

A REVIEW OF MOTIVATION AND JOB SATISFACTION OF DISTRICT LEVEL HEALTH WORKERS IN VIETNAM

Hung Phung Thanh
Vietnam

49TH International Course in Health Development
September 17, 2012 – September 6, 2013

KIT (ROYAL TROPICAL INSTITUTE)
Development Policy & Practice/
Vrije Universiteit Amsterdam

TITLE

**A REVIEW OF MOTIVATION AND JOB SATISFACTION OF
DISTRICT LEVEL HEALTH WORKERS IN VIETNAM**

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

By

Hung Phung Thanh, Vietnam

Declaration:

Where other people's work has been used (either from a printed source,
internet or any other source) this has been carefully acknowledged and
referenced accordance with departmental requirements.

The thesis **A review of motivation and job satisfaction of
district level health workers in Vietnam** is my own work



Signature:

49th International Course in Health Development (ICHD)

September 17, 2012 – September 6, 2013

KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam

Amsterdam, the Netherlands

September 2013

Organized by:

KIT (Royal Tropical Institute), Development Policy & Practice

Amsterdam, the Netherlands

In co-operation with:

Vrije Universiteit Amsterdam/ Free University of Amsterdam (VU)

Amsterdam, the Netherlands

TABLE OF CONTENTS

List of tables	iv
List of figures	iv
List of abbreviations	v
Acknowledgement	vi
Definitions	vii
Abstract	viii
Introduction	ix
Chapter 1: Background information of Vietnam	1
1.1. Geography.....	1
1.2. Demography	1
1.3. Socio – Economic	1
1.4. Education	1
1.5. Health status	2
1.6. Structure of health system in Vietnam	2
Chapter 2: Problem statement	4
Chapter 3: Methodology	6
3.1. Conceptual framework	6
3.1.1. Definitions of Motivation and Job satisfaction	6
3.1.2. The difference between motivation and job satisfaction.....	6
3.1.3. Conceptual framework	6
3.2. Study design.....	8
3.3. Ethic consideration	9
3.4. Limitations of study	9
Chapter 4: factors influencing to motivation and job satisfaction of HWs at district level	10
4.1. Motivation and job satisfaction of HW.....	10
4.2. Company policies	10
4.3. Quality of supervision	10
4.4. Relations with others	11
4.5. Job status.....	11
4.6. Personal life	11

4.7. Remuneration	12
4.8. Job security	12
4.9. Working environment.....	12
4.10. Achievement	13
4.11. Career Advancement.....	13
4.12. Personal Growth	14
4.13. Job interest.....	14
4.14. Recognition.....	14
4.15. Responsibility	14
Chapter 5: Policies and practices influencing motivation and job satisfaction of HWs in Vietnam	16
5.1. Company policies	16
5.2. Quality of supervision	16
5.3. Personal life	16
5.4. Remuneration	17
5.5. Working environment.....	18
5.6. Career Advancement	18
5.7. Personal growth	18
5.8. Recognition	20
5.9. Reflecting the major gaps of Vietnam current response about improving motivation and job satisfaction of health workers	21
Chapter 6: Identify practices to improve motivation and job satisfaction in other countries	22
6.1. Company policies	22
6.2. Quality of supervision	22
6.3. Relations with others	23
6.4. Personal life	23
6.5. Remuneration	23
6.6. Working environment.....	24
6.7. Career advancement.....	24
6.8. Personal growth	25
6.9. Recognition	26
Chapter 7: Discussion	27

Chapter 8: Conclusion and recommendations	31
8.1. Conclusion.....	31
8.2. Recommendation.....	32
List of references.....	34
APPENDIX	39
Appendix 1: Structure of health system in Vietnam	39
Appendix 2: Some main contents of Decree 64/2009/ND-CP on policy with HWs and staffs working in disadvantage areas.....	40
Appendix 3: Some main contents of Decree No.56/2011/ND-CP regulating the preferential supplements for HW in public health sector ...	41
Appendix 4: Case study in Rwanda in 2006 – Performance based finance	42
Appendix 5: Case study in Busoga Diocese, Uganda	44
Appendix 6: Case study of Kazakhstan - Privatization and Per-capita payment in Primary Health Care	46
Appendix 7: Case study in 2 district of Zambia in 2006 - pilot study on nonfinancial incentive and financial incentive	47
Appendix 8: Case study in Zambia - Zambian Health Worker Retention Scheme 2003	49
Appendix 9: Case study in Malawi in 2005 - 6 years Emergency Human Resource Program.....	51
Appendix 10: Some strategies of World Health Organization.....	53

List of tables

Table 1: Distinguish between motivation and job satisfaction	6
Table 2: Some indicators of Human Resource for Health In Malawi in years 2004 and 2009	53
Table 3: Strategies to improve attraction, recruitment and retention of health workers in rural and remote areas	54

List of figures

Figure 1: Two-factor theory of Herzberg	6
Figure 2: Structure of health care system in Vietnam	39
Figure 3: Improved HWs satisfaction due to better human resource management	44
Figure 4: Service with increased utilization	45

List of abbreviations

Center Board of Health	CBH
Childhood Mortality Rate	CMR
Commune Health Station	CHS
Commune People Committee	CPC
Communicable Disease	CD
Continuing medical education	CME
Disability Adjusted Life Year	DALY
District Health Office	DHO
District People Committee	DPC
District Preventive Health Center	DPHC
Emergency Human Resource Program	EHRP
Family Life Education Program	FLEP
Gross Domestic Product	GDP
Hanoi School of Public Health	HSPH
Health Facilities	HF _s
Health worker	HW
Human Resource for Health	HRH
Infant Mortality Rate	IMR
Joint Annually Health Review	JAHR
Maternal Mortality Ratio	MMR
Millennium Development Goals	MDGs
MOH	MOH
National Strategy for Health	NSH
Non-communicable Disease	NCD
Provincial Department of Health	PDoH
Provincial People Committee	PPC
World Health Organization	WHO
Zambia Health Worker Retention Scheme	ZHWRS

Acknowledgement

I would like to thank the Ford Foundation Fellowship for giving a great opportunity to me to attend this International Course of Health Development

I would like to thank coordinators of ICHD for their supports to course

Special thanks to my thesis advisor and thesis backstopper who spent valuable time to advise and guide me to complete this thesis.

Special thanks to my colleagues who gave comments and supports in searching references.

I also would like to thank all my classmates who helped, shared their knowledge and experiences in this course.

Definitions

Health worker: "health workers are all people primarily engaged in actions with the primary intent of enhancing health"¹.

Motivation: "Motivation in the work context is defined as an individual's degree of willingness to exert and maintain an effort towards organizational goals. It is an internal psychological process and transactional process: result of interactions between individuals and work environment, or broader social context"².

Job satisfaction: "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"³.

Abstract

Vietnam has been facing with shortage and misdistribution of human resource for health which cause negative impacts on quality of health care. At district level, these problems are more serious. Low motivation and low job satisfaction are reasons could be explained for difficulties to recruit and retain health workers, contribute to strengthen shortage and misdistribution of health workforce. In this thesis; the factors, policies in Vietnam and interventions in other countries effecting to motivation and job satisfactions of health workers were explored in order to identify strategies to improve this situation.

In general, factors suggested by 2-factor theory of Herzberg have influences to motivation and job satisfaction of health workers. Health workers are motivated and satisfied by relation with colleagues, recognition from community, job interest. In contrast, low remuneration, low quality of supervision, poor working environment, poor relation with manager and low personal growth are key factors which reduce motivation and job satisfaction of health workers. Vietnam established policies to address these factors but there are problems in policy implementation process such as inadequate allowances, unmet-need training topics, inadequate equipment, and lack of supportive supervision. Some different interventions from other countries focused to deal these challenges with evidence of effectiveness. By improving motivation and job satisfaction of health workers; performance of individual and organization, and quality of health care will get better.

Based on findings of this thesis and strategies suggested by World Health Organization to improve retention of health worker, recommendations were made to tackle important factors influencing motivation and job satisfaction of health workers at district level in Vietnam.

Key words: health workers, motivation, job satisfaction, Vietnam, human resource.

Word count: 11.992 words (excluding tables, figures, Appendixes).

Introduction

My background is a bachelor of public health. After graduating Hanoi School of Public Health (HSPH) in 2008, I have been working in Health Management faculty of this school. This school has responsibility for undergraduate, graduate and specialist training programs. School also has carried out large researches; some of them were the largest in the world at their time. My main responsibilities are to coordinate and assist for some modules such as “project management” and “management principles and basic skills”. I worked as a teaching assistant of some training courses on leadership and management, decentralized health management which were funded by GIZ organization. In terms of research, I had many opportunities to participate in some researches related to human resource for health, and reproductive health. Working at HSPH requires me to continuously enhance my knowledge and experiences of public health, especially in health management.

During my working time in public health and health system, there is one question that frequently asked by my student is “how to address and improve quality of health care”. Human resource for health is one of main factors influencing to quality of health care. Recently, in Vietnam, human resource for health itself is facing with shortage and unequal distribution of health workers. Those issues are more severe at district level; contribute to influence on low quality of health care. If health workers have good motivation and job satisfaction, it will help to retain and improve performance of health workers, then to improve quality of health care. It is necessary to have further researches on this topic. It would be very useful for me to improve my professional knowledge about human resource for health in Vietnam. After having comprehensive knowledge, I will be more confident to share my knowledge for my student in terms of human resource management, project management and health planning as well.

Therefore, in my thesis, I would like to figure out factors and policies influencing on motivation and job satisfaction of health workers in Vietnam as well as to review experiences of some countries in the world to address this issue.

Chapter 1: Background information of Vietnam

1.1. Geography

Socialist Republic of Vietnam is located on the Eastern of Indochina Peninsula in South East Asia. Vietnam is a S-shaped country, stretching from 8° and 24°N, and the longitudes 102° and 110°E with area approximately 321,698 km². Distance between the northernmost point and southernmost point is 1,650km. Distance East-West is 600km in widest area and 50km in narrowest area. The long land border of Vietnam is 4,639 km; bordering China to the north, Lao and Cambodia to the west. The coastline of Vietnam is 3,444 km long, bordered on the east by Eastern Sea, on the south by Pacific.

1.2. Demography

Total population in Vietnam was 87,840,000 people in 2011. The population growth rate is 1.04%. Sex ratio is 97.9 men/ 100 women⁴. Population density of Vietnam is 265 people per km²; doubles Asia's density and 6 times higher than global average density of population. This situation has made burdens to economy, society, and living condition of people. Aging index of population in Vietnam (number of people over age 65 per 1,000 youth under age 15) was increased 11%, from 24.5% in 1999 to 35.9% in 2010. High proportion of elder has increased need of health care service for elder. At the same time, high proportion of woman aged from 15-49 also impact to demand for reproductive health services and child care.

1.3. Socio – Economic

Vietnam is a middle income country. Gross domestic product (GDP) in 2012 was 138 billion USD, and GDP per capita was 1,527 USD⁵. Life quality of people in all regions is continuously improved with positive impact on health. Stable development of economy is condition to increase investments for health in order to enhance people's health. Total expenditure on health was 6.81% of GDP in 2011, and total expenditure on health per capita was 231 USD⁶.

There are some emerged issues in Vietnam such as high unemployment rate, low income. Living condition in remote areas is still difficult. Vietnam poverty rate in 2010 was high with 14.2% and there is a disparity among regions⁷. Culture, society, education and medicine have been improved slowly. Industrialization, urbanization also creates challenges for health care.

1.4. Education

Educational level, literacy rate have been significantly improved. There is no gender disparity in access to education. Vietnam's literacy is high, and it has continuously increased over the last years, over 95%. However, there are still disparities between regions in country, between the rich and the poor in society.

1.5. Health status

Almost basic criteria set in the 5 years plan are achieved. The universal health insurance in 2011 was 64.9% of population. Life expectancy at birth in Vietnam was 75 years for both sexes in 2011⁸. Maternal Mortality Ratio (MMR) was 67 per 100,000 live births. Infant Mortality Rate (IMR) was 15.5 per 1,000 live births. Childhood Mortality Rate (CMR) was 23.3 per 1,000 live births. Malnutrition rate of children under 5 was 16.8%. The prevalence of people living with HIV was less than 0.3%⁷. However, in order to achieve Millennium Development Goals (MDG), Vietnam needs more efforts to reduce CMR to about 19.3 per 1,000 live births; to reduce MMR to 58.3 per 100,000 live births⁷.

Morbidity, mortality

Besides the risks related to return of some communicable diseases (CDs), complex development of new infectious diseases; the continuous increase of non-communicable diseases (NCDs) is becoming a major challenge for people's health and health system in Vietnam.

The total burden of disease in Vietnam was 12.3 million DALYs, including: NCDs 71%, injury 16%, diseases related to infant and childbirth 13%. Leading causes of burden of disease in Vietnam are: stroke (male), depression (female), lower respiratory infection (child), cardiovascular diseases (elder)⁹.

There is a clear change of disease pattern in Vietnam. NCDs have increased such as diabetes (5.2% of adults), cancer (181.3/100,000 males and 134.9/100,000 females), cardiovascular diseases (27.2% of adults). Since 2010, mortality of CDs has increased because of return of malaria, influenza H5N1, and hand-foot-mouth disease. Hepatitis B virus HBV will continue to cause health burden for Vietnam in next decades. In 2010, prevalence of HBV was 11.21/100,000 people⁷. HIV/ AIDS: In 2012, the number of people living with HIV was 208,866 and the number of people living with AIDS was 59,839. There were 62,184 deaths due to AIDS. Prevalence of HIV/AIDS was 224.3 per 100,000 people¹⁰. Tuberculosis: The prevalence of people getting tuberculosis was 57.7 per 100,000 people in 2012⁷.

