

# **Inequity in utilization of Maternal Healthcare in Vietnam: A Literature Review and Analysis to Strengthen the Maternal Health Service provision in Vietnam.**

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# **Inequity in utilization of Maternal Healthcare in Vietnam: A Literature Review and Analysis to Strengthen the Maternal Health Service provision in Vietnam.**

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

by

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Declaration:

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Signature:



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## **List of abbreviations**

MOH

Ministry of Health

MHC	Maternal health care
MOF	Ministry of Finance
SBA	Skill birth attendant
EMOC	Emergency obstetric care
CHC	Community health centre
CHC	Commune health centre
ANC	Antenatal care
CDD	Control of Diarrheal Diseases
ARI	Acute Respiratory Infection
MH	Maternal health
MM	Maternal mortality
SM	Safe motherhood
CHS	Commune Health Stations
MDG	Millennium development goal
WHO	World health organization
OR	Odd ratio
VHW	Village health worker
DHS	Demographic and Health Surveys
MICS	Multiple Indicator Cluster Surveys
UNICEF	United Nations Children's Fund
UNFPA	United Nations Fund for Population Activities
SHI	Social health insurance
LMIC	Low middle income country
EMM	Ethnic minority midwives
HCFP	Healthcare Fund for the Poor
PHC	Primary health care
HBR	Home based record
MCH	Maternal child health
GDP	Gross domestic production
MOET	Ministry of Education and Training
MOST	Ministry of Science and Technology
MOJ	Ministry of Justice
UHC	Universal Health Coverage
MMR	Maternal mortality rate
HIV	Human immunodeficiency virus
OOP	Out of pocket
SHI	Social health insurance
FGD	Focus group discussion
MOLISA	Ministry of Labour, Invalids and Social Affairs

## **SUMMARY**

Name: Nguyen Thi Thu Thuy

Nationality: Vietnamese

In Vietnam, with regard to the context of the MDGs, MHC utilization is a vital issue for the MOH. However, recently, the inequality in utilization of MHC service among the country still occur and keep emerging. This inequality has been found in the striking difference in utilization MHC services between areas, also in the small rate of utilization among minority ethnic. In this thesis, the two major study questions was raised to tackle the problem are:

1. What factors are associated with inequality of MHC utilization in Vietnam?
2. What should be suggested to improve the current policies for MHC in Vietnam?

The methodology used in this thesis is a literature review. The research tools are included Google Scholar, PubMed, Google and VU Online Library. Some other databases has been explored to contribute to the result. A Six block building framework was proposed to analysing the findings. In Chapter 3, the result indicated numerous facts worth noting. The results of Leadership block showed the policies benefits the rich more than the poor and lack of consideration for the ethnic groups. The result of Health workforce showed the shortage of skill birth attendant and emergency childbirth care services in distant regions. In Chapter 5, some recommendations focus mainly on Health workforce and Leadership. In the context of Vietnam, the implementation of policies is considered as weak and almost infeasible to apply. Thus, it is also a need to improve this stage in order to enhance the MHC utilization among the country.

**Key words:** Maternal healthcare, health service provision and utilization, Vietnam

## **CHAPTER 1**

### **Introduction**

My name is Nguyen Thi Thu Thuy. My academic background is in International economics where I have bachelor degree. Currently I am working as project staff in Vietnam Health

Environment Management Agency (VIHEMA). Even though my working position is not relevant to maternal health but I have special interest in this field. In long future, working as maternal health staff is considered as my preferred choice. Therefore the thesis would help me gain a more in-depth knowledge of my chosen field and improve my professional development. This thesis is aims to identify factors contributed to inequality of maternal healthcare provision and utilization in Vietnam in order to make recommendation for increase the quality of MHC provision, with a special focus on disadvantaged women.

Vietnam health sector has made remarkable progress on the way in improving its capacities and performance. Vietnam has already achieved almost all the health-related Millennium Development Goals (MDG). Its health indicators are better than what currently occur in other low- and middle-income countries (LMIC) at similar development level. However, evidence shows the growing disparities in health outcomes and inequity in health. It is clear that ethnic women have fewer admission to training, health care, and mobility compared to Kinh people, the major ethnic group in Vietnam (1, 2). This problem seems to be adding a difficulties to the achievement of MDG 5. Generally, it is likely that the inequity gap in maternal health seems to be widening, which remains to be a severe public health issue (1, 4).

In Vietnam, women plays an important role in various sectors. In 2011, it is estimated that they accounted for 70% in labour market. However, women's leadership and political involvement are limited (5). Currently, women's contribution in the market economy, administration, and the general public has enlarged. In terms of gender equity, small movement has been completed to increase gender relationships. In spite of this, a current domestic survey and global reports displayed that several features of Vietnamese men's and women's associations are still far-off from equivalent. It is noted that gender equity also impact to women' maternal health in Vietnam (6). In the health care sector, females account for 60% of the human resources and have been involved in reaching improvement in public health. Nevertheless, only 60% of women be given antenatal care for the duration of their prenatal period (5, 7). Thus, improvement for maternal health status among Vietnamese women is needed. For all the reasons above, inequity in MHC utilization in Vietnam has become a public health issue and it is need to be addressed as soon as possible.



