines of the MOH. The proportion of doctors/doctors with correct diagnosis increased from 82.6% to 100% for grade 1 hypertension ($p=0.046$) and from 60.9% to 90% for type 2 diabetes ($p=0.083$).

3.3.4. Changes in people's entitlements

The interview results showed that most of the hypertensive patients had their blood pressure measured (100%), medication dispensed (94.8%) and counseling (92.8%). The proportion of patients with blood and urine tests increased significantly after the intervention ($p<0.001$), from 23.2% to 52.5% and 20.9% to 33.1%, respectively. However, only less than 5% of patients before and after the intervention were examined for risk factors.

Table 0.11. Service use of hypertension patients at CHS before and after intervention

Service	Pre (n=392)	Post (n=387)	P value
Examination (%)			
- Blood pressure	100	100	---
- Heart and lungs	27,6	56,1	< 0,001
- Height and weight	6,2	5,2	0,540
-Waist, butt	3,9	2,6	0,313
Test (%)			

Service	Pre (n=392)	Post (n=387)	P value
- Blood test	23,2	52,5	< 0,001
- Urine test	20,9	33,1	< 0,001
Drugs Distribution	82,7	94,8	< 0,001
Counselling (%)	88,4	92,3	0,070

When asked about the overall satisfaction with the use of hypertension and diabetes services at CHSs, the number of satisfied patients has a high rate both before the intervention (97.1%) and after the intervention (99.2%). When asking hypertensive patients about the improvement of medical care at CHS before and after the intervention, 75.2% said there was an improvement; in which the most is about the attitude of the doctor/medicine (61.2%); improved professional advice (20.2%), more thorough examination (19.9%), better facilities (18.3%), better equipment (17.1%).

3.3.5. Necessary conditions for medical training

To ensure that services and drugs for the management and treatment of hypertension and diabetes are adequately provided at CHSs, the following conditions must be met: (1) CHS staff must have sufficient knowledge and good practice in diagnosis, treatment and counseling for patients; (2) Availability of technical services and drugs must be ensured; (3) Services must be paid in an appropriate manner to encourage the provision of basic health services at the commune level; (4) There is close monitoring and supervision based on operational indicators of service supply and use; (5) Management capacity to ensure the provision of services; (6) Promulgated legal documents must be consistent.

3.3.6. Cost impact forecasting research

The analysis results show that the estimated cost of implementing the List if only medical services are included is VND 361,730,546,732; if including medical treatment and screening for hypertension and diabetes, the cost to pay for the commune level from the health insurance fund is VND 458,903,321.57. According to WHO, the proportion of health insurance expenditures for primary health care at the commune level should reach 20%.

Table 0.1. Budget impact for applying basic benefit package for management and treatment of hypertension and diabetes at commune health station

Indicator	Cost (VND)
Estimated cost to implement the List	458.903.321.57
Cost savings compared to treatment of hypertension at the upper level	73.257.691.241
Cost savings compared to treatment of diabetes in the upper line	134.757.869.774
Cost savings due to reduced cases of complications due to hypertension	72.811.434.347
Total cost savings	280.826.995.362

Chương 4. DISCUSSION

4.1. Develop a list of basic services in the treatment and management of hypertension and diabetes at the commune level

This is the first study in Vietnam on building a list of basic services; the process should be carried out on clear principles: Having a scientific and practical basis; (2) Transparency; (3) Involvement of stakeholders. The list of basic services for the treatment and management of hypertension and diabetes at the primary health care level, including services on screening (opportunistic, proactive), diagnostic examination, treatment, counseling, and disease management; 9 types of antihypertensive drugs and 6 types of diabetes drugs in the treatment of the disease.