Injury: the number of accidents, injuries and deaths due to accident, especially traffic accidents has increased over last 10 years. On average, there are about 30 deaths and 70 injuries every day. Mortality rate due to traffic accidents in 2010 was 17.9 per 100,000 people¹¹.

1.6. Structure of health system in Vietnam

Based on the state administrative structure, health system in Vietnam is decentralized with 4 levels: central level, provincial level, district level and commune level¹². (Appendix 1)

Central level:

Ministry of Health (MOH) is a governmental agency. It performs functions of state management on protection, care and improve people's health, including fields such as preventive and curative medicine, rehabilitation, traditional medicine, drug management, cosmetic influencing on people's

health, food safety and hygiene, medical equipment, etc.

MOH includes Offices, Departments, and Administrations. A division of Committee of population-family-children is merged into MOH. Besides that, MOH managed 70 institutions with major blocks: hospitals, preventive medication, study institutes, specialized institutes and university, colleges.

Provincial level

Directly under Provincial people committee (PPC), function of Provincial Department of Health (PDoH) is to advise the PPC perform State management of public health in the area. PDoH is comprehensively managed of organization, staffing and operations by PPC and under the direction, guidance, inspection of MOH.

District level:

Directly under District People Committee (DPC), District Health Office (DHO) is an agency to perform state management of protection, care and improving the health of people in that area.

DOH is directed, managed of organization, staffing, and operations by DPC. It is directed, examined and professional inspected by DOH.

Besides that, at district level, there are District hospital (including regional clinics) and District Preventive Health Center (DPHC). These institutions are separated from District Health Center of old model by Decree 172, managed by PDoH.

Commune level

Commune Health Station (CHS) is the first level which directly serves people. It is managed to formulate and implement health care and protection for people by Commune People Committee (CPC) and DOH. CHS has tasks to provide primary health care service, early detect outbreak, treat, deliver, and mobilize people to implement family planning methods, prevent diseases and enhance health for community.

Chapter 2: Problem statement

Vietnam has been confronting with challenges related to human resource for health (HRH), especially the shortage and misdistribution of health workers (HWs). According to Joint Annually Health Review (JAHR) 2012, density of doctors in Vietnam increased from 6.6 (2009) 7.2 per 10,000 population (2010); density of nurses increased from 8.8 (in 2009) to 9.4 per 10,000 populations (in 2010)⁷. These numbers have been increased over the last few years, however, they are still lower than numbers of regional area (15.2 doctors and 19.2 nurses per 10,000 population)¹³. JAHR 2009 showed that to achieve target of Draft Master Plan of Human Resource for Health by 2020, Vietnam needs to train annually approximately 7,100 doctors, 1,700 university pharmacist and 27,600 nurses. Urban population accounts for 27.4% of population in the whole country, but urban areas make up 59% of doctors, 55% of nurses and 82% of university pharmacist¹⁴. The shortage of HRH will affect the prevention, treatment and health promotion¹. In the world, about 1 billion people could not access to basic health services due to shortage of skilled health workers¹⁵. The Africa Region, there is a severe shortage of HWs. This area accounts only 3% of HWs but 24% of global disease in the world¹. The study conducted in 6 provinces in Vietnam 2010 shows that almost HWs often have to take multiple tasks for supervision activities, and even manage 3-4 national health programs¹⁶.

At district level, there is a serious shortage of HWs while in this level; HWs are very close with community and responsible for patient care as well as other prevention activities. Currently; health facilities (HFs) at this level need a total number of 9,200 HWs for curative medicine. 90% of districts lacks from 1 to 30 health staffs working in prevention medicine, some districts even lack more than 30 health staffs¹⁴. Only 26.7% of DPHCs have enough doctors meanwhile 13.3% of DPHCs have fewer than 10% of health staffs trained as doctors. The shortage of qualified health workers is more severe at district level. There are only 2.1% of health worker with post-graduation qualification in the whole country, but 95% of them are working at central level and provincial level, only 5% of them choose to work at district level. Whereas, 25.1% of health worker has graduation qualification, 26% of them are working at the district level. In preventive medication, the proportion of university-trained health workers is low (11.2%), and only 2% of them has degree/ certificate related to preventive medication (public health, occupational health).

All health facilities (HFs) at district level have been experiencing difficulties in retaining HWs, contribute to increase shortage of HWs and to reduce quality of health care⁷. A study of USAIDS in 2010 indicated that all 6 provinces of study have faced with migration of HWs, especially highly skilled HWs from rural to urban, from lower to higher level¹⁶. There are some reasons leading to this migration, low motivation and low job satisfaction of HWs is one of the main reasons. In Vietnam, some studies showed that HWs were not satisfied with their job and they would move

to another health facility if they had better opportunities. In the world, many studies show that job satisfaction of HWs helps to maintain HRH and to improve quality of health services. According to Richard Daft, high motivation will help to increase performance of staff and organization, leading to increase in productivity and quality¹⁸. In fact, some initiatives improving staff motivation obtained effectiveness to retain HW, contributing to reduce shortage of HRH¹⁷. In 2008, Lyn showed that severe shortage of HRH in Asia countries could be addressed through policy, planning, and implementation of initiatives such as incentives in order to motivate HWs¹⁹. Therefore, motivation and job satisfaction are very important to retain HWs as well as improve health care quality, especially in the context of HRH shortage.

There is a question: in the context of HRH shortage, how to have a good motivation and job satisfaction of HWs in order to improve retention as well as health care quality at the district level? Therefore, this paper is to conduct a research on "A review of motivation and job satisfaction of district level health workers in Vietnam" with the following objectives:

- To describe and discuss critically factors influencing on motivation and job satisfaction of health workers
- To identify policies and practices in Vietnam influencing on motivation and job satisfaction of health workers at the district level in Vietnam.
- To identify practices to improve motivation and job satisfaction in other countries.
- To provide recommendations for policy makers and interventions to improve motivation and job satisfaction of health workers.

Chapter 3: Methodology

3.1. Conceptual framework

3.1.1. Definitions of Motivation and Job satisfaction

"Motivation in the work context is defined as an individual's degree of willingness to exert and maintain an effort towards organizational goals. It is an internal psychological process and transactional process: result of interactions between individuals and work environment, or broader social context"².

Job satisfaction can be defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"³.

3.1.2. The difference between motivation and job satisfaction

Table 1: distinguish between motivation and job satisfaction²⁰

Management	Internal State	Workplace
Incentives	Motivation	Improved
Workplace Climate	Job Satisfaction	Retention

There is difference between motivation and job satisfaction. Job satisfaction is emotions for specific work situation, meanwhile motivation is to pursue and meet the demand. While job satisfaction is influenced by workplace climate overall, the employee's performance is due to job facets. To retain employees, we should pay more attention to job satisfaction. Meanwhile, the motivation will help increase employee performance²⁰.

3.1.3. Conceptual framework

F. Herzberg developed two-factor theory which is known as motivation-hygiene theory²¹. This theory is based on the idea that there are two main factors of motivation: extrinsic factor (hygiene) and intrinsic factor (or motivational factors). These main factors also have a correlation with satisfaction and dissatisfaction.

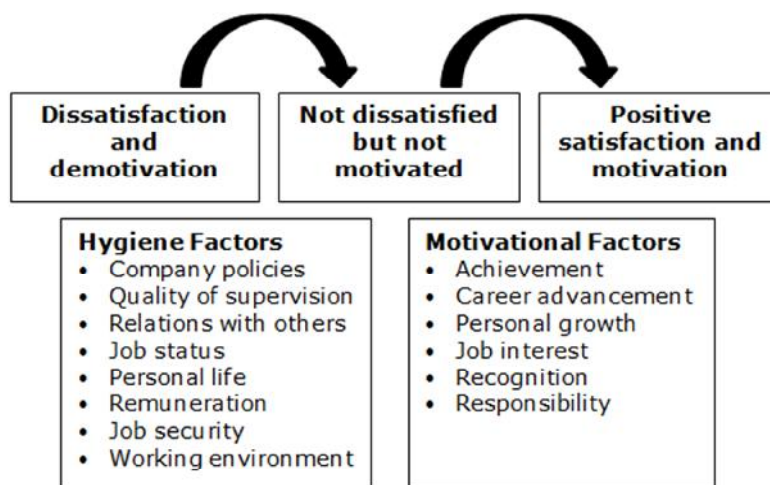


Figure 1: Two-factor theory of Herzberg

Hygiene factors:

These factors related to the work organizational environment of HWs:

- Company policies: Poor communications, lack of policies, procedure and rule in Health Facility (HF) can demotivate HW. Policies should be also fair, clear and flexible.
- Quality of supervision: related to capacity and skill of supervisor. It can motivate HW to work better if a supervisor is willing to teach, support, delegate authority to HW.
- Relations with others – includes relationships, interaction, discussions with manager, colleagues and client/patient. Positive relationships are no conflict; no sarcasm will motivate and improve job satisfaction of HW.
- Job status: some indication related to job, such as important title, private office, etc. For example, “doctor” is a respected title which motivates HW.
- Personal life: includes individual life of HW such as house, family, their children education, entertainment, etc. Good personal condition will motivate HW.
- Remuneration: includes basic salary and financial incentives such as topping up or hardship allowances. They should be adequate, equal, fair and competitive among employees. Increase or decrease these areas make effects to job satisfaction of HWs.
- Job Security: Security of HF which influences to HWs.
- Working environment – includes infrastructure, water, sanitation, light, medicine, medical equipment, etc. Lack of these areas will make HWs be unconfident and demotivate them.

According to Herzberg, hygiene factors are related to dissatisfaction or lack of dissatisfaction and dissatisfaction leads to demotivation. Hygiene factors themselves are not able to motivate individuals. But if they are positive, they will have effect of preventing dissatisfaction in work. For example, if a worker satisfies remuneration, he/she will not quit job but also may not be motivated to perform better.

Motivator factors:

These factors create motivation in the work:

- Achievement: when employee completes effectively task or project, the job satisfaction will be increase. For example, when the HW cures patient of disease, he/she will be happy and satisfy with that result.
- Career advancement: related to promotion. If HW sees that they have opportunities of promotion, they will be motivated to perform better.
- Personal growth: opportunities to learn new skills and knowledge related to currently professional work. If this opportunities lack, it will have negative effect on satisfaction and motivation of HW.

- Job interest: how HW feels about that job: interesting, or boring, easy or difficult, meaningful. These characteristics will affect HW, for example: saving life of patient will motivate HW.
- Recognition: If the HW gets acknowledgement for what they achieve, job satisfaction will be increased. If being criticized or not getting recognition, it will demotivate and reduce job satisfaction of HW. The recognition can come from manager, colleagues and patients.
- Responsibility: If HWs are more independent to be responsible for their work, they would have strong working motivation and be more satisfied with their career

There is a variety of factors influencing motivation and job satisfaction of worker. In fact, regarding to specific workers, these factors operate simultaneously instead of separation. To create motivation and job satisfaction for worker, we have to tackle properly both these 2 factor groups²².

Satisfaction of worker depends on existence of motivating factors. Once motivation factors are developed properly, they will be able to improve motivation and job satisfaction of workers. For example, if the worker thinks that his/her job is meaningful (like save life of other people); they may be motivated and satisfied with job to perform better.

Therefore, job satisfaction and motivation are very close concepts in reality. Authors often use these concepts interchangeably. So, this thesis will describe studies which mention both job satisfaction and motivation. I will focus on two above aspects in literatures of job satisfaction and motivation look into what literatures mention about according to these areas to make conclusion.

3.2. Study design

This study was based on the review of published and unpublished scientific studies on HRH, factors in relation to motivation and job satisfaction of HWs in Vietnam and other countries.

The published and unpublished studies were sought from different sources, including PubMed, Google Scholar search engine, KIT library, Hanoi School of Public Health library, Hanoi University of Medical library. Websites of Vietnam general statistics office, MOH, Joint Annually Health Review (JAHR), and WHO were searched for relevant documents.

Key words were used in combination to obtain journal articles and other relevant documents on the Internet: autonomy, district hospital, district level, doctor, evaluation, feedback, job satisfaction, health worker, human resource, interventions, motivation, nurses, quality of care, retention, salary, skills, supervision, training, performance, prevention, policies, Vietnam.

3.3. Ethic consideration

There is no ethical problem. This is literature review which does not harm to any people or animal as well as make negative effects to any culture in the world.

3.4. Limitations of study

- It is not able to analyze all problems of policies because of limited number of references related to policy influencing motivation and job satisfaction of HWs in Vietnam
- Some references include HWs at both commune and district levels, not specify only district level.
- This study could not analyze much about differences of motivation and job satisfaction among clinical and preventive HWs because number of references related to preventive HWs are limited.
- Interventions always combine many solutions to tackle motivation and job satisfaction. So there are not many interventions to provide evidence how each factor effect motivation and job satisfaction of HWs.

Chapter 4: factors influencing to motivation and job satisfaction of HWs at district level

This chapter will describe factors based on conceptual framework mentioned above.