## Background information

### 1. Socio-economic and demographic data

Viet Nam's land boundaries measure 4639 km, its coastline is 3444 km in length, and its land mass is 330,951 km<sup>2</sup>. The population reached 90 million in 2013, consisting of 53 ethnic groups (8), whereas the Kinh including beyond 85 percent of the people (9). The country has overall 63 provinces/ cities that are categorized in six main sub regions according to geographical and socioeconomic characteristics. The Mekong deltas in the South and the Red River in the North offer productive agricultural land whereas most of the other parts is mountainous or craggy. The majority of ethnic minority groups, about eight million residents, lives mainly in the mountainous and difficult areas of the country (2) (10). Viet Nam is a middle-income country, with annual economic growth rate was around 6% (11). The country has a rising markets in South-East Asia region thanks to Doi Moi - the economic reforms, which implemented in 1986. Vietnam has established the visions of becoming a modern industrialized country till 2020. Nonetheless, inequalities in health sectors amongst urban and rural areas, and sections of the inhabitants is continue rising (12).

The health status of Vietnamese people has improved markedly, as reflected in basic health indicators such as life expectancy, infant mortality rate, maternal mortality rate, and malnutrition rates of children under 5 years of age.

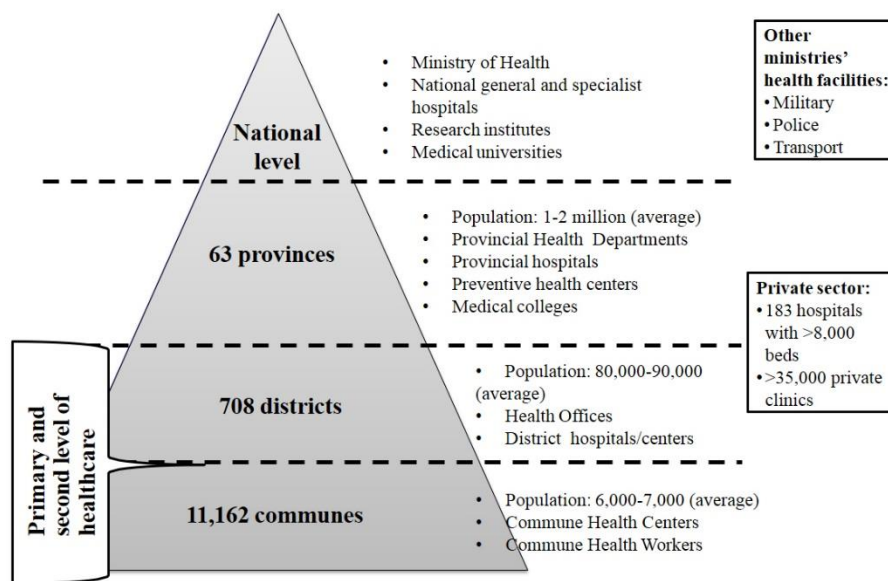
No	Indicators	2010	2011	Target for 2015
1	Average life expectancy (years)	72.9	73.0	74.0
2	Maternal mortality ratio (per 100 000 live births)	68	67	58.3
3	Infant mortality rate (per 1000 live births)	15.8	15.5	14.8
4	Under-five mortality rate (per 1000 live births)	23.8	23.3	19.3
6	Decrease of crude birth rate (‰)	0.50	0.50	0.1
7	Population growth (%)	1.05	1.04	0.93
9	Under-five child malnutrition rate (underweight) (%)	18.0	16.8	15.0
10	HIV/AIDS prevalence rate (%)	<0.3	<0.3	<0.3

**Table 1. Basic health indicators in Vietnam 2010-2011**

*Sources: General Statistics Office. Survey of population change and family planning 2011 and 2012*

### 2. Health system in Vietnam

The health system in Vietnam is organized in four levels which are national level (Ministry of Health), provincial level (provincial health departments), district level (district health offices), and commune level (commune health centre) (13). As a result, the service delivery comprises four official levels: (1) national level (central and regional hospitals); (2) provincial-level providers (provincial and regional hospitals); (3) district-level hospitals and centres; and (4) commune health centres (14).



**Figure 1. The health system hierarchy in Vietnam in 2015**

*Sources: Vietnam health system and health infrastructure: achievements, challenges and orientation*

Vietnam has experienced a variation of health segment transformations in 1990s. The health system has been advanced gradually, medicinal services has been progressively upgraded, and a wide diversity of ultra-modern services have been broadly presented (15) (16) (17). Vietnam's health indicators are better than what currently occur in other LMICs at its development level (18). The health system has witnessed major transformation (19). Main improvements comprised acknowledgement and endorsement of the private health sector. Further reforms are the launch of the user fees and health coverage, and opening of the pharmacological market place (20). Generally, expensive charge is not anymore assumed to be an important problem to minority reach to health services. Due to numerous government procedures, as well as the institution of the national Healthcare Account for the deprived, proposing costless healthcare over a selected commune health center (CHC). CHC is considered as a place where the poor and rural groups are mostly access for the healthcare services (21) (3). However, currently the amount of private health-care suppliers is also growing, which donates to the complication of the state in health in Vietnam (22). The rigorous state provision for the public health segment has not allowed CHC workforce quality in countryside areas to achieve the nationwide health plan purposes by the MOH for the CHC scheme. About one-fifth of workers at CHC accountable for the Control of Diarrheal Diseases (CDD) agenda not properly counsel a mother of a kid with diarrhea. Nearly two-fifth of CHC staff in charge for the Acute Respiratory Infections (ARI) program took 30% of incorrect responses concerning drug of treatment for a kid who get ARI (23). Moreover, current statistics recommend that maternal health service utilization among ethnic women is specially poor (4). Additionally, maternal mortality of subgroups is assumed to be four times bigger than Kinh group regarding to antenatal care (ANC) and giving birth (12). The health coverage scheme has not been completely expand entrance to services and monetary safety.