4.2. Pilot implementation of intervention activities

4.2.1. Actual situation of service and drug supply before intervention

With the treatment and management of hypertension at the commune level, there are 25/26 CHSs in Soc Son that have periodically dispensed drugs for patients with hypertension every 30 days. The number of antihypertensive drugs available at CHSs is from 3 to 5 drugs, mainly belonging to 3 groups: calcium channel blockers, ACE inhibitors and diuretics. However, in Soc Son, there are only 2 CHSs that are piloting treatment for diabetes patients, the remaining CHSs only manage the list of diabetes patients in the area. In addition to medical care and drug, patient management is very important to always be monitored for disease status.

4.2.2. Changes in CHS's capacity to provide treatment and management of hypertension and diabetes services

The results show that the capacity of CHSs has improved significantly with the number of patients with hypertension and diabetes managed and treated. Especially with diabetes, by the time of the intervention, 17/26 CHSs provided periodic drug distribution for patients every 30 days (an increase of 15 CHSs compared to 2017). Although the intervention period of the study is not too long, it has initially effectively supported the locality in meeting the people's health care needs.

As for ensuring the availability of CHS drugs, at the end of the study's intervention, CHSs are maintaining relatively good numbers of drugs and diversity of drug classes to treat hypertension, as well as ensuring adequate supply of drugs for the treatment of diabetes patients at the commune level when expanding the treatment scale from 2 to 17 CHSs. This helps CHSs better meet the treatment needs and increase the effectiveness of treatment.

4.2.3. Changes in people's entitlements

The post-intervention evaluation results showed that the indicators of the percentage of hypertensive patients in the area who went to CHS for testing as well as receiving periodic drug distribution increased significantly and had statistical significance ($p < 0.001$). The index of the proportion of patients who were consulted also increased compared to before the intervention, although it was not clear ($p > 0.05$). Similar to diabetes, although the total number of patients managed and treated at CHS before and after the intervention is not much, all indicators of the number of diabetes patients using the service, the percentage of people being examined, are done. Testing, periodic drug dispensing increased over the years and had statistical significance ($p < 0.01$). The analysis

results also show that the average amount for medical care and the average cost/prescription of hypertensive and diabetic patients increased significantly after the intervention.

4.2.4. Changes in knowledge and practice of doctors/medical staff at CHSs

In general, the knowledge of medical doctors at the commune level on the management and treatment of hypertension and diabetes has improved markedly after the intervention. The medical doctors can base on the basic clinical/paraclinical information to make a diagnosis and prescribe a reasonable medication for the patient, this rate is 100% and 78.3% respectively for hypertension. grade 1, 90% and 91% for type 2 diabetes. However, commune health care providers are still very limited in patient care counseling when no one can fully answer about 8 issues that need counseling according to the guidelines. of the MoH.

4.3. Conditions to ensure CHSs providing basic services in the treatment and management of hypertension and diabetes

Research results show that there are similarities with other countries in terms of conditions necessary to ensure basic service provision for hypertension and diabetes at primary health care levels; it is politically supportive and oriented as in Peru, Chile; apply an appropriate payment method such as the performance-based payment method in Uruguay.

To ensure that the health care package is fully provided in accordance with regulations, political orientations and commitments play a very important role. It is necessary to have overall policy conditions for health facilities to be able to provide these basic

services, that is: to have sufficient professional capacity to provide primary health care; ensure the availability of technical services and drugs; ensure sufficient financial resources; services should be paid in an appropriate manner to encourage service delivery at the commune level as experienced in Thailand.

4.4. Estimating the cost of providing primary health education in the treatment and management of hypertension and diabetes at the commune level and budgetary impact

4.4.1. Cost of providing basic health education in the treatment and management of hypertension and diabetes at the commune level

The cost estimation results show that the cost of 1 visit at the CHS in Hanoi is 105,451 VND and under the depreciated cost option is 101,796 VND. According to research results in 2011 in 76 communes in 2 provinces of Hai Duong and Thai Nguyen, the cost is 44,593 VND/visit at CHS.