4.1. Motivation and job satisfaction of HW

In Vietnam, several studies showed that, the rate of HWs satisfy with job is generally high. This rate is also higher than the rate of HWs satisfied with each sub-factor. According to Hang's study (2009) in Binh Thuan province, the rate of preventive HWs satisfied with job is 63.5%, higher than the rate of HWs satisfy with each factor (6.7% - 51.8%)²³. In a district of Vinh Phuc, while the rate of HWs satisfy with each factor is from 32% to 67.6%; job satisfaction rate of HWs is 71.1%²⁴.

These studies also showed remuneration, relations with colleagues and managers, working environment, personal growth were factors could predict job satisfaction of HWs^{23,24}. 76.9% of preventive HWs chose salary and allowance as one of options to increase their job satisfaction²³. All HWs who satisfy with salary and allowance are satisfied with job in general²⁴. Nhuan's study also indicates that the job satisfaction rates among group satisfied relationship with colleagues, managers and working environment were higher than those rates among groups of dissatisfaction, respectively 8.3, 7.8 and 7.3 times²⁴. 83.5% of preventive HWs chose option of improving the infrastructure and equipment to increase job satisfaction in general²³. 56.5% of preventive HWs thought that they would have more job satisfaction if they had opportunities for learning and development²³. Regarding to preventive HWs, the job satisfaction rate in group satisfy factors of learning, development was 10.3 times higher than that rate in group dissatisfy factors of learning, development²³. Whereas, in terms of general HW at district level, this number was 21.6 times²⁴.

4.2. Company policies

The lack of information about the regulations and policies is a factor demotivating HWs. It is shown by study of Dieleman in 2 provinces of Vietnam²⁵. Poor information leads to problems for HWs. After referring patient from district level to higher level, doctor did not get the feedback on patient referrals, so they did not know whether they diagnosed those patients correctly or not. Thus, they could not improve their professional skills²⁶. 11%-18.5% of HWs in Soc Son hospital satisfy with items related to reward and sanction mechanism²⁷. Job description has important role to clarify tasks of HW. In Guyana, job description which is not regularly reviewed makes HWs not understand clearly their tasks and demotivates HWs²⁸.

4.3. Quality of supervision

The supervision activities with feedback can help motivate HWs. However, a study showed that in 80% of reviewed studies, poor skill of supervisors

demotivated HWs¹⁷. In Vietnam, HWs often do not receive feedback from supervisions. So they do not know if they perform well enough or not²⁵. Trong's study supported this statement. 82.5% of HWs did not receive feedback from supervisions²⁹. Inke Mathaeur's study in Kenya and Benin in 2005 showed that 40% of Benin HWs and 50% of Kenyan HWs were not satisfied with the quality of supervision due to lack of feedbacks³⁰. Supervision also can be seen as dissatisfaction factor of HWs in Fiji, Tonga, Cambodia³⁰.

4.4. Relations with others

In Vietnam, getting support from the managers, colleagues are one of the most important factors to motivate HWs²⁵.

In general, the relationship with colleagues is highly appreciated. In Vietnam, doctors generally satisfy with colleague relationships²⁶. 67.6% of HWs in a district of Vinh Phuc province are satisfied with colleagues²⁴. The rates of preventive HWs in Binh Thuan province satisfied with "sharing and communication with colleagues" and "support of colleagues" are high, 70.2% and 79.2%, respectively²³. In districts of Hochiminh city, 96.5% of nurses were satisfied with their colleagues³¹.

Good relationships with managers also help increase motivation and job satisfaction of HWs. However, in Vietnam, the findings showed that HWs in general were not satisfied with the relationship with their managers. Only 27.5 % - 52% of HWs are satisfied with their managers^{23,24}. 42.5% of clinical HWs in 2 district hospitals in Phu Yen province satisfy manager's attention³². The rate of clinical HWs in Soc son hospital satisfied with manager (attention, listening, encouraging) were 16%-24%²⁷. Whereas, in Benin and Kenya, HWs felt confident and attempted to achieve the goal of organization because of encouragement from their managers.³⁰.

4.5. Job status

In Vietnam, the medicine is respected and highly ranked. HWs were respected by community and they were happy and proud of their job²⁵. However, there are also differences between curative and preventive field. Curative medicine is received more respect than preventive medicine because many people and HWs think that preventive medicine require fewer skills and knowledge. That opinion make preventive HWs feel less motivated than HWs in curative field²⁶. Additionally, workload influences satisfaction of HWs. In Soc son hospital, only 8% of HWs was satisfied with their workloads²⁷.

4.6. Personal life

Ha's study showed that in Vietnam, doctors mostly were satisfied with their living condition: a stable life and close to their family. In general, low living cost, inexpensive housing, cafes, karaoke were factors that doctors often felt satisfied to work at the district level. However, doctors were not satisfied with lacking of schools, isolated from families²⁶. In Zambia, the unavailability of electricity, water and poor education for

children were also seen as factors that demotivate HWs. The young staffs did not accept those bad conditions³³.

4.7. Remuneration

In Vietnam, the remuneration is the factor received lowest rate of HW satisfaction. For example, in Ho Chi Minh city, 62.1% of nurses were not satisfied with salary because salary is low paid compared with their performance³¹. In Binh Thuan province, only 40% of preventive HWs satisfied with salary²³. The average salary of HWs in both curative and preventive medicines at district level is 2 million VND^{23,26}. This figure was only enough for expenditure in 2 to 3 weeks each month. Dieleman also showed that basic salary was a factor demotivating and forcing HWs to work other jobs to earn extra income, such as private practice and agriculture²⁵. In a study conducted in 5 provinces of Vietnam in 2012, 11% of HWs intended to change to another workplace because of low salary³⁴.

The financial incentive has been seen as an important factor to motivate HWs, especially in countries where governmental salaries were not enough for the basic needs of HWs and their families¹⁹. However, in general, HWs were not satisfied with their salary and allowances. The percentage of HWs in Vinh Phuc province satisfied with allowance was very low (32.4%)²⁴. Rate of clinical HWs in Phu Yen province satisfied with items of salary and allowances were 28.7%-47.1%³². Another study indicated that the percentages of preventive HWs in some provinces dissatisfied with allowances were from 56%-75.7%³⁵.

Many developing countries are facing with the same situation related to salary and allowance for HWs. For instance, in Ghana, 95% of HWs regarded low salary and allowance as the most obstacles. Only less than 7% of HWs was satisfied with their salary. Mischa reviewed 108 references in 2008 and showed that 90% of the studies mentioned financial incentive as a factor demotivating HWs¹⁷.

4.8. Job security

There is no study to show how job security influence motivation and job satisfaction of HWs in Vietnam. Regarding to international references, few studies showed influence of contract to HWs. In Pakistan, there was no difference between satisfaction of permanent HWs and satisfaction of contractual HWs on each factors³⁶. But, HWs could be affected by whether contract is signed or not. In Uganda, HWs felt more security when they were signed fixed contracts while HWs with poor performance were dismissed³⁷.

4.9. Working environment

In Vietnam, almost HWs in studies complained about poor infrastructure, lack of equipment and supplement. The percentage of HWs who satisfied with infrastructure and equipment in their HFs was quite low^{23,24,26}. In a district of Vinh Phuc, only 39.4% of HWs satisfied with infrastructure and

equipment in their HF²⁴. In Phu Yen province, 35.6% of clinical HWs was satisfied with infrastructure and equipment³². Whereas, in Binh Thuan province, the percentages of preventive HWs who satisfied with infrastructure and equipment were lower, just 21.2% and 29% respectively²³. Poor working environment has caused problems for HWs. Ha's study showed that in many cases, doctors at district level could not diagnose for patients and they had to refer patients to the hospital at a higher level. Due to inadequate equipment for preventive medicine such as tests for environment condition, temperature, and humidity; majority of supervision activities were not implemented²⁶. Dieleman also showed that, inadequate vehicles and difficult transportation demotivated HWs²⁵. In terms of job safety, the shortage of safety working equipment make HWs expose to harmful agents. A study conducted in some provinces showed that the rates of preventive HWs frequently exposed to bacteria and toxic gas were high, 58% and 52.3% respectively³⁵. In Binh Thuan province of Vietnam, only 51.8% of preventive HWs felt satisfied with job safety factor²³.

Meanwhile, in the world, many developing countries have suffered from poor working environment. In Ghana, inadequate equipment and drugs were ranked at the 4th in the obstacle problems. 64% of HWs see this factor as a problem. This shortage comes from basic equipment (trash, brush, soap, pencils) to expensive items (air conditioners, sterilizers, ambulance in emergency cases)³⁹. In Bangladesh and Vanuatu, difficulties related to transportation and access to HFs caused absenteeism and job dissatisfaction of HWs¹. Violence is not a serious problem in Vietnam⁷, however, in some countries like Tonga, Papua New Guinea, poor security leads to sick leave and burnout of HWs¹. In Papua New Guinea, female HWs mentioned a list of threats making them be afraid of and lead to unfinished works: taking night duty alone, being young woman in HF, sexual harassment, prowler of male people, violence related to jealous wives, etc³⁸.

4.10. Achievement

Achievement factor has a close relationship with job satisfaction. Hang's study showed the high rate of preventive HWs satisfied with their results to prevent and control diseases²³. In Phu Yen province, average point of satisfaction with diagnosis and treatment results was 4 out of 5 points³². In Uganda, 80% of HWs supposed that patient survival was the most important achievement. It was more important than money to motivate them³⁷.

4.11. Career Advancement

Promotion is an important factor which helps HWs to get higher position with higher salary and allowance. However, in Vietnam, Ha's study revealed that HWs always complained about low approval process²⁶. In Soc Son district, 18.5% of HWs was satisfied with promotion. Promotion even demotivated and made HWs dissatisfied due to the lack of transparency

and fairness. In Ghana, many HWs were demotivated when seeing other staffs were promoted because those people had better relationship with managers³⁹. HWs in Kenya and Benin also were demotivated because of low promotion progress³⁰. Tanzanian HWs were not satisfied with the promotion because most HWs had not promoted for 10 years⁴⁰.

4.12. Personal Growth

In Vietnam, HWs want to update their knowledge through regular training to improve professional skills. The training also brings opportunities for "career path" or per diem which contribute to increase income of HWs²⁵. However, some studies showed that there are not many training opportunities for HWs due to their workload and shortage of doctors in their HFs^{16,26}. Lack of training opportunities lead HWs' knowledge is not updated. It also demotivated and reduced job satisfaction of HWs^{25,26}. In Binh Thuan, 37% of preventive HWs felt satisfied with current learning and development²³. In Phu Yen province, 64.4% of HWs was satisfied with training opportunities. Many HWs complained that when attending in any course, they were not subsidized tuition fee, transport allowance; so their lives became very hard³². In other countries, lack of training opportunities was also factor demotivating HWs. Two thirds of respondents in Kenya and Benin ranked personal growth as their top goal. However, most HWs were demotivated because of limited training opportunities³⁰.

4.13. Job interest

According to a study conducted in Hochiminh city in 2005, 80% of nurses felt that nursing was an interesting job and they would keep that job until retirement³¹. However, regarding to doctors, they were less satisfied with job because of colleagues having less experiences, poor patients and low utilization of health services²⁶.

4.14. Recognition

In Vietnam, assessment of managers to HWs is not appropriate²⁵. In Phu Yen province, HWs were demotivated because some HWs with good performance were not recognized and vice versa³². Dieleman's study also revealed that HWs thought assessment was formal and not useful²⁵. However, recognition of community is better. It was one of reasons Vietnamese HWs choose medical profession²⁶. Meanwhile, despite poor working environment, Tanzanian HWs were motivated because of receiving recognition from others. A literature review showed that 70% of the reviewed studies mentioned recognition from managers, colleagues and community as a key factor to motivate HWs¹⁷.

4.15. Responsibility

Responsibility is a factor motivating HWs in their career. Although there are some risks in their career, however, HWs always try to complete their mission with high responsibility. In Vietnam, the percentage of HW

satisfied with responsibility in general was highest (80% of HWs) comparing with other factors. In terms of initiative, 70.2% of preventive HWs were satisfied because they can take initiative in their works²³. Whereas, in another study, 21.3% of clinical HWs felt satisfied with their initiative in work²⁷. Lack of job description demotivated HWs because they did not know clearly their responsibilities. It could be also seen in case of Guyana²⁸.

Chapter 5: Policies and practices influencing motivation and job satisfaction of HWs in Vietnam

In 2013, Government established National Strategy for Health (NSH). According to NSH, by the end of 2020, Vietnam needs to reach 9 doctors and 2.2 university pharmacists per 10.000 populations. Some targets of NSH are: to develop HRH in both quantity and quality; to strengthen HRH in rural, remote and disadvantage areas; to expand training and education, to develop proper financial mechanism; to provide adequately drugs and medical equipment, etc⁴¹.

Based on factors of conceptual framework, thesis reviewed literatures to identify, analyze policies and practices which influence motivation and job satisfaction of HWs in Vietnam. The following policies also aim to achieve NSH's targets.

5.1. Company policies

In Vietnam, lack of information about the policies and regulations are important factors that demotivate HW²⁵. In HFs; meetings are held monthly, quarterly and annually to discuss the operations and problems. Besides the meetings, information was also sent to departments through reports, letters. However, people who attended in the meeting did not pass information to their colleagues and subordinates.

Most HFs did not develop a specific job description. In fact, it is difficult to build a job description, especially in preventive medicine because preventive HWs are normally in charge of many tasks¹⁶.