There is a deficiency of human capitals for health with advanced diplomas, particularly at the common level. The health information management is ineffective (24). For example currently the health department at provincial level required precise and well-timed data. Nevertheless, physical record-keeping activities in some provinces still need to be improved. Furthermore, health data was being delivered to the district level, but not submit to CHCs where it could be used to support health staff implement daily assessments (25). It is also well-known that

hospitals in higher level often faces with overstrain of patients to visit in Vietnam. The outpatient centre greetings hundreds of people day-to-day and is frequently burdened (26) (27).

### **3. Maternal healthcare in Vietnam**

Vietnam has achieved much progress in reducing MMR, from 200/100,000 in the 1990s to 69/100,000 in 2009 (28). The main causes for high MMR in Vietnam are haemorrhage (31.7%), eclampsia (16.9%), and sepsis (14.3%) (29). However, there are big discrepancies between the regions. The MMR is much higher in mountainous areas and among ethnic minorities than those in the mainland and among those of non-ethnic origin. In the former areas, a low number of ANC visits and high home delivery is recorded for the most recent year of available statistics (up to 20% in some places). Key factors relate to three delays of MMR which are the root cause of the high MMR in the mountainous region: Delays due to poor awareness and practice on safe motherhood of local people; Delays due to distances from the health facility and bad road conditions; delays to get the service in health facilities due to lack of available services) (30, 31).

Currently, about 500 community health centres remain lack of motherhood care suppliers. A larger number of the specialised obstetrics and gynaecology doctors work at the higher level, including district and provincial. There is a deficit of around 400 motherhood care suppliers at the provincial level. Around a one-quarter of them have a university qualification, and they have a tendency to labour in the central cities (5) (6) (32). Therefore, urban women have a diverse choice of ways to MHC utilization. Public services remain to take over, yet private services are occupying a noteworthy part. There were striking difference in providing maternal health services between urban and rural areas (33) (34). In Vietnam, high maternal death causes a significant policy anxiety. MOH and global development associates has made a countless efforts in safe motherhood (SM) policy in order to decrease maternal mortality and morbidity. It was expected consideration from administration and converted a nationwide health object program with yearly state finance from 2008 (35). Nevertheless, besides the value of services, numerous aspects might donate to poor delivery service such as charges of services, service payments and indirect costs for example transport and time (36). Aiming to increase the quality of MHC, Vietnam has also applied a populace and procreative health plan, which last from 2011 to 2020, directing general coverage for reproductive health (37). In 2012, the MOH delivered the Major Plan for Universal Health Coverage starting from 2012 till 2015 and 2020 (38).

	Antenatal care by skilled staff			Birth with skilled attendant		
	2000 (%)	2006 (%)	2011 (%)	2000 (%)	2006 (%)	2011 (%)
<b>Education attainment</b>						
High education	83.3	94.2	96.8	84.1	92.8	97.1
Low education	47.9	87.1	80.8	49.8	82.3	75.3
<b>Economic level</b>						
Non-poor	79.2	96.0	98.0	80.2	95.9	98.7
Poor	40.9	68.5	78.4	43.0	52.8	71.9
<b>Setting</b>						
Urban	95.4	98.0	97.9	97.3	98.3	98.8
Rural	62.5	88.6	92.0	63.7	84.5	90.5
<b>Ethnic groups</b>						
Kinh	78.2	96.5	97.7	81.3	96.4	98.6
Ethnic minority	26.3	63.2	73.2	19.5	45.8	63.4

**Table 2: Proportions of women who received antenatal care by skilled staff and those who gave birth with assistance from skilled attendants**

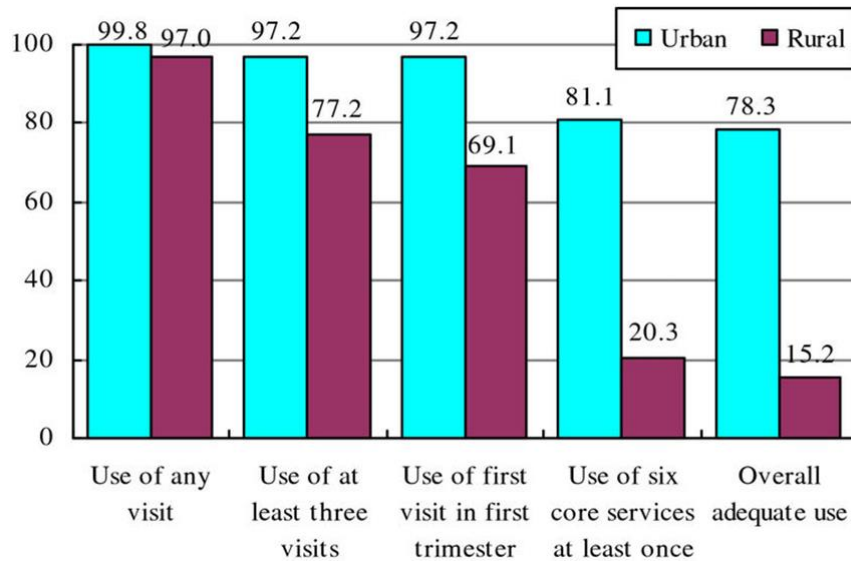
*Sources: Vietnam Multiple Indicator Cluster Surveys, 2000, 2006, and 2011*