The study also estimated that the average cost of prevention per capita in the commune in Hanoi is 58,458 VND under the full cost option, the cost of hypertension screening/time at CHS is 9,708 VND, the cost of diabetes screening at CHS is equal to VND 9,708. vote/person is 5,958 VND, expenditure for diabetes screening at CHS by capillary test/person is 13,782 VND. This result provides important background data for the development of financial policy for prevention and control sector. management of BKLN.

4.4.2. Budget impact of the list of basic services in the treatment and management of hypertension and diabetes at the commune level

According to the results of the study, if the health insurance covers the list of basic services in the treatment and management of hypertension and diabetes at the commune level including medical treatment and screening for hypertension and diabetes, the total cost will be paid to the commune level in Ha Noi. Internal from the health insurance fund will be 458 billion. However, the current proportion of health care expenditures for the commune level is still too low compared to the 20% recommended by WHO.

4.5. Policy inadequacies affecting the implementation of medical education in the treatment and management of hypertension and diabetes at the commune level

Policy on online medical examination and treatment with health insurance: According to the Law on Health Insurance, from 2016, people will be free to choose district-level medical examination and treatment facilities within the province/city. This policy was born in the context of weak grassroots health care capacity.

Hospital autonomy policy: Autonomy policy puts pressure on units in balancing revenue and expenditure; medical facilities must expand all forms of medical examination and treatment in order to attract patients and increase revenue for the unit.

Price policy for medical services: Service prices promulgated according to Circular 39/2017/TT-BYT/2018/TT-BYT adjusted for technical services performed at CHSs are only calculated at 70% of the price bracket. Meanwhile, the cost of these technical services at the commune level is not lower than at the district level; Some services are not priced enough to cover the cost.

CONCLUSION

1. Develop a package of basic medical services in the treatment and management of hypertension and diabetes at commune health stations: Screening and counseling services for patients with hypertension and diabetes are included in the treatment guidelines of the MoH as well as internationally, but not in the list of commune services. Need to add drugs Ibesartan and Labetalol, give Furosemide in the treatment of hypertension; introduction of Acarbose and injectable insulin in the treatment of diabetes.

2. Actual situation of providing basic services in treatment and management of hypertension and diabetes at the commune health station of Soc Son district, Hanoi: There are 25/26 CHSs providing periodic medicine for hypertensive patients with a period of 30 days. The average number of hypertensive patients receiving periodic medication at these 25 CHSs is 163 people. The treatment and management of diabetes only manage the list.

3. Results of basic service provision in treatment and management of hypertension and diabetes at CHSs: The number of antihypertensive drugs at CHS increased compared to pre-intervention (5-9 drugs). The number of CHSs dispensing drugs to treat diabetes periodically increased. 100% of health workers interviewed correctly diagnosed hypertension with an efficiency index of 17%; for diabetes is 90% with an efficiency index of 47.6%. The cost of hypertension screening at the commune level is 9,708 VND; for diabetes screening for people above 30 years old at CHS is 5,958 VND, by capillary test is 13,782 VND. Screening at CHS in Hanoi can save an estimated cost of 280 billion VND due to savings in treatment at the upper level and complications.

RECOMMENDATION

1. For the Ministry of Health

- The package of basic health services at the commune level for hypertension and diabetes should be periodically reviewed and updated according to professional guidelines.

- Financial resources are needed to pay for screening and counseling for hypertension and diabetes.

- Studying regulations on access to health centers to adjust in the direction of increasing the use of treatment and management services for hypertension and diabetes at CHSs.

2. For Hanoi Department of Health

- Direct the district health facilities to ensure the supply of all kinds of drugs and in sufficient quantities for the treatment of hypertension and diabetes at CHSs continuously and without interruption.

- Develop plans, programs and organize training to continuously update knowledge and practice of treatment and management of hypertension and diabetes for CHSs.

- Mobilize financial resources to carry out screening for hypertension and diabetes at CHSs for people: prioritize investment in CHSs to upgrade facilities and equipment to ensure the provision of basic medical services.

- Periodically check, monitor and evaluate the operation of the CHS in the treatment and management of hypertension and diabetes to detect problems and make timely adjustments.