5.2. Quality of supervision

The supervision is formalistic. Supervision based on job description is not popular in Vietnam because almost HFs have not developed job description¹⁴. Moreover, unclear job description is difficult to supervise; there is a lack of indicators and tools of supervision¹⁶. Besides that, supervision is not regular and supportive to HWs; skilled supervisors are insufficient. HFs do not have regulations and mechanism related to supervision. Only 42% of hospitals supervising implementation of treatment protocol, mainly through peer review of medical records. There is no systematic and comprehensive supervision⁷.

5.3. Personal life

The *Decree 64/2009/ND-CP* regulates allowance for buying and transporting clean water in rural and disadvantage areas. However, there is no adequate information mentioning about this solution. Besides that, there are no policies on housing and land subsidies for HWs. However, some local authorities implemented the initiative in policy making including subsidized housing and land for HWs⁷. For examples, in Ha's study, some localities in Thai Binh Thai Nguyen provided housing to attract and retain HWs²⁶.

5.4. Remuneration

HRH budget is mainly used for salaries and training. In Vietnam, this budget makes up about 32%-35% of total health budget. This rate is lower than the average rate of HRH budget in South East Asian countries (35.5%), in Western Pacific region (45%)¹.

In Vietnam, HWs can practice in both public and private sector. In public health sector, there is not enough incentive to encourage HWs. Although Government has policies to praise and reward HWs, however there are often small gifts or money¹⁶. Moreover, income from private practice is much higher than basic salary, so private practice is more attractive than public sector. HWs have more motivation to practice private than working in public HF¹⁴.

Decree No.43/2006/ND-CP: autonomy and self-responsibility for task performance, organization, and finance of public non-business.

Decree 43 is applied for both curative and preventive medicine. MOH regulated basic salary. According to the Decree, HF^s earn money from patients and they are allowed to keep money to spend what they think the best⁴². In context of market mechanism and hospital autonomy, some hospitals have used their budget to create incentives¹⁶.

As a result, the Decree increases total income of HWs, contribute to motivate and improve job satisfaction of HWs. A study in 18 autonomous hospitals showed that total revenues of district hospital increased 2.5 times in average. Additional average income of HW in district hospital was 0.5 times higher than their monthly salary⁴³.

However, the Decree 43 makes some hospitals have to recruit fewer nurses to reduce costs. Patient care is given to people who have no professional knowledge or people are hired by the patient's family. It not only affects quality of health care but also reduces job satisfaction of HWs, especially nurses because they feel their jobs are not respected¹⁴.

Besides that, the Decree 43 causes some problems to preventive medicine. Direct revenues through preventive health services are limited. So, Decree makes a paradox that "the more active HF^s work, the less budget can save". This situation has influenced activities of preventive HWs⁴⁴.

Decree 64/2009/ND-CP: policy with HWs and staffs working in disadvantage areas

Supplements were amended and increased. HWs working in rural and disadvantage areas receive preferential supplement of 70% of basic salary⁴⁵. They also receive attractive supplement of 70% of basic salary in 5 years. Plus with occupational supplement from 20% to 70% of basic salary, total supplements account for 100%-150% of basic salary. They are still low if comparing with other regional countries, supplements are 200% to 500% of basic salary to retain HWs in rural areas²⁶. Financial mechanism in hospitals is limited and not enough to pay for highly qualified HWs¹⁴.

Decree No.56/2011/ND-CP: the occupational supplement for HWs in public health sector

According to Decree No.56, occupational supplement from 20%-70% of basic salary, depends on task of HW⁴⁶. However, it is difficult to classify HWs because HWs always take several tasks in their HFs due to shortage of human resource⁴⁷. Whereas, there is no guideline to help HFs solve this situation.

5.5. Working environment

Decision No 47/2008/QĐ-TTĐ: construction, renovation, upgrading hospitals in district and regional hospitals

This decision has contributed to improve infrastructure and working environment for HWs. However, decisions focus on cure medicine while preventive is missing.

In 2009, the Prime Minister approved a budget of 14,000 billion VND (approximately USD 663 million) to upgrade regional hospitals and district hospitals. This implementation is to upgrade infrastructure conditions in public HFs, helped HWs have better working environment. However, changes were not considerable. Medical equipment was backward compared to other countries¹⁴. Most of district hospitals only had 30% to 50% of required medical equipment, many hospitals have inadequate necessary equipment to serve diagnosis, treatment such as ultrasound, surgical tools, etc⁴⁸. By December 2011, 91.3% of district hospitals were invested by Government, one third of them were completed⁴⁹. However, infrastructure did not meet standard requirements of medical care and security. Buildings were poor quality, quickly downgraded and inconvenient.

The investment for preventive medicine is even worse. Working environment is poor and insufficient because after separating, most investments are focused on curative medicine^{7,23,50}. There are no policy to improve considerably infrastructure, medical equipment and supplements for preventive medicine. Hang's study also showed that poor working environment did not meet the need of HWs to work²³.

5.6. Career Advancement

In Vietnam, promotion process is regulated in Law on Cadres and Civil Servants⁵¹. In fact, in some HFs, appointment is normally implemented by manager. Manager proposes health staff for promotion; HWs are not involved in this process. Thus, this can lead to non-transparent act which affect quality of appointment, promotion and demotivate HWs¹⁴.

5.7. Personal growth

Circular No. 06/2008/TT-BYT: continuing professional development

The Circular allows all kinds of HWs with secondary school and junior college education using previous academic results to study at higher level.

Continuing professional development is postgraduate education, applying the model of in-service training, a 4 year concentrated training based on program of the Ministry of Education and Training and the MOH⁵². It brings conditions and opportunities to HWs. It is not only to strengthen professional competences of HWs but also to contribute to improve motivation, job satisfaction, retaining of HWs¹⁴.

However, many HWs do not return to HFs after graduation. Working environment, salary and living condition are reasons why it is difficult to attract and retain HWs. There is no specific sanction mechanism to force HWs return to work in the locality after graduation¹⁴.

Moreover, inadequate medical schools has obstructed participation in training courses of HWs from remote and disadvantage areas¹⁴. Medical school network includes 14 universities of medical/ pharmacy, 33 junior colleges, 42 secondary medical schools, 19 postgraduate training institutions of medical, pharmacy, public health⁵³. Disadvantages and mountainous areas are lack of medical universities. Red River Delta and Mekong River Delta have similar population of about 18 million people. But whereas the Red River region has 7 medical universities, the Mekong Delta has only one university. There is no medical university in northwest mountainous area.

Circular No.07/2008/TT-BYT: continuing medical education (CME)

This in-service training is to update professional knowledge and technologies, to provide supports to lower levels, to transfer technologies. The training courses could last 2 weeks to 3 months. Circular regulates number of credits which HWs need to complete: at least 24 hours per 1 year and 120 hours for 5 years. After each course, students receive certificate of CME⁵⁴. Through this Circular, managers can allow HWs who have insufficient study hours to work or not¹⁴.

In fact, almost HFs have not yet developed training plan. HFs often appoint health staff to participate in training courses after they receive information of training courses from MOH or PDoH¹⁶. By these ways, HFs always are passive in health activities and training to deal with shortage of HRH. Ha's study showed that there were not many training opportunities for doctors. They often do not have enough time to participate in training course because of working overload of work and the shortage of doctors²⁶.

Topic and quality of training courses could demotivate HWs. Almost topic are overlapping such as information technology, science study methodology, nursing management; only few topics related to specialized professional¹². These courses do not meet actual demands of HFs⁵⁵. To fit training needs, some HFs assessed training need of their HWs and contracted to training facilities afterwards. But, this way requires HFs have enough funds to pay. Besides that, the quality of training courses is not really high because it focuses mainly on theories and lack of practice. So, some HWs are not interested in short courses⁵⁶.

Another problem for both postgraduate education and in-service training is that participant selection for certificate/ diploma training courses are based on the criteria and cooperation between Provincial health bureau and HFs. However, almost HWs do not understand about selection process²⁵.

Decision No.1816/QD-BYT: rotation of HWs from higher level hospital to support lower level hospitals, from provincial hospital to support district hospitals.

This Decision established in 2008 is to enhance capacity of HWs at lower level through on-job-training, skills supplement, and technology transfer⁵⁷. Through this Decision, HWs at district level have opportunities to learn new techniques. The results showed that this Decision helped to improve skills of HWs at lower level. After more than two years of implementation, 1.702 technical skills were transferred to district level, 12.066 HWs at the district level attended in 607 training courses. Besides that, 305 district hospitals sent their HWs to technically support to 1.815 CHSs⁵⁸.

Decree No.43/2006/ND-CP: autonomy and self-responsibility

According to this Decree, hospitals themselves can use budget for health staff training based on demand of hospitals⁴². However, limited budget of hospital is only sufficient for in-service training or technology transfer courses. Regarding to preventive medicine, there is not enough budget for preventive HFs to support their HWs participate in demand- based- training courses¹⁶.

Decree 64/2009/ND-CP: policy with HWs and staffs working in disadvantage areas

According to this Decree, HWs receive 100% of tuition fees, transport allowance if they attend in training course. However, in some areas, HWs did not receive the tuition fee, and transport allowance. It made HWs' lives become very difficult³².

5.8. Recognition

Some policies related to assessment of HWs are the Law on Cadres and Civil Servants, Law on emulation and commendation and the MOH Decision on assessing health staff^{51,59,60}. The policies are expected to motivate HWs, however, in reality, evaluation is still formal.

Be the same as supervision, job description-based-assessment is not popular in Vietnam. In Vietnam, assessment is mainly based on instruction of MOH⁵⁹. HWs do self-assessment according to MOH forms. After that, team and department make comments to HW's self-assessments. Finally, managers classify HWs into categories: best performance, good performance and poor performance. However, assessment's criteria is unspecific and applied to all kinds of HWs¹⁴. A study showed that hospital had not built evaluation process with specific

criteria to assess HWs. On the other hand, due to the staff's multiple tasks, so it was difficult to evaluate HWs⁶¹. As a consequence, hard working HWs were sometimes underestimated and some lazy workers were not disciplined. All those things could have negative impacts on HW's motivation⁶².

5.9. Reflecting the major gaps of Vietnam current response about improving motivation and job satisfaction of health workers

Vietnam established some policies to address challenges. However, based on the findings of factors and policies in Vietnam, this study identified some major gaps as follows: 1/ financial incentives were increased but not sufficient for basic needs of HWs; 2/ working environment were invested and improved, but it was still poor and insufficient; 3/ training topics are duplicated, inadequate training facilities, HWs do not have training opportunities because of many reasons; 4/ supportive supervision was not implemented regularly and lack of supervision forms; 5/ lack of policies to improve relations with managers while HWs often complaint about this issue; / job description is not developed made HWs not clearly understand their responsibilities and tasks; 6/ lack of policy to subsidize HWs in remote and disadvantage areas; 7/ while HWs want to have simple recognition after their performances, policies on recognition are not to address it, mainly focus on performance assessment but very formalistic.

So, in next chapter, this study would find out about interventions that some developing countries applied to tackle their HRH problems, including major gaps which mentioned above.

Chapter 6: Identify practices to improve motivation and job satisfaction in other countries

Currently, most countries are facing different issues related to job satisfaction and motivation of HWs. Many interventions have been implemented. This chapter would explore examples of some countries how problems of motivation and job satisfaction of HWs were addressed. These evidences were classified by main intervention groups:

6.1. Company policies

Since 2006, Rwandan MOH has implemented job description and clarified responsibilities of individuals and organizations. A study in 2008 showed that this solution helped to encourage 96% of Rwandan HWs to perform better⁶³. (Appendix 4)

In Uganda in 2001, Family Life Education Program (FLEP) reviewed and updated personnel policy manual; developed and disseminated profile files to manage, updated job description for HWs. Besides that, FLEP also developed new assessment progress, strengthen supervision, trained for staff, and reviewed salary. These solutions brought significant improvements in 10 out of 12 indicators related to satisfaction and commitment of HWs, including management system³⁷. (Appendix 5)

In 1996, Zhezkazgan of Kazakhstan FGPs published profiles of HWs (qualification, photo, opinion on caring patient). By doing this, people could choose Primary Health Care they want. It improved motivation of HWs. HWs spent more effort to perform better to attract patient and to improve their professional status. Competitions among providers were increased⁶⁴. (Appendix 6)

6.2. Quality of supervision

In Uganda, FLEP developed a new process to supervise HWs, standard guideline and checklist. It also organized workshop to support supervision activities, strengthen regular supervision and verbal feedback. Besides that, program also conducted supervisory skills training courses. Before intervention, HWs satisfaction with supervisor performance and feedback got approximately 1 point. After intervention, these points were 4 and 3.5, respectively³⁷.

In 2006, a "Performance-based incentives pilot study" (PBIPS) was conducted in Luangwa and Chongwe districts, Zambia. District health management (DHM) conducted regular supportive supervision with feedbacks. It increased satisfaction of HWs in health centers because they felt that DHM was interested in them and encouraged them to improve their performance⁶⁵. (Appendix 7)

Some countries apply Mentorship program. In Antigua, experienced HWs were in charged with coaching new staff, including supervision, technical support. Angola Government contracted with foreign doctors to address shortage of doctors and to strengthen mentorship of these foreign doctors to Angola HWs²⁸. However, there is no evidence how these interventions affect motivation and satisfaction of HWs.