## **Chapter 2: Problem Statement, Justification, Objectives and Method**

### **I. Problem statement and justification**

In Vietnam, the quality of maternal health in CHCs is still low. Approximately 80% of CHCs delivered antibiotic handling and oxytocin. However a small number can achieve further simple obstetric services for example physical placenta elimination or new born recovery. There is around 5% of CHCs do not provide birth assistant services. On the other hand, few provincial hospitals could offer widespread maternal facilities as necessary. Several services that were similarly seldom provided comprised belated abortions, new born care at district level, and uterus administration/manual placenta elimination (32). Females were tend to choose public services than private services. Because the superiority and capacity of services delivered by the private segment have not advanced enough, particularly in rural and remote areas. Nevertheless, there is higher number of women in the city desired to practice private segment servicing for ANC appointments. Females selected the private division because less of waiting times, more accessible to services and competitive providers (39). On the other hand, the management of the private services remained low. Females in mountainous areas with a little awareness and financial circumstantial frequently selected delivery at home or private suppliers. The cause was that the civil services might not reach to numerous females in subgroup population, particularly in hard-to-reach areas (7). Low quality infrastructure and inadequate capability of health workers were difficult for women to gain access to health facilities. Further, the impact of charges on access to health services in LMIC have harmfully affected MHC utilisation. In addition to the formal service charge, informal expenses, cash and favours for health suppliers affected on the selection of health service for the females as well (32). In 2002, based on state statistics there was about one-fifth of all antenatal females still did not take any ANC appointment in their prenatal period. And merely a half of them took three or further appointments, which are three quarter in city and over a half in countryside regions (40). The proportion of motherhood fatality in Vietnam was 240 demises for each 100,000 childbirths in 1990 and this amount had decreased to 59 in 2010. MHC utilization has improved in Vietnam, nevertheless, there is a quantity of boundaries in MHC use. For example there was a notable variances in usage among different areas (8).

In the figure below, the city women practice much more services than females in the country area. A great amount of women in the rural region did not obtain needed services. The proportion of females who gain health support through ANC appointments amid the city women was 4.2 times higher than in the countryside (21).



**Figure 2: The proportion of women who get support from ANC visits in rural and urban areas in Vietnam**

*Sources: Urban - rural disparities in antenatal care utilization: A study of two cohorts of pregnant women in Vietnam*

The ethnic minority groups has a threat of not getting SBA was nearly higher than 7 times in comparison to the Kinh/Chinese. The ethnic minority females had a three times hazard higher of not getting ANC associated to females in the ethnic majority cluster (4). A WHO report from 2005 showed that ethnic minority females have a more than four times possibility of maternal death linked to Kinh females (3). That groups are comprised ethnic minorities, the poor in the urban areas and immigrant inhabitants. Also, the uneven usage among clusters appears tougher to resolve due to missing and unqualified countrywide reporting schemes (9). Related to human resources for health, the lack of maternal health labors, imbalanced resource health staff, and discouragement of employees are impact to development in maternal health system (10). It is also clear that women in rural areas joined ANC later, take less visits and scarcer services than women in the cities. Therefore, they had a poorer rank of general acceptable utilization of ANC than persons living in the cities. From 2000, maternal health problems have not pay enough attention in the structure of policies particularly in subgroup areas in Vietnam (11). Besides, the improvement on the road to achieving the MDG 5 is remain infeasible from the pathway in many nations worldwide (12) (41). The MOH of Vietnam has highlighted maternal and youth health for many years and has devoted to develop the motherhood and child health, but unfairness still occurs (7). In the period of 2011–2015, the National Targeted Agenda on Safe Maternity aiming to implement teaching of native young ethnic females to come to be village midwives, related to ethnic minority midwives (EMMs). Nonetheless, usage of EMM amenities was moderately poor. For example there was only half of mother accessed EMM services. The small proportion of EMM services usage could be caused by the inadequate accessibility of EMMs in these communities. Mothers who did not access EMM services mostly since the EMM services were not obtainable for the duration of their prenatal period (42).

As health equity is considered as one of four indexes of International Plan for Women's, Children's and Youngsters' Health, which lasts from 2016 to 2030 by WHO. UNFPA Framework 2015–2030 for the Asia-Pacific Area identifies susceptible groups stay as significant objects for refining maternal health in nations (13) (43). Recently, there still a few of reports or existing studies about inequity in maternal health usage in Vietnam which help policy makers to understand the summary situation and to take a suitable policy for increase MHC provision. This paper would help them to clarify the problems which contributed to unequal rate of MH utilization. Suggest the proper policy and actions for MOH and stakeholders to implement.

**Study questions:** The literature review and analysis will focus on the following questions:

1. What factors are associated with inequality of MHC utilization in Vietnam?
2. What interventions have been applied to improve quality MHC and health system in Vietnam and in several Asian countries and how effective have they been?
3. What should be suggested to improve the current policies for MHC in Vietnam?

## **II. Objectives**

### **1. General objective:**

To identify factors contributed to inequality of MHC utilization in Vietnam in order to make recommendation for increase the quality of MHC provision in Vietnam.

### **2. Specific objectives:**

- a. To **assess** the situation of MHC utilization of Vietnam in leadership, healthcare financing, health workforce, information and health facilities conditions and services delivery.
- b. To **analyse** factors contributing to inequality of MHC utilization in Vietnam.
- c. To use the findings to **draw** feasible recommendations for strengthen the provision of MHC utilization in Vietnam
- d. To **find** lessons for improve and withdraw a recommendations for MHC in Vietnam base on results from Asian countries.

## **III. Method**

### **1. Search strategy**

In order to response the overhead requests, a wide-ranging literature review will be conducted. A systematic online search has implemented for literature review on inequality of MHC utilization in Vietnam, linking related search terms for MHC in Vietnam. Other articles and journals were recognized through citation following. Only studies and reports in English were comprised. The search will be narrow to papers from 2000 until present, the last seventeen years. The research tools will be used as follows:

- a. Google Scholar
- b. PubMed
- c. Google
- d. VU Online Library

## 2. The key words

Vietnam AND Maternal OR Child one of the following keywords:

1. Health service
2. Health system
3. Health policy
4. Health finance
5. Health personnel/ human resource
6. Health facilities

**Table 3: Search terms and other sources**

Search terms: “Vietnam”, “Asian countries” AND	MESH terms: Maternal health; Maternal health services; Health personnel ; Insurance, health; Health information system; Information management; Delivery of healthcare; Financing, Government; Policy making; Healthcare disparities; Reproductive health services; Fees and Charges; Fees, Medical; Health facilities; Ethnic groups; Healthcare disparities.
Other sources	Website: WHO, MOH of Vietnam, UNFPA Co-worker documents: Grey literature about reproductive healthcare in Vietnam Report: SBA report, Reproductive report, Health system in Vietnam, maternal health utilization report Information: Health insurance in Vietnam, information health in Vietnam

## 3. Description of conceptual framework

The thesis described and analysed the inequality of utilization of MHC in Vietnam based on the WHO Health System Building Blocks, using six main blocks to measure the effect of health system in the country such as leadership, healthcare finance, health workforce, information and research, medical and technologies and service delivery (44). Health services provision are the most obvious roles of any health system, both to customers and the universal public. The quality of services is extremely important, especially in development of MHC system (45). There would be imprecise if using a single model to analyse and improve the utilization of MHC. Every health system in every country basically need an economical and wide-ranged intervention to improve the provision of utilization. Therefore, they require an effective health system to have an influence at the large scale. The Health System Building Blocks helps to answer the question by using integration of building blocks to discover the core of problem and identify the proper intervention. This framework is effective in assessment of inputs which affect to utilization of services provision such as financing, health personnel, health facilities and service delivery, etc. The WHO and its companions have been cooperated to get a widespread consent on active approaches and methods of health systems capability, together with “inputs”, “processes” and “outputs”, then to link these to index of “outcome” (46).



The six building blocks donate to the reinforcement of health systems in diverse means. Several inter-sectorial modules, for instance leadership/governance and health information schemes, deliver the foundation for the general strategy and guideline of all the further health system blocks. Crucial input modules in the health system including financing and the health workforce. A last group, medical and technologies and service delivery, reveals the products of the health system, namely the accessibility and delivery of care (46). According to this framework, the thesis has provided in-depth findings based on data and evidence about inequality of utilization of MHC in Vietnam. Thanks to those findings and outcomes, we could find the factors affected to the inequity and effectiveness of MHC utilization. Also the limitations exists under the healthcare system for a long time. Thus, it is helpful to give policy makers understanding about situation and to draw the recommendations for improving the quality of MHC provision in the country. This framework helps to identify the gap occur in each component of health systems in maternal healthcare. For example, during the process detection of the limitations about health workforce, we can easily find out whether the number of health staff are adequate or equally distributed or capable, responsive and industrious or not. For each component, the framework give the detailed information as follows:

**Service delivery:** Strong health services must provide operative, harmless, good individual and non-individual health interferences to people in need with least unused of properties. Fairness in health result is the crucial goal (47). Through this block, we could discover and analysis whether equal distributed and deliver maternal services in many regions in Vietnam.

**Health workforce:** Low quality of health workforce in maternal healthcare can strongly affect to quality of services in MHC. Such as shortage of health personnel lead to overload of hospital and limit the utilization of services among patients (46). Based on this block, we analysis whether the staffs equally distributed and fairly competent in different areas throughout country or not. Also discover some root cause for low quality of health personnel which affect to equity of MHC utilization, especially in mountainous areas.

**Health information:** With this block, it is necessary to identify the cause for poor information management and recording in different regions of Vietnam (46).

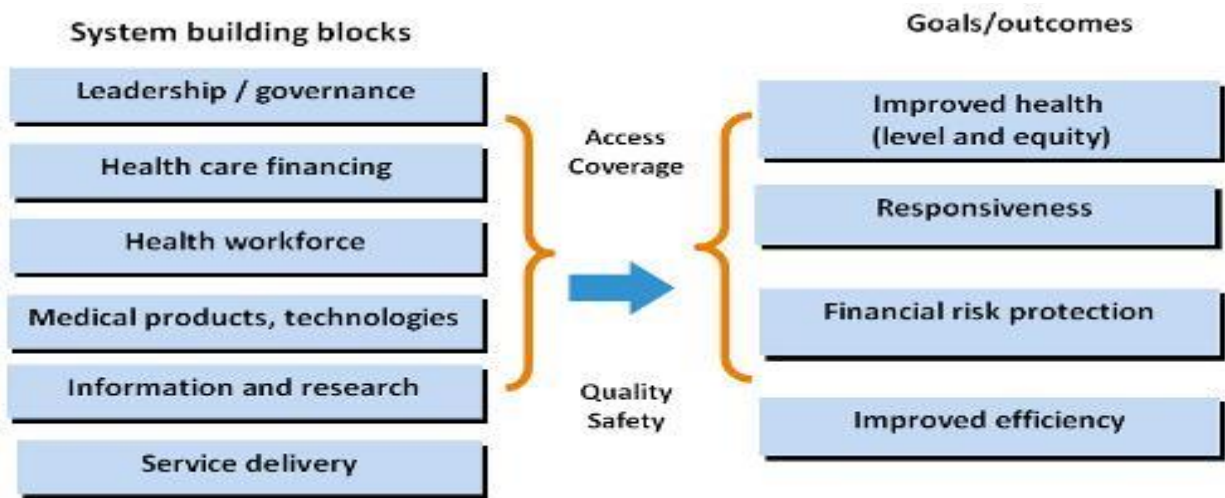
**Medicines and technologies:** A good medicinal health organization warrants equitable right to use to important medicinal produces, injections and equipment of guaranteed value, security, effectiveness and their properly usage (46). Through this block, we discover would people in remote areas has equity in access medicine compared with other richer regions or not.