6.3. Relations with others

In 2006, Performance-based Finance (PBF) Initiative was implemented in Rwanda. 75% of clinical workers said that collegial work climate in their institutions was equal. 80% of clinical staffs supposed that managers made more supports to their employees and number of complaint on leaders reduced. PBF stimulated team spirit because rewards was given to team instead of individual in order to avoid jealousy among HWs⁶³.

In 1996, Kazakhstan created new position named "practice managers". This position helped managers reduce administrative time to have more time for medical practice. Manager's participation in clinical activities bring them closer to HWs and motivate HWs⁶⁴.

6.4. Personal life

In 2003, Zambia implemented "Zambia Health Worker Retention Scheme" (ZHWRS). Districts were divided into 4 categories from A to D according to location, with D district is the most remote district. ZHWRS applied allowances for doctor such as housing, car loan, mortgage loan, education for children. Doctors did not highly appreciated car loan because the procedure was very bureaucratic, inadequate budget they could loan to buy car they want. Regarding to mortgage loan, no one can access because high interest rate and unattractive conditions. In terms of educational allowance for children, almost doctors said that is meaningless incentive. This incentive was only applied for biological children whilst Zambian culture, doctors have to take responsibility for education of their younger brother/sister/ child of their siblings³³. In Malawi in 2005, Government and donor implemented program called 6 years Emergency Human Resource Program (EHRP). There are some strategies in EHRP, including improving housing condition for HWs. There is no specific evidence of this strategy, but EHRP increased number of HWs working in public sector and improved quality of health service⁶⁶. (Appendix 9)

6.5. Remuneration

In Malawi, in 2005, EHRP implemented some areas of intervention. One of them is to improve incentives through a salary top-up by 52%. These incentives made positive impact on HWs as well as recruitment, retaining of HWs. By the end of 2005, there were about 5400 HWs including doctors, nurses and key staffs receiving salary top-up⁶⁷. It increased HWs in public sector from 5.453 in 2004 to 8.369 in 2009⁶⁶.

Mathauer's study (2006) showed that in Kenya, a doctor working in public sector gets basic salary of \$ 145USD, allowance of \$ 311USD. So, total income is 3 times higher than basic salary. This policy attracted 500 doctors to work in public health sectors⁶⁸.

In Zambia in 2003, employee received rural hardship allowance with of 200 Euro (for C category) and 250 Euro (for D category). ZHWRS contributed to increase doctors in rural and redistributed doctor in the country. From 9/2003 to 12/2004, 68 doctors signed contracts. Most of

the doctors highly appreciated this allowance and said that without the incentive, they would find more attractive health facilities or leave off public health sector. However, this relationship is not linked to performance so it could not improve performance of HW³³.

Some countries apply PBF to encourage their HWs work more to increase income^{63,64,67,69}. In 1995, Primary Health Care (PHC) facilities of Kazakhstan was privatized and had the right to manage resources, personnel changes, changes in payment mechanisms. Besides that, in 1996, per-capita-payment system implemented to Primary Care. It helped Family Group Practices generate more savings, financial incentives. Primary care provider satisfied with their funding and they thought that they could provide quality service to population⁶⁴. Whereas, In Rwanda, PBF helped increase the availability of HWs, supplement working hours. 96% of HWs believed that PBF encouraged working better. HWs were more attracted to work in public hospitals. However, because of PBF, 72% of Rwandan HWs used to work supplementary hours and felt tired⁶³. Another consequence of PBF is that it led to unreasonable and over prescription, the increase of treatment services like cases of Southeast Nigeria, China^{69,70}.

Some Governments allow HWs to practice in both public and private health sectors to improve income. In Indonesia, 80% of doctors have private practice. Practicing in both public and private health sectors helps HWs not only increase income but also maintain their reputation in public health sector and opportunities to attend in training courses¹⁹.

6.6. Working environment

In Kazakhstan in 1995, PHC facilities were provided equipment, supplements to enhance primary care through local budget and their own investment. Together with interventions of training, changing payment mechanism; improved working environment motivated HWs and created changes of HW's performance⁶⁴.

However, it does not mean that improved working environment always leads to positive results of motivation. In Rwanda, new buildings, water and sanitation facilities were built. The hospitals also were provided equipment, supplements such as cushions, covered sheets, beds. Hospitals' hygiene was improved when hospitals contracted with external companies. However, working environment was not improved very much. Only 4% of HWs was satisfied with working environment and almost HWs complained about inadequate equipment⁶³.

6.7. Career advancement

EHRP of Malawi in 2005 implemented long-term solution was to promote HWs. By the end of 2005, 1.100 HWs were promoted; many of them were nurses whose promotion had been blocked because of civil service rule. There was no evidence related to motivation of HWs, however, results on retention and health outputs were positive⁶⁷.

6.8. Personal growth

Post-graduate education

Many countries faced challenges of inadequate medical schools. In Angola, in order to provide home visits and community education, Government opened five new medical schools to produce more community HWs. Or in Uganda, in 2000, Government issued a policy to privatize education. As a result, many training facilities were developed²⁸. Two these interventions are to increase capacity of postgraduate education, however, there is no evidence how they could affect motivation and satisfaction of HWs.

Some countries also face with the problem of budget for training. High tuition fee and HWs themselves have to pay fee for studying are causes which limited HWs' accessibility to training, such as the case in Uganda. Some countries, such as Tanzania, Ukraine, Zambia, and Papua New Guinea encourage HWs to participate in training while they still maintain wage and training subsidies^{19,33,63}. In Zambia, ZHWRS changed internship curriculum to focus more on surgery and obstetric contents. ZHWRS also applied policy that doctor would receive a supported fund to attend in postgraduate training after completing 3 working years in HF. It helped retain doctors. However, many of them said if they obtained a scholarship, they would not complete 3 years contract⁶⁵. EHRP of Malawi implemented in 2005 achieved positive results. The number of graduated students from 4 main training institutes increased 39%, to 1,277 in 2009 from 917 in 2004. It contributed to increase HWs density per 1000 population from 0.87 in 2004 to 1.44 in 2009. Outputs of health services were considerably improved⁶⁶.

In-service training

It is difficult to conduct specialized training in almost countries. Organizing continued training courses to update knowledge and skills of HWs is the solution that chosen by many countries. Some interventions have positive results. In Uganda, FLEP conducted in-service training HWs, strengthened leadership and management at all levels, strengthened supervision skills of supervisors. As a result, professional development was one in eight aspects with increased job satisfaction of HWs³⁷. In Lebanon, 85.6% of HR managers provided training sessions to HWs inside and outside hospital. 19.6% of hospitals used effectively continued training for HWs as a strategy to reduce dissatisfaction of HWs⁷¹.

In Kenya, a number of HFs chose gradual improvement by providing leaflets to HWs in order to update information, document⁶⁸. Another solution is staff rotation. In Tonga, nurses were rotated among departments, hospitals, areas⁷². This solution helped to prevent burnout, isolation of HWs. It also increased sharing of skills and experience to improve professional development of HWs¹⁹. There is no evidence of these solutions to improve motivation and satisfaction of HWs.

6.9. Recognition

In Rwanda in 2006, based on performance assessment, individuals with good performance are rewarded. 88% of Rwandan HWs felt inspired when seeing other colleagues were rewarded. Besides that, mechanism related to sanction and reduce rewards has been used. 88% of HWs said that it is difficult for absenteeism in workplace⁶³.

In 2 districts of Zambia in 2006, DHM assessed performance of HF based on familiar indicators of HMIS. Rewards were given to best HF and most improved HF quarterly. It helped to improve motivation and job satisfaction of HWs. However, it seems that non-financial incentives have more positive impacts than financial incentives. In district where financial incentives were applied, job satisfaction of HWs were increased, however, HWs said that they were not rewarded commensurately with their performance⁶⁵.

In Benin, HF used performance-based-rank to reward. This solution motivated HWs to make more efforts, to "fight for the best". However, in fact, it was only useful with active HWs but it demotivated low-ranked staffs⁶⁸.

In Mozambique, HF posted photos, offered medals and rewards to HWs who obtained achievements every month. It encouraged HWs to perform better²⁸.

Chapter 7: Discussion

Based on 2-factor theory of Herzberg, the study tried to provide evidence of factors influencing motivation and job satisfaction of HWs. However, not all factors have adequate evidence to describe effects, policies and interventions for motivation and job satisfaction. Some factors such as company policies, personal life, job interest, job security, achievement have few studies. So, it should conduct more studies on influences and interventions of these factors to motivation and job satisfaction of HWs. Besides that, there are not many studies which mention the rate of overall job satisfaction. According to some studies, the rate of HWs with overall job satisfaction is higher than rate of HWs satisfied with each sub-factor. This showed that HWs often reflect overall job better and more positive than when they consider details of each factor. Studies in the future should also pay attention to verify this statement.

Major factors

References provided a variety of data depending on each country, each HF. But in general, factors such as remuneration, working environment, relations with others, and personal growth are key factors or “predictors” that affect motivation and job satisfaction of HWs. Particularly, low remuneration is a factor that received lowest satisfaction of HWs. Income of HW is only enough to pay a part of their expenses. Many HWs do extra working hours, private practice, even outside of professional work or move to other areas, other location. So, these are risks, invisible factors leading brain drain of health workforce from lower to higher levels, from public to private sector. They also cause the shortage of HWs be more severe. Working environment is the second factor received lowest satisfaction of HWs. Poor infrastructure and inadequate equipment not only reduced motivation and satisfaction of HWs but also made HWs not able to perform well and apply knowledge. Additionally, inadequate safety working equipment increased HW’s risks of exposing to infectious diseases. In terms of relationships, HWs often have good relationship with colleagues, patients. This can be explained because HWs often interact, especially work in group with their colleagues. Meanwhile, relation with managers is often worse. HWs do not get helps and supports from their managers. There are some reasons could explain this problem. Managers do not have much time to be close to HWs. Moreover, leadership and management require not only the skills of planning, priority setting but also the soft skills related to communication, change management, etc. In fact, almost managers are not trained on this field. Personal growth is also an important factor because it not only helps HWs update knowledge and skills to work better but also increases salary and promotion. It is also one reason of HWs to retain at the facility. In general, HWs have low satisfaction with personal growth because of lack of training opportunities. Besides that, study also showed other important factors such as quality of supervision, recognition. Lack of supportive supervision demotivates and makes HWs dissatisfied. HWs are interested in timely and direct feedback

from their supervisor. They expect to receive feedback on what their problems are and how to improve their performance. Another important factor is recognition. HWs often receive good recognition from community but they complain about recognition from managers. It could be explained that HWs are people who directly diagnose, treat and save life of patient, so their performances are easily recognized by patient and community. Whereas, managers are often busy and inadequate skills of leadership and management, so they do not have attention on important of recognition.

Some other factors such as job status, achievement, responsibility generally motivate HWs with high satisfaction rate. It is due to the fact that medicine is special profession which requires high responsibility to save patient's lives and medicine also receives respects from community. In contrast, factors related to policies, personal life and career advancement receive less satisfaction from HWs. Lack of job description is normally found in Vietnam as well as other countries. It makes HWs do not clearly understand their tasks; as a result it reduces responsibility and performance of HW.

Policies in Vietnam

The Government tried to develop and implement policies in order to attract and retain HWs, to improve their performance and quality of health care. Government and MOH focus on main solutions related to key factors such as remuneration, working environment and personal growth. However, these solutions themselves exists problems. Regarding to remuneration, policies are to increase allowances for HWs and financial autonomy for HFs to increase income of HWs. In the difficult context of Vietnam, these allowances are considered as the great supports and efforts of Government. However, they are insufficient, especially in contexts of market economy, the increase of living demand, inflation which made HWs' lives more difficultly. Besides that, the Government has attempted to improve infrastructure, to provide equipment for district HFs. However, these investments are still insufficient; the equipment is outdated, deteriorated and not meet all needs of HFs. Especially; there are limited investments for safety working equipment. Government has tried to implement policies for postgraduate education and in-service training for HWS in order to create favorable conditions for HWs's personal development. However, common problems are inadequate training facilities, duplicated topics, and HFs could not send their HWs to courses because of insufficient HWs. Study explored that policies also include allowances for education and training; however, HWs in somewhere still miss information of these allowances and do not receive them.

Whereas, other important factors such as quality of supervision, relations with managers, personal life of HWs, recognition are not concerned appropriately. Although relation with managers is an important factor which influences motivation and job satisfaction of HW, however, there is

no policy or no reference could be found. Regarding to supervision, Vietnam's policies focus on supervision activities, not mention about supportive supervision. Even supervision activities are not regularly and lack of supervision forms. Vietnam also has policies on recognition, including assessment, rewards and sanction; however, these policies lack of criteria resulting in improper and formalistic assessments. An important note is that HW's recognized expectation could be from simple aspects, such as they just want to be recognized immediately after finishing work. But, this aspect is not mentioned in policies of Vietnam. Lack of job description is a factor which reduces responsibility and performance of HW, however there is no regulation and in fact, almost HFs have not developed it.

Policies in Vietnam also showed that although preventive medicine is considered a priority of health sector, but policies has not proved these priorities. Allowance for preventive HWs are not considerable to ensure income for preventive HW equivalently income of clinical HWs - who often have high extra income from private practice, extra working hours, etc. Investments for upgrading infrastructure and equipment almost focus on curative medicine while after being divided, DPHC's working environment was worse than district hospital. This could explain why job satisfaction and motivation of preventive HWs is always lower than motivation and job satisfaction of HWs in curative medicine.

Interventions of other countries

In order to find solutions to improve motivation and job satisfaction of HW, the study attempted to provide evidence about effectiveness of intervention. Generally, the developing countries such as Malawi, Rwanda, Uganda, and Zambia have similar HRH problems as Vietnam: low density of doctors and nurses in rural and disadvantage areas, difficulties in attraction and retention of HWs working in rural and disadvantage areas, same main factors influencing to motivation and job satisfaction of HWs. So, interventions worked in those countries could work in Vietnam.

In context of limited budget for health, there are many kinds of solution which those countries applied to improve motivation and job satisfaction of HWs. Countries often focused on solutions to deal with two factors: remuneration and personal growth. Experience showed that in order to improve remuneration of HWs, it is difficult to increase salary because it will affect the whole system. Solution applied is to increase allowances for HWs such as hardship allowance, area allowance, health insurance allowance, etc. This has partly helped to attract and retain HWs like Zambia's case study³³. In terms of solutions related to personal growth, developing countries focused on updating their knowledge, skills for HWs through in-service training or leaflets and distribute training information to HWs. Moreover, some countries tried to improve working environment for HWs. Satisfaction of HWs increased inconsiderably, however, working environment still needs to be improved because it not only affects the motivation and satisfaction of HWs, but also affects performance of HWs

and quality of health care. To deal with quality of supervision, improving feedback and support in supervision is simple solution to increase satisfaction of HWs. Some countries organized training course on leadership and management skills for managers, it helped managers not only to improve relations with their staffs but also to manage their organization better. Job description was implemented in somewhere to help HWs clearly understand their tasks in order to improve performance. Another strategy is to subsidize housing, car loan.

So, it could be seen that solutions which countries applied are similar to strategies of WHO in order to retain HWs (Appendix 10)⁷³. In general, to improve motivation and job satisfaction, countries always have to tackle different factors. Besides that, in the context of financial difficulties at both national level and institutional level, evidence indicated that non-financial incentives are more important than financial incentives to motivate HWs. Non-financial incentives are useful for HWs in remote and disadvantage areas, such as improving working condition, professional development, education, supervision, recognition, verbal praise, positive feedback. This study also indicated that contexts of country, of workplace are very important to develop and implement strategies. As World Bank suggests, many solutions could be implemented such as salary increases, training, performance based incentive, etc. But the most important thing is that, solutions are appropriate with local situation, easy for supervision and assessment and not complicated for administration¹⁹.

Chapter 8: Conclusion and recommendations

8.1. Conclusion

This study provides an overview of the factors influencing motivation and job satisfaction of HWs in Vietnam and other countries. It showed policies' problems that Vietnam has been facing in order to improve motivation and job satisfaction of HWs. Besides that, it also provided evidence of interventions which other countries applied successfully. This study offers some conclusions as the follows:

- All factors suggested in Two-factor theory of Herzberg affect motivation and job satisfaction of HWs. Their influences are different due to each context and each factor.
- Relations with others, remuneration, working environment and personal growth, quality of supervision are important factors influencing motivation and job satisfaction of HWs.
- Remuneration and working environment are the most dissatisfied factors of HWs.
- High responsibility for saving patients, recognition from community is motivational factors of HWs. However, lack of job description makes HWs not know clearly their tasks.
- Vietnam Government and MOH have policies to support HWs. However, each policy has its own problems. In terms of education and training, there are not enough training facilities; topics are unattractive and impractical. Allowance and incentives are insufficient and only improve partly HWs' lives. Government has invested inconsiderably working environment for HWs. There are lacks of supervision forms and job description.
- Policies of Vietnam do not put the priority on preventive medicine. Preventive medicine receives less concerns and investment than curative medicine.
- Nonfinancial incentives are very important, even more important than financial incentives in order to increase motivation and job satisfaction of HWs, especially in developing countries.
- Motivation and job satisfaction are not only to improve performance and retention of HWs but also contribute to improve quality of health care.
- In order to improve motivation and job satisfaction of HWs, it is necessary to consider specific contexts in each country and each agency, such as contexts related to politics, culture, society, economy.

8.2. Recommendation

There is a lot of problems in relation to motivation and job satisfaction of HWs in Vietnam. In this section, based on strategies for retention of HWs suggested by WHO as well as findings of this study, this study makes some recommendations by prioritizing from among many gaps I identified. These recommendations are to address major gaps in Vietnam context.

Short term:

- Strengthen education and training, especially in-service training to district level HWs by revising curricula and increasing training opportunities of HWs. MOH and MOET need to revise curricula of postgraduate education and in-service training to be compatible with practice and training need of HFs. HFs also conduct training need assessment of their HWs to propose training topics. This solution is to help HWs able to practice and apply what they are trained. Additionally, MOH and PDoH should choose suitable locations for in-service training. These locations need to be close HFs. Besides that, HWs should be given opportunities of training and education fairly and transparently by HFs .
- Strengthen supportive supervision to HWs. To solve this problem, MOH must develop checklists/ forms of supervision, reports with proper indicators. Supervision needs include both outcome and process indicators to provide overall picture how outcome could be achieved and to avoid unnecessary care, over prescription. MOH could use available and existing indicators to limit workload of supervisor and HWs. PDoHs also should organize training courses on supervision to improve skills of district level supervisors.
- Strengthen leadership and management skills of managers. MOH and PdoHs should provide training courses on this topic. It will improve managers' skills to analyze problems and set priorities, soft skills (decision making, conflict management, change management, and so on) to address HRH issues, including relations with staff.
- HFs should develop job description for HWs, especially priority groups such as doctors, nurses and preventive HWs. They are main cadres directly care patients and preventive activities. A job description clarifying objectives, responsibilities, rights of HWs will help HWs be confident about their roles, increase their responsibilities.
- Strengthen recognition for HWs through performance-based assessment, system of rewards, title to HWs. Recognition should be given quickly after performance of HWs. HFs should also public profiles of HWs and praise them in front of other people, especially community.

Mid term:

- Provide and strengthen scholarships and education subsidies for HWs with mandatory agreements. Government should include mandatory agreements into policy to increase recruitment as well as to reduce brain-drain of HWs after training. Besides that, information related to these scholarships and subsidies need to be delivered to HFs and HWs in order to encourage them develop professional.
- Government and MOH revise policies related to HW performance assessment. Criteria of assessment need be specific and proper with features of HW.
- Payment and incentive should be linked to performance in HFs; otherwise it will not stimulate health staffs to work. Financial incentive should be considered carefully, to avoid comments that incentives/ rewards are not commensurate with their performance.
- HFs should develop strategic plan in general and HRH plan in particular. This strategy is to help HFs proactively arrange HRH.

Long term:

- MOH and MOET should develop training facilities (postgraduate education and in-service training) near rural areas. This solution is to help HWs easily access to training facilities
- Government and MOH should revise and provide properly financial incentives such as hardship allowance, transport allowance, vacation allowances, etc. This revise has to be considered about market fluctuation, basic expenses of HWs in order to ensure that total income of HWs is enough for basic living standard.
- Government and MOH should strengthen improvement of infrastructure, medical equipment and supplements, especially safety working equipment. This strategy is to have acceptable working environment with safe and adequate medical equipment, to keep HW's mind on work.
- Government and MOH should develop policy on supplement of subsidizes for HWs such as housing, school for children, etc. This policy is to help HWs keep their minds on work.

Last but not least, interventions need to base on specific context. Each HF has its own situation and characteristics. It is impossible to create a common formula to improve motivation and job satisfaction of HWs. To improve motivation and job satisfaction, it is necessary to understand the political-cultural-economic context of that country/ organization.

List of references

1. World Health Organization. Working together for health: World Health Organization; 2006.
2. Franco LM, Bennett S, Kanfer R. Health sector reform and public sector health worker motivation: a conceptual framework. *Social Science a Medicine* 2002;54.
3. Marvin D. Dunnette, Leaetta M. Hough, Triandis HC. *Handbook of industrial and organizational psychology* 1994:1297-349.
4. General Statistics Office. Population and Labour. 2013 [cited 2013 14th April]; Available from: <http://www.gso.gov.vn/default.aspx?tabid=427&idmid=3>
5. International Monetary Fund. World Economic Outlook: Vietnam. 2013.
6. World Health Organization. Vietnam Health Statistics. 2013 [cited 2013 14th April]; Available from: <http://www.who.int/countries/vnm/en/>
7. Ministry of Health. JAHR 2012: Improving quality of medical services. Joint Annual Health Review 2012.
8. World health Organization. Vietnam: Health profile. 2011.
9. Nhung NTT. Burden of diseases and infury in Vietnam. Medical Publishing House 2011.
10. Vietnam Administration of HIV/AIDS Control. Report on HIV/AIDS control and prevention in 2012 and plan in 2013. 2013.
11. Ministry of Health. Health Statistics Yearbook 2010. 2010.
12. Ministry of Health. JAHR 2007: Overview of health in Vietnam. Joint Annual Health Review 2007.
13. Organization WH. World Health Statistic 2013. 2013.
14. Ministry of Health. JAHR 2009: Health workforce in Vietnam. Joint Annual Health Review 2009.
15. World Health Organization. Second global forum on Human Resource for Health Bangkok Thailand 25-29 January 2011: World Health Organization; 2011.
16. USAIDS. Assessment of Health system performance in six provinces of Vietnam. 2010.
17. Mischa Willis-Shattuck, Posy Bidwell, Steve Thomas, Laura Wyness, Duane Blaauw, Prudence Ditlopo. Motivation and retention of health workers in developing countries: a systematic review. *Human Services Research* 2008.
18. Richard L.Daft, Martyn kendrick, Vershinia N. Management. 8th ed: South-Western Higher Education; 2010.
19. Lyn N Henderson, Jim Tulloch. Incentives for retaining and motivating health worker in Pacific and Asias countries. *Human Resource for Health* 2008;6.
20. Marc Luoma. Increasing the Motivation of Health Care Workers. *IntraHealth International* 2006.

21. Herzberg. Motivation-hygiene profiles: Pinpointing what ails the organization. *Organizational Dynamics* 1974.
22. National Economics University. *Manual of Human Resource Administration*. National Economics Publishing House; 2007.
23. Hang DTN. Status of human resource for health and job satisfaction health workers in district health centers in Binh Thuan province. 2009.
24. Nhuan LT, Linh LC. Job satisfaction of health workers at district and commune level. *Vietnam Journal of public health* 2009;13:51-6.
25. Dieleman M, Cuong PV, Anh LV, Martineau T. Identifying factors for job motivation of rural health workers in North Vietnam. *Human resource for health* 2003.
26. Ha BTT, Witter S, Shengalia B, Vujicic M. Understanding the four directions of travel: qualitative research into the factors affecting recruitment and retention of doctors in rural Vietnam. *Human resource for health* 2011;9(1).
27. Huong VTL. Status of Human Resource for Health and some factors influencing job satisfaction of health workers in Soc Son general hospital. Hanoi: Hanoi School of Public Health; 2011.
28. Kaplan AD, Dominis S, Palen JG, Quain EE. Human Resource Governance: what does governance mean for the health workforce in low- and middle-income countries? *Human Resources for Health* 2013;11(6).
29. Trong LV. Status and factors influencing human resource for health in Gia Lam district health center, Hanoi in 2009. Hanoi School of Public Health; 2009.
30. Inke Mathauer, Ingo Imhoff. Health worker motivation in Africa: the role of non-financial incentives and human resource management tools. *Human Resources for Health* 2006;4.
31. Chau TT. Job satisfaction of nurses in 14 health facilities in Hochiminh city. 2005.
32. Viet VH. Study on job satisfaction of health workers in Tuy An and Dong Hoa district hospitals, Phu Yen Province. Hanoi School of Public Health; 2010.
33. Jaap Koot, Tim Martineau. Mid Term Review: *Zambian Health Workers Retention Scheme 2003–2004*. 2005.
34. Health strategy and policies. Status and some amendments of allowances for health workers and officers in Vietnam 2012.
35. Hai HN. Working condition and health status of preventive health workers in some provinces. Hanoi: Hanoi University of Medical University; 2007.
36. Ramesh Kumar, Jamil Ahmed, Babar Tasneem Shaikh, Rehan Hafeez, Assad Hafeez. Job satisfaction among public health professionals working in public sector: a cross sectional study from Pakistan. *Human Resource for Health* 2011;11(2).
37. Mary L O'Neil, Paydos M. Improving retention and performance in civil society in Uganda. *Human Resource for Health* 2008;6(11).