**Health financing:** A well-functioning health financing arrangement rises sufficient capitals for health. And to confirm persons can access required services, and are safe from fiscal disaster (46). This block is considered as backbone of every health systems and health services development. Because it helps sustain equity of access MHC services through healthcare funds and investment in facilities, working conditions, etc.

**Leadership and governance:** This component includes planned policy agendas and are united with coalition-constructing, the delivery of suitable guidelines and inducements, and responsibility (46). This component also appears important to find out what government has made to ensure equity of MHC utilization in Vietnam.

Lastly, the System building block is widely used and considered as a best practical method to analyse and support writer to discover the precise findings for the thesis so far. The end product

will be an all-inclusive vision of inequity in MHC utilization in Vietnam in order to involve interested party in the country in significant discussion to successfully tackle the issue.



**Figure 3: Six building blocks framework**

*Source: The WHO Health Systems Framework, WHO*

## **CHAPTER 3: FINDINGS**

This chapter described the findings from literature review on factors regarding to inequality of and quality of MHC services in Vietnam. The findings were offered based on components of six block building framework.

### **I. Findings on six block buildings**

#### **1. Leadership/Governance**

##### **1.1. Governance for equity in access to maternal services**

Although maternal health has improved over time, inequities in utilization exist between disadvantaged and privileged groups in Vietnam. Ethnicity, household wealth and education are all significantly associated with maternal service utilization. Studies about leadership reported that the health interventions was prioritized rich over the poor and a lack of service provision for difficult areas. Additionally, growing trend was detected in the inequity procedures for delivery of tetanus vaccination, blood pressure testing, urine examination, blood inspection, and HIV checking. The utilization ratio of caesarean segment was considered to be greater among the wealthier women than lower women (48). Disproportions were also higher for interferences that need sustenance from the health organization, for example with SBA, there was fewer provision from the government through promotions, such as assured injections and Vitamin A supplementations. In health system in Vietnam, it is said that existing funds favours city areas and advanced levels, such as tertian hospitals, at the expenditure of funds in principle care (49). A study in one poor province in central of Vietnam found the prominence on social locating by classifying two possible physical reasons. This is considered as a partially cause of social rank in this province. These reasons are restricted compromise influence and limited independent decision-making capability (50). These interior mechanisms seem to deteriorating both deprived women's and care professionals' susceptibilities. Judgment and destructive, ethnicity-based rules are abundant and create a fences between care specialists and pregnancy women (50) (51).

##### **1.2. Informal payment**

In Vietnam, government implemented the National strategy for People's Healthcare and Protection which emphasizes the accessibility and the utilization to primary healthcare services for every residents. Both fee exemptions and health insurance schemes for universal coverage are results of this strategy. National Strategy on Reproductive Healthcare during 2001-2010 and 2011-2020 outlines guiding principles and objectives to be taken in maternal healthcare. The household direct OOP health expenditure, however, as a share of the total health expenditure has been always high, ranging from 50% to 70% during 2002-2010 (52). Vietnam has among the world's highest levels of OOP. Furthermore, studies highlight that the poor and the vulnerable groups still find services unavailable without informal fees to doctors, nurses, or other health staff (3).

Maternal healthcare utilization between urban and rural areas shows large inequities. Informal payments and the growing private sector, together with weak public health insurance, partly contribute to the inequities due to the ability and willing to pay for services parallels the increasing income of clients. A number of studies in Vietnam shows that besides co-insurance,

patients have to suffer a considerable informal expense and unintended expenditures, as well as housing and transport for the associated family members. The cover was over a half on hospital charges, informal payments, transport and accommodation per birth in hospitals at district level. And spent only one-fifth for each child natal in hospitals at provincial level (3). The great out-of-pocket expenditures by the insured also revealed in a lengthier interval of hospital stay (52). In Vietnam the system of informal charges or “pocket money” is outspread in the public and the health segment is no exclusion (53). Consequently, the deprived are extremely involved, because they are less capable to pay bribes, which rise the prices of gain access to health services, and are hard to pay for private substitutions when bribing use up public health services (54). However, there is a lack of papers or detailed documents about informal payments in the Vietnamese health system (3).