38. Razee H, Whittaker M, Jayasuriya R, Yap L, Brentnall L. Listening to rural health workers in Papua New Guinea - The social factors that influence their motivation to work. *Social Science & Medicine* 2012;1(8).
39. Irene Akua Agyepong PA, Ebenezer Asiamah,, Evelyn K. Ansah DAA, and Christiana Narh-Dometey. Health worker (internal customer) satisfaction and motivation in the public sector in Ghana. *International journal of health planning and management* 2004;19:319–36.
40. Manongi RN, Marchant TC, Bygbjerg C. Improving motivation among primary health care workers in Tanzania: a health worker perspective. *Human Resource for Health* 2006;4(6).
41. The Government. Decision on approving National Strategy to protect, care and strengthen people health in period 2010-2020, vision to 2030. The Government. 122/QD-TTg. 2013.
42. The Government. Decree on providing for the right to autonomy and self-responsibility for task performance, organizational apparatus, payroll and finance of public non-business units. The Government. 43/2006/ND-CP. 2008.
43. Ministry of Health. Lessons for Hospital Autonomy Implementation in Vietnam from International Experience. 2011.
44. Ministry of Health. JAHR 2011: Strengthening management capacity and reforming health financing to implement the five-year health sector plan 2011-2015. Joint Annual Health Review 2011.
45. The Government. Decree on policies for health workers and staff working in disadvantage areas. The Government. 64/2009/ND-CP. 2009.
46. The Government. Decree on the preferential supplements for health workers in public health sector. The Government. 56/2011/ND-CP 2011.
47. Health strategy and policies Institute. Analyse factors influencing attraction and retention of health workers in mountainous area. 2012.
48. Hung DV. Some analysis on medical equipment investment and recommendation to improve effectiveness of investment in Vietnam. Vietnam health economic association 2010.
49. Financial and Planning Department. Report on operation of first 6 months in 2012. Ministry of Health; 2012.
50. Cuong DV, Tuan KA. Status of primary care management in some localities in Vietnam. Health strategy and policy institute; 2006.
51. National Assembly. Law on cadres and civil servants. National Assembly. 22/2008/QH12. 2008.
52. Ministry of Health. Guideline of continuing professional development. Ministry of Health. 06/2008/TT-BYT. 2008.
53. Ministry of Health. Draft of plan for developing Vietnam health system to the year 2020 and orientation to the year 2030. 2011.

54. Ministry of Health. Guideline of continuing medical education. Ministry of Health. 07/2008/TT-BYT. 2008.
55. Ministry of Health. Joint Annual Health Review 2007. Joint Annual Health Review 2008.
56. Fields B, Duc NX. Health workforce training: Situation Analysis and Initial Identification of Opportunities for Program Support ADB, Vietnam. 2008.
57. Ministry of Health. Decision on fielding rotated professionals from upper level hospitals to lower levels to improve the quality of medical care. Ministry of Health. 1816/QD-BYT 2008.
58. Administration of Medical Services. Report on implementation of Project 1818. Ministry of Health; 2011.
59. Ministry of Health. Decision on establishing regulation of staff assessment in public non-business units of Ministry of Health. Ministry of Health. 28/2006/QD-BYT 2006.
60. National Assembly. Law on amendment and supplementation of the Law on emulation and commendation National Assembly. 47/2005/QH11. 2005.
61. Anh PT, Thu NTH. Survey on human resource for health in Ba Thuoc district hospital, Thanh Hoa Province, Vietnam. 2013.
62. Truong DX. Several models and study on civil servant management reform in Vietnam. 2008.
63. Friederike Paul. Health Worker Motivation and the Role of Performance Based Finance Systems in Africa: A Qualitative Study on the Rwandan Performance Based Finance Initiative in Hospitals. Development Studies Institute, London School of Economics and Political Science 2009(08-96).
64. Abzalova R, Wickham C, Chukmaitov A, Rakhipbekov T. Reform of Primary Health Care in Kazakhstan and the Effects on Primary Health Care Worker Motivation: The Case of Zhezkazgan Region. Partnership of Health Reform 1998.
65. Furth R. Zambia pilot study of performance based incentives. Quality Assurance Workforce Development Project, USAIDS 2006.
66. Management Science of Health. Evaluation of Malawi's Emergency Human Resources Programme. 2009.
67. Palmer D. Tackling Malawi's Human Resources Crisis. Reproductive Health Matters 2006;14(27).
68. Mathauer I, Imhoff I. Health worker motivation in Africa: the role of non-financial incentives and human resource management tools. Human Resource for Health 2006;4(24).
69. Uzochukwu, Onwujekwe. Healthcare reform involving the introduction of user fees and drug revolving funds: influence on health workers' behavior in southeast Nigeria. Health Policy 2005;75(1).
70. Liu X, Martineau T, Chen L, Zhan S, Tang S. Does decentralisation improve human resource management in the health sector? A case study from China. Social Science & Medicine 2006;63(7).

71. El-Jardali F, Tchaghchagian V, Jamal D. Assessment of human resources management practices in Lebanese hospitals. *Human Resource for Health* 2009;7(84).
72. World Health Organization. The Migration of Skilled Health Personnel in the Pacific Region. WHO Western Pacific Region 2004.
73. World Health Organization. Increasing access to health workers in remote and rural areas through improved retention - Global policy recommendation. 2010.

APPENDIX

Appendix 1: Structure of health system in Vietnam

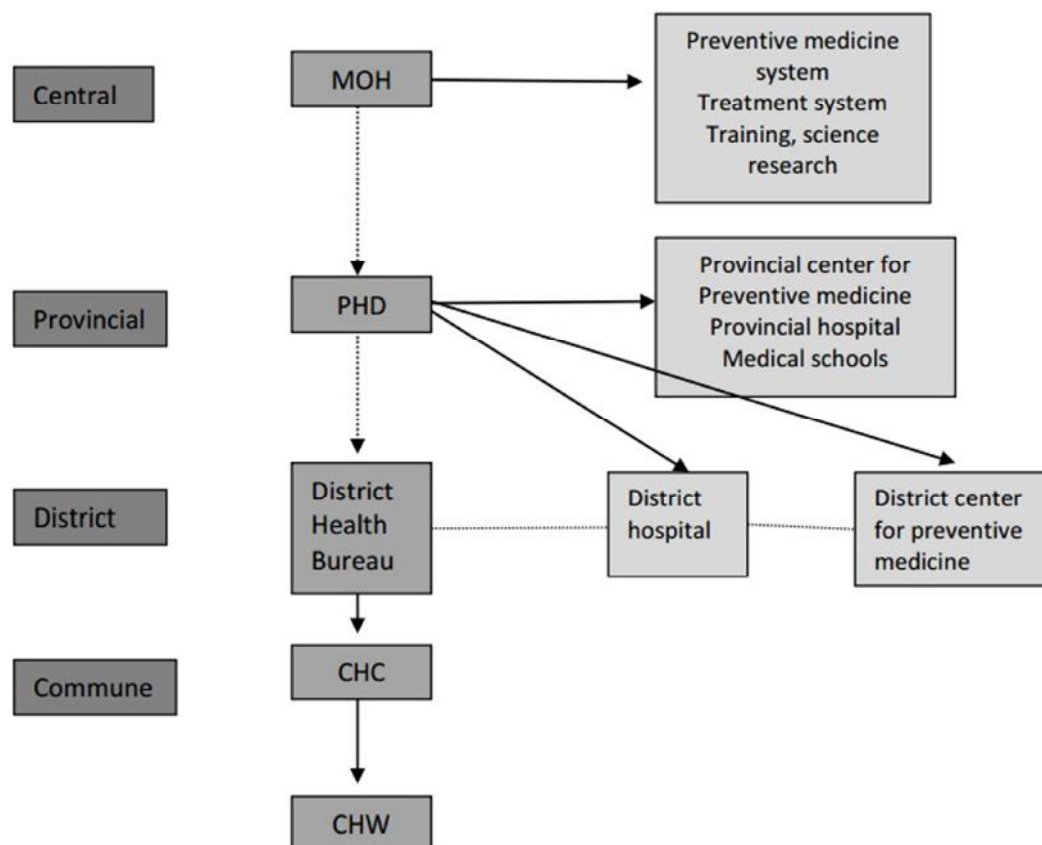


Figure 2: Structure of health care system in Vietnam

Appendix 2: Some main contents of Decree 64/2009/ND-CP on policy with HWs and staffs working in disadvantage areas

Article 5: Preferential supplement

Health workers, health officials and military medical workers working in the disadvantage areas receive preferential salary supplement to 70% of basic salary according to current ranks and grades, plus leadership supplement and supplement for people whose seniority is over highest salary step.

Article 6: Attractive supplement

1. Health workers, health officials and military medical workers working or being appointed to work in the disadvantage areas receive attractive supplement to 70% of basic salary according to current ranks and grades, plus leadership supplement and supplement for people whose seniority is over highest salary step.

2. Health workers, health officials and military medical workers can receive attractive supplement no more than 5 years. Time for receiving attractive supplement is determined as follows:

a) From the day receiving decision of mobilizing health workers, health officials, military medical workers of other localities.

b) From the day this Decree takes validity for health workers, health officials and military medical workers working in the disadvantage areas.

Article 7: Subsidies for visit, study, professional development

1. If health workers, health officials and military medical workers working in the disadvantage areas are appointed to attend in fieldtrip, study tour or training courses on profession, foreign language, they will receive 100% of tuition fees, transport allowance, housing fee.

2. If health workers, health officials and military medical workers working in the ethnic regions want to study ethnic language to serve examination and treatment, they will be supported allowances to buy materials and self-study by the amount of money for studying in formal schools.

Article 8: Allowance for buying and transporting water

1. Every year, areas lack of clean water, health workers and health officials receive allowances to buy and transport clean water to serve daily living needs.

2. In areas lack of clean water, based on specific situation of communes and islands, Provincial People Committees decide time and amount of allowances to buy and transport clean water properly.

Appendix 3: Some main contents of Decree No.56/2011/ND-CP regulating the preferential supplements for HW in public health sector

Levels of preferential supplement:

1. Allowance up to 70% of basic salary is applied for health officials regularly and often work these following jobs:

a) Testing, examination, treatment and care of HIV/AIDS, leprosy and tuberculosis, mental health;

b) Forensic examination, forensic psychiatry, pathological surgery.

2. Allowance up to 60% of basic salary is applied for health officials working these following jobs:

a) Examination and treatment, patient care, emergency recuperation, rescue team of 115, infection;

b) Testing and prevention of infectious diseases;

c) Medical quarantine in border areas.

3. Allowance up to 50% of basic salary is applied for health officials working in examination and treatment, care and serve anaesthetized patient, active treatment, pediatric, pediatrician, burn, and dermatology.

4. Allowance up to 40% of basic salary is applied for health officials working in preventive medicine; testing; examination and treatment; infection control; patient care, rehabilitation; medical examination; traditional medicine; pharmacy and cosmetics; food safety, medical equipment; reproductive health in public health facilities and nursing facilities for wounded soldier, sick soldier, people with disabilities, except cases regulated in items No 1, 2 and 3.

5. Allowance up to 30% of basic salary is applied for following employees:

a) Health officials working in health education communication; population and family planning;

b) Health officials do not directly do medical profession in health facilities, institute, specialty hospitals, and health centers: HIV/AIDS, leprosy, tuberculosis, mental health, pathological surgery, forensic medicine.

6. Regarding to civil servants, officials not directly related to medical profession; people who are working as managers, serving in the medical business units (except for people regulated in Point b of item 5), officials working medical professional in agencies, schools; managers will based on specific job and revenue to consider and decision but allowance is not more than 20% of basic salary according to grade and step, plus allowance for leadership and allowance for whose seniority is over highest salary.

Appendix 4: Case study in Rwanda in 2006 – Performance based finance

Before 2006, Rwanda had faced challenges related to HRH such as low density of HW (1 HW per 1,640 population), demotivation of HWs, high absenteeism, etc.

In 2006, Performance-Based Finance Initiative was implemented. This PBF covered all commune level, health center to district hospital level.

- In district hospital, performance payment was linked to norm/standard of quality in order to ensure quality.
- To strengthen meeting and information sharing in institute.
- To develop a standardized treatment procedures.
- To develop indicators of supervision and M&E.
- To implement internal assessment in hospital in order to provide feedback, to improve performance and skills of HWs.
- Peer review to assess performance of each other.
- Results were computerized and give rewards to hospital instead of individual.
- To build new building, infrastructures. Basic medical equipment was provided such as cushions, bed covers, and bed-nets. Hospitals contracted external companies for sanitation.

In 2008, a study was conducted to assess effectiveness of this intervention.

Results:

- By clarifying job description and responsibilities of individuals and organization, 96% of HWs said that their responsibilities were increased.
- After applying mechanism of sanction, 88% of HWs said that it was difficult for absenteeism.
- Financial incentives increased availability of HWs and supplement working hours. 96% of HWs said that PBF encouraged them to perform better. Hospitals could contract with more HWs. HWs were attracted to work in hospital. Salary of HWs was doubled averagely.
- PBF applied assessment in everywhere, so HWs also had to improve working environment to avoid getting low points.
- Relations with others were improved, such as relationship between managers and HWs, among groups, between clinical HWs and patients. 75% of clinical HWs said that collegial work climate was improved by PBF. According to HWs, managers were more supportive and responsive with needs of HWs. 80% of HWs said that number of complaints related to their managers was reduced. PBF stimulated team spirit.
- Supervision was improved with more feedback. HWs felt that supervision was supportive to show them what and how they could improve their performances.
- Standardized processes increased relationship and responsibility of HWs to patients. As a result, patients felt that they were respected.
- Number of health service increased.

Some problems:

- Working environment was improved inconsiderably. Only 4% of HWs agreed that there were enough infrastructures, equipment. Almost of HWs complained about lack of beds, basic medical equipment, etc.
- 40% of HWs dissatisfied with supervision.
- PBF led to increase health services and over workload of health workforce. 72% of HWs used to work outside working hours and felt tired.