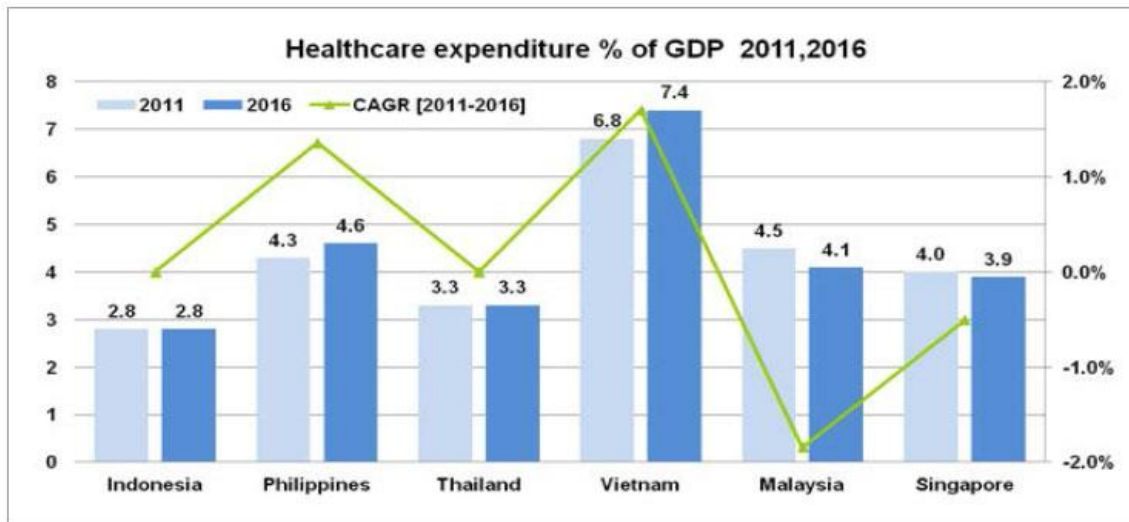
## **2. Healthcare financing**

### **2.1 UHC in mountainous area**

Vietnamese government is committed to universal health coverage thanks to a number of policies and laws regarding health financing and health insurance. The health financing policies focus on equity in health. The financing system has shifted from a tax-based system to social health insurance since 1992. Further, a detail schemes to expand health insurance coverage for the poor and near-poor groups has been approved. However, UHC, is challenging due to a low coverage for residents in hard-to-reach areas. It is caused by several reasons such as geographic, transportation, and monetary barriers (55). Whereas two-thirds of the Vietnamese inhabitants is provided by health insurance, health cover expenditure make up for only below one-fifth of total health expenses in 2012 (56). Besides finding a possible financing system for the health system, an effort has been put on the poorer sections with the National Healthcare Fund for the Poor (HCFP), implemented in 2003. Nevertheless, the coverage of this package is also a reason for unfairness. Incidentally, the program has focus on the underprivileged, ethnic minorities living in directed provinces, and family unit living in poor communes groups. Wagstaff indicated that the program is mostly focus on the poor, the two other groups were less boarded up. General the HCFP enclosed only three-fifth of those qualified in 2004 (1).

### **2.2 OOP payments**

In Vietnam, the direct charge is a main issue for an unfair of the general public. In latest years the financing the healthcare system in Vietnam is implemented based on OOP expenditures. In other hand, the government funding is not sufficient to afford all healthcare expenses (3). The possibility of catastrophic expenses for the deprived is substantial with this system, particularly when a great percentage of the unfortunate keep on uncovered (57). Although the quantity of individuals with health coverage in Vietnam has improved suddenly, the involvement of the health insurance like a part of entire health spending was nearly one-fifth in 2008. Vietnam’s health insurance meet an additional objection concerning the money durability of the system. From 2003, expenses have increased quicker than incomes in the obligatory and volunteer agendas. By 2007, general health expenses surpassed its profits (58).



Source: EIU, Frost and Sullivan analysis

**Figure 4: Healthcare expenditure in Asian regions from 2011 to 2016**

Source: EIU, Frost and Sullivan analysis

The table below shows that Vietnam was at highest position comparing with other Asian countries in healthcare expenditure (59). Numerous families in Vietnam suffered of huge health spending, forced to be poverty owing to healthcare expenditures. The OOP is still great partially as fee-for-service is the greatest public supplier expense method in Vietnam. The MOH and MOF together fixed the medical service payment programme (60). The payment plan contains services such as hospital inspection and inpatient stops, laboratory services, and operations or processes. Furthermore, patients give money for medications and substantial charges. Payments are compensated either one by patients like OOP expenses, or by the cover system by provider compensation. Medicine services are also included in the inclusive government payment plan. Charges do not yet contain all charge constituents, and public amenities remain to obtain government budget supports. Moreover, technologies develop increasingly advanced that make the cost of care increase (59) (56). In brief, Vietnam SHI delivers inadequate monetary security, mostly for the poor. This causes a big inequity in utilization, and huge inequity in health effects (61). Fundamental these outlines of consumption are big inequity in the quality of health services for the ethnic minorities. The ethnic minorities come to CHSs more often, which are fewer equipped and supervised by suppliers who utilize less skills. The rich come to hospitals, which are operated by clinicians and better provided with drugs and more efforts than CHSs. Castel's study indicated that monetary blockades from hospitals were mentioned as the most noticeable obstacles to right of usage by the ethnic minorities instead of beliefs or distance (62).

### 3. Health workforce

#### 3.1 Lack of staff and unbalance distribution

As indicated in the problem statement, shortage of health staff is common not only in Vietnam but also in Asian countries. Based on a paper about human resources of health in 2011, those countries meet various health workforce problems. Even though there is not a combined scarcity of health workforces at the local level, several Asian nations drop under the WHO onset of standard for distribution of doctors, nurses, and midwives. In the table below, Vietnam

has a low position at ratio of nurses and midwives per doctor (20, 63). The lack of female health workers have been displayed to hold back women from pursuing maternal health services in Vietnam. The statistics about midwives in 2014 reported that the figure of midwives in Vietnam for each 1,000 live child birth is absent. (3, 64, 65).

	Population (millions)	Number		Density per 1000 population			Gap in health workers*†	Ratio of nurses and midwives per doctor†
		Doctor	Nurse and midwife	Doctor	Nurse and midwife	Combined		
Brunei	0.4	400	2120	1.1	6.1	7.2	..	5.3
Singapore	4.4	6380	18 710	1.5	4.4	5.9	..	2.9
Malaysia	26.6	17 020	43 380	0.7	1.8	2.5	..	2.5
Thailand	63.9	31 855	140 404	0.5	2.2	2.7	..	4.6
Philippines	88.0	90 370	480 910	1.2	6.1	7.3	..	5.3
Indonesia	231.6	56 938	387 458	0.2	1.7	1.9	83 652	6.8
<b>Vietnam</b>	<b>87.4</b>	<b>43 292</b>	<b>77 233</b>	<b>0.5</b>	<b>0.8</b>	<b>1.4</b>	<b>78 747</b>	<b>1.8</b>
Laos	5.9	1863	5363	0.3	0.9	1.2	6226	2.9
Cambodia	14.4	2047	11 125	0.2	0.9	1.1	19 660	5.4
Myanmar	48.8	17 791	49 341	0.4	1.0	1.4	44 132	2.8
ASEAN	571.4	266 301	1 248 117	0.5	2.2	2.7	..	4.7
Global	6659.0	8 404 351	17 651 585	1.3	2.8	4.1	..	2.1