Appendix 5: Case study in Busoga Diocese, Uganda

In Uganda in 2001, Family Life Education program (FLEP) faced the increase of staff turnover, the reduced performance of organization, poor working environment and people stop coming to health services. Under support of MSH, FLEP developed a tool to assess Human Resource Management (HRM). Based on this result, FLEP set priorities such as: to revise and update personal policy manual, complete and distribute profiles of HWs to manage and supervise them; to update job description; to develop new process to assess performance of HWs and strengthen supervision; to improve communication among 40 clinics. Besides that, Uganda also trained HWs, strengthened leadership skills at all levels and revised policy related to salary.

HWs with poor performances were fired. Health facilities also made a fixed contract with HWs to help them feel secure.

An assessment conducted in June 2002 showed that there were significant improvements. Ten out of twelve indicators, including satisfaction and commitment of HWs increased such as salary, supervisor performance, professional development, etc.



Figure 3: Improved HWs satisfaction due to better human resource management

Besides that, health services such as outpatient visits, well child visits, deliveries, pre and post-natal visits, permanent methods, number of family planning were also improved.

Two factors were not increased satisfaction, including staff benefits and job satisfaction. These factors need more resources.

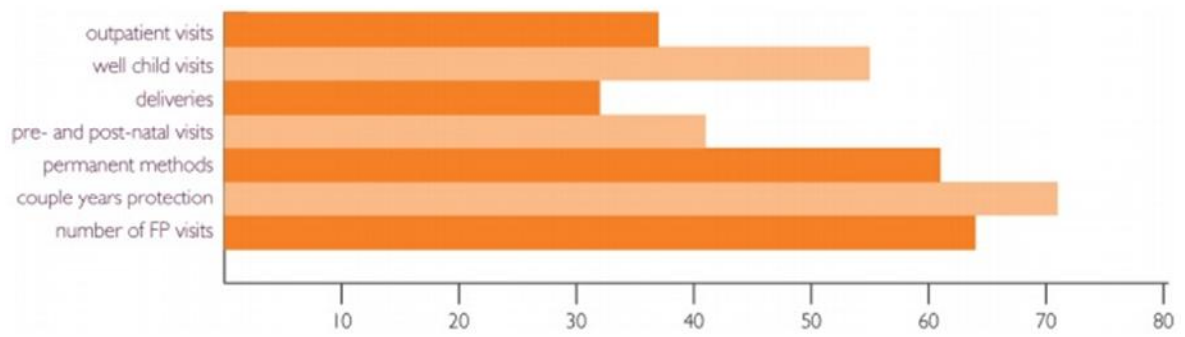


Figure 4: Service with increased utilization

Appendix 6: Case study of Kazakhstan - Privatization and Per-capita payment in Primary Health Care

Before 1995, Kazakhstan focused on specialized care. Primary Health Care was managed by hospital. HWs were not motivated because their salaries were linked with seniority, educational level and position. There was no system of accountability and feedback in health facilities. Procedures were complicated and bureaucratic. It was difficult to fire HW.

In 1995, Government implemented health reform program. PHC facilities were privatized. This reform made changes related to economic incentives and working environment of HWs. Managers of PHC facilities themselves could make decisions: finance, service distribution, human resource management.

In 1996, Mandatory Health Insurance (MHI) Fund applied per-capital payment system to Primary Care. It allowed FGPs to be free to make incentive and set priorities for their service. It also encouraged FGPs use resources more effectively to generate savings, financial incentives. It stimulated creation of FGPs and HWs. Health care providers were satisfied with their funding, and they felt that they could provide quality health services to population.

Open enrollment: FGPs published details of HWs such as qualification, photos. So, people could select PHC facilities they want. It improved motivation of HWs. HWs had to make their efforts to attract patients in order to gain finance and to improve professional status. It also increased competitions among health care providers.

New position was established: primary care manager. This staff is responsible for providing reports on performance of each individual, participating in planning, etc. The information was used by managers of health facilities to assess and make decision of reward. Managers also had more time for medical practice. Their participations motivated HWs. Results from performance assessment increased competition among HWs, motivated them to perform better. Another important thing is that managers had power and evidence to fire HWs with poor performance. So, HWs attempted more to perform better.

HW's capacity was strengthened through seminars, workshops on management, finance. Some HWs themselves pay fees to attend in training courses on economic, finance. HWs were motivated because they thought that training courses not only helped them improve their skills but also helped them to be HWs with unique skills.

Appendix 7: Case study in 2 district of Zambia in 2006 - pilot study on nonfinancial incentive and financial incentive

In Zambia in 2004, a "Performance-based incentives pilot study" was developed by Central Board of Health (CBH) and supported by USAIDS. This study was implemented in a small district (Luangwa) and a large district (Chongwe). Rewards were given to best health center and the most improved health center of district quarterly in the meeting among district and health centers. There are 2 kinds of incentive: trophy and shield (non-financial incentive) for small district, and financial incentive for large district. Financial incentive was based on 10% of user fee of all health centers.

Indicators of performance assessment were based on Health Management Information System (HMIS) and national technical guideline. These indicators were familiar to health centers. The assessment activities were integrated into performance assessment process of District Health Management (DHM). DHM would assess health centers and collect results based on indicators. There is a meeting among DHM and health centers in each district every quarter, and rewards would be given at that time. Health centers were provided guideline of performance how assessment would be done and how scoring process is. Districts provided copies of results to health center in order to help health centers verify results and compare with other health centers.

Results:

- In small district, HWs were very proactive and there were competitions among health centers. Supervisions were conducted regularly with more supports to HWs. HWs also received more feedback. They felt that DHM were interested in them more regularly, discussed and encouraged HWs to improve their performance. Job satisfaction of HWs was increased. HWs felt that rewards were sufficient to their works. HWs were satisfied because they were recognized good performance. They liked completion among health centers. HWs also wanted DHM to continue providing these rewards quarterly. Copies of results helped HWs not only identify what they need to improve but also share information, strategies to other health centers.
- In large district, in 1st quarter, one health center received both rewards of best and the most improved health center. It made other health centers question about fairness of reward. HWs were not satisfied because they thought that system was not fair. Amounts of money in 3 quarters were different. Job satisfaction of HWs was increased; however, they felt that rewards up to 10% of user fee were not enough to motivate HWs. There was no guideline for health centers how to use these rewards. Almost winners divided their rewards to HWs based on role and responsibility of HWs. So, financial incentives given to different HWs were different. Health centers also used a part of reward to buy basic medical equipment such as water containers, and mats.

- Both districts experienced period of suspicion to reward because there was one health center received both 2 rewards. After receiving copies of achievement, health centers of small district understood fairness while health facilities of large district still had doubts and supposed that the winner cheated. Some reasons could be explained for this situation: financial incentives made HWs more suspicious about cheat than non-financial incentives. Failures in delivering copies of results of health centers affected negatively transparency.

Appendix 8: Case study in Zambia - Zambian Health Worker Retention Scheme 2003

In Zambia in 2003, Government implemented Pilot Zambian Health Workers Retention Scheme. According to this scheme, Zambian districts were divided into 4 categories based on location. Districts in D category were the most disadvantaged.

Some regulations of this scheme were:

- HWs had to work at least 3 years in rural areas.
- Doctors would receive salary corresponding to substantive grade. The salary was provided by MOH/CBH.
- HWs received rural hardship allowance by 200 Euro if working in district in category C, and 250 Euro if working in districts in category D.
- CBH paid child education allowance with maximum 450 Euro per term per child, and maximum 5 children.
- CBH provided maximum 2500 Euro to upgrade accommodation for each HW, subsidized housing.
- HWs were subsidized postgraduate education if completing contract of 3 years. HWs also would receive 3 month hardship allowances per year after 3 years working. This allowance would put into post-training fee.
- HWs could loan maximum 90% of 3 years hardship allowance.
- HWs were assessed their performance annually and determined training need to strengthen skills and capacity. Good performance was a criterion for retention.

Doctors in this scheme were young doctors who had just completed internships. They lacked experiences about district hospitals, lacked skills related to surgery and obstetrics. So, Government changed internship to extend from 12 months to 18 months and to focus on more surgery and obstetrics.

Results:

- ZHWRS contributed to increase number of Zambian doctors in rural areas, redistributed doctors in the whole country. There were 68 doctors signed in the period from 9/2003 to 12/2004.
- Almost doctors who were interviewed said that they would work in district hospitals without incentives. Instead of that, they would find more attractive health facilities in districts in category A, or to move out of public health sector. However, incentives were not linked to performance so it could not help to improve performance of doctor. Many doctors still received package of incentive even they left health facilities for some reasons.
- Hardship allowance was highly appreciated. It accounted for 50% of basic salary.
- Doctors generally satisfied with their jobs. Becoming senior doctors in district hospitals from junior doctors of tertiary hospitals were really new challenge and positive experiment.

- In somewhere, Zambian doctors replaced expatriate doctors. In Southern Province, number of doctors increased from 1 to 2 doctors per district. In some other fields such as ARV or Tuberculosis programs, there was a migration of doctors but in this scheme, doctors were retained.

Some problems:

- Initially, low payment and complex procedures made dissatisfaction of HWs because at that time, management system was not developed.
- Information related to scheme is not clear. Doctors did not understand about scheme, even they did not know about what they would be supported in postgraduate training. Some stakeholders also did not understand and they made incorrect information.
- Almost new doctors said that they intent to complete 3 years contract. However, doctors working in health facilities did not want to finish their contracts, other doctors had planned to leave out of district hospital.
- Education allowance for children: Almost doctors said that it was not significant allowance. Someone having children received this allowance. This strategies is not appropriate, because this strategy only accepts biological children, while according to Zambian tradition, doctors are responsible for education of children of their sibling or education of their younger brother and sister.
- Car loan: there were only 5 doctors could access to car loan (some other doctors were in procedure at time of study). Money which doctors loan was only enough to buy saloon-car which was not proper with their transportation need. Besides that, procedures were very bureaucratic. Another problem is that cars were registered by DHM team; it was really factor demotivating HWs. Last but not least, instead of this loan, HWs could also access to other loans and they preferred them more.
- Mortgage loan: there was no one who access to this loan because of high interest rate and unattractive conditions.
- Loan scheme for housing and vehicle was very complicated, risky and time consuming.
- Postgraduate training: almost doctors wanted to take postgraduate education in other countries. So besides working to complete contract, they tried to find other scholarships. They said that they would finish their 3 year contracts if they obtained scholarships.
- Housing subsidies: procedure was very tedious and complicated. As a result, this strategy delayed maintenance of housing.
- Financial administration was not smooth.
- Poor working environment made HWs not be able to apply what they learnt. It was a reason some doctors left scheme before and after contracting.

Appendix 9: Case study in Malawi in 2005 - 6 years Emergency Human Resource Program

In 2005, Government and sponsors developed 6 years Emergency Human Resource Program. This program focused on improving 11 HW groups.

Short-term:

- To improve incentives by salary top-up 52% in order to recruit and retain Malawian HWs.
- To strengthen training capacity by 50%, double number of nurses and triple number of doctors.
- To utilize doctors, nurses and international volunteers to temporarily address the shortage of human resource.
- To provide international support in order to strengthen HRH planning, management function, development.
- Strengthen M&E capacity with using existing HMIS.

Long-term

- To implement retention, promotion, career advancement, training, policies for HWs in disadvantage areas.
- To improve housing for HWs.
- To provide specific incentives.
- To provide scholarship, incentive for higher education and in-service training.
- To build infrastructures and clinics.

Salary top-up was considered about sustainability. IMF agreed to finance for salary top-up. Besides that, Government committed to maintain budget for health, especially putting salary increase into policies.

Results:

By the end of 2005, there were 1,100 promoted HWs. Many of them were nurses whose promotions were blocked because of other rules.

A study in 2006 showed that 700 out of 1,000 retired respondents said that they would be willing return public health sector if getting salary top-up and training opportunities

The migration of Malawian nurses to UK reduced in 2006.

In comparison with data of 2004, pre-service training increased by 165%, postgraduate training increased by 79% in 2007.

To 2008, new training facilities could implement pre-service training.

To 2009, Malawi achieved targets related to numbers of physician, technician and clinical officers.

Table 2: Some indicators of Human Resource for Health
In Malawi in years 2004 and 2009

	2004	2009	% of increase
Health worker	5,453	8,369	53
Doctor	43	265	516
Nurse	3.456	4.812	39
Graduates from 4 main training institutions	917	1,277	39
Doctor graduates	18	31	72
Nurse graduates	575	699	22
Health worker density per 1000 population	0.87	1.44	66

Quality of health services was improved. In 2009, outpatient service increased by 49%, antenatal care increased by 7%, safe delivery increased by 15% compared to data of 2004. These improved health services saved 13.187 lives.

Appendix 10: Some strategies of World Health Organization

Table 3: Strategies to improve attraction, recruitment and retention of health workers in rural and remote areas

Category of intervention	Examples
A. Education	A1 Students from rural backgrounds
	A2 Health professional schools outside of major cities
	A3 Clinical rotations in rural areas during studies
	A4 Curricula that reflect rural health issues
	A5 Continuous professional development for rural health workers
B. Regulatory	B1 Enhanced scope of practice
	B2 Different types of health workers
	B3 Compulsory service
	B4 Subsidized education for return of service
C. Financial incentives	C1 Appropriate financial incentives
D. Professional and personal support	D1 Better living conditions
	D2 Safe and supportive working environment
	D3 Outreach support
	D4 Career development programmes
	D5 Professional networks
	D6 Public recognition measures

Source: World Health Organization. Increasing access to health workers in remote and rural areas through improved retention - Global policy recommendation. 2010