**Table 4: Density of health staff in Asian countries**

*Source: Maternal, neonatal, and child health in Southeast Asia: towards greater regional collaboration, 2011.*

Unbalanced spreading of workforce, mainly in distant countryside areas is also a chief human resources issue in every nations. For instance, based on data from MOH China in 2011, the difference in health labours is striking when in metropolitan areas had 2.97 doctors and 3.09 nurses per 1000 people in 2010, while country side areas only had 1.32 doctors and 0.89 nurses per 1000 people (66).

### 3.2 Ethnic minority midwives

There are wide gaps in the ethnic minority midwifery guidelines, such as no nationwide recognized definition, range of practice or capabilities. A midwife cannot accomplish as a SBA in Vietnam because existing regulations does not contain all the globally recognised midwives' responsibilities. Variations in the programme content, management, and occupation are required to create an encouraging change. This is linked to qualified principles of midwifery rules that are associated with the universal description of an ethnic midwife. While various health programmes spread maternal and new-born care actions, there is no precise manuscript for a typical range of practice for midwifery (32). One study shows that Vietnam is one of the nations which do not practice worldwide standards on admittance level and dimension of

teaching (67). Midwives have not been formally involved in the health system or given identical names, or rewarded steady salaries. They were frequently not suitably prepared to take the services they were educated to offer (68).

### **3.3 Staff income**

A scarcity of authorized teaching packages and little fee for midwives also subsidized to the slow development of MHC. For instance, in 2011 midwives in north of Dien Bien, a mountainous province in Vietnam, were waged merely US\$2.5 every month for their works. Most of them often must to work as a famers in the fields to make their living income (69). The low payment also received not only by ethnic midwives, but also for VHWs (32). In current years the government has campaigned sponsorships to appeal competent health workers to healthcare sector, particularly in isolated and remote regions. This comprises adversity and favoured grants for staffs at work in extreme hard-to-reach areas, together with an extra sum respected at 70% of basic wage. Further policies were applied extensively, for example the 1816 Initiative on workforce switching, and delivery of allowances for teaching and re-training in ethnic and poor areas. On the other hand, the operation of this inventiveness faced problems, counting growth of a suitable training curriculum for health suppliers and distribution and durability of competent staff after teaching (32, 66, 70).

### **3.4 EMOC**

In terms of EMOC services, at commune level there are two services among the 30 essential skills revised that Commune Health Station (CHS) maternity care workers are not presently allowed to conduct: administration of a breech birth and supervision of a prolapsed cord. Moreover, compared with the six EMOC index by WHO, CHS in Vietnam are legalized to implement only five of the tasks. Consequently, at present CHS in Vietnam are not capable to be chosen because EMOC amenities rendering to global principles (32, 71).

### **3.5 Training**

A few of studies showed that the knowledge of EMM and VHW and other health staff in general are missing. And some EMM even found hard to overcome individual obstacles to receive the training. A study of Corino reported that only 80% of all VHW had actually monitored a three, six or nine months teaching (68, 72-74). In 2007 the WHO has printed a broadsheet about the significance of the VHW. In this explanation, the VHW is not an officially educated medicinal specialized (74). Similarly, one survey to assess the awareness of PHC physicians concerning new born care in a Vietnamese province illustrations that only 60% of the probable points were attained. It is reflected that PHC workforce in the province seems to have lacking understanding regarding new born care (75). A number of VHW had discover skills for advisory on birth, dealing with usual birth and support with instant breastfeeding. Nevertheless, there were a minor amount of skills that members had not study in both pre-service and in-service teaching (71) (32). Besides, health providers has found difficulties in differentiating a miscarriage from a new born death, as various health providers did not know the meaning of a neonatal death (22). About one-quarter of health workers defined properly the uterus. Further, their understanding about the grounds of obstetric and new born difficulties, analysis and cure was incomplete (67). Only a small number of providers at district and commune level may possibly appropriately response questions about reproductive care.

Commonly, health workers at provincial level had far superior understanding than those at district and commune level (76).

### **3.6 Supervision**

There was limited studies about the supervision in MHC services, especially for ethnic health workers. However, several studies revealed that the supervision in CHCs was poor and even not meet the health staff's expectations. Bad supervision was observed as discouraging by selected participants. Management was directed once-a-month or three-monthly based on the agenda of districts. Overall, the health staff employed at the CHCs think that supervision they expected from the district level was supportive when it deliver material and directions and recognized areas for enhancement (77). On the other hand, the value of supervision did not completely response the prospects of CHWs since the administrator lack of management abilities. The volume of time managers consumed at the CHCs was also realized as unacceptable (70). Supervision for new born healthcare was also inadequate, in addition there was definitely no community-focused referral scheme (32) (40).

### **3.7 Workload**

Workload remains one of barriers for healthcare staff in Vietnam. In countryside parts, it seems hard for only one medical doctor when he has working at night shifts in numerous district hospitals for long hours, due to medical doctor's shortage (70) (78) (79) (80). The midwives - who helps women during giving birth and after the delivery, also have to experience long working hours and few opportunities for mutual support even throughout obstetrical emergencies. Their salary, however, was not reflected balanced to the workload, and the individual dangers elaborate during working process (77).

## **4. Medical products, technologies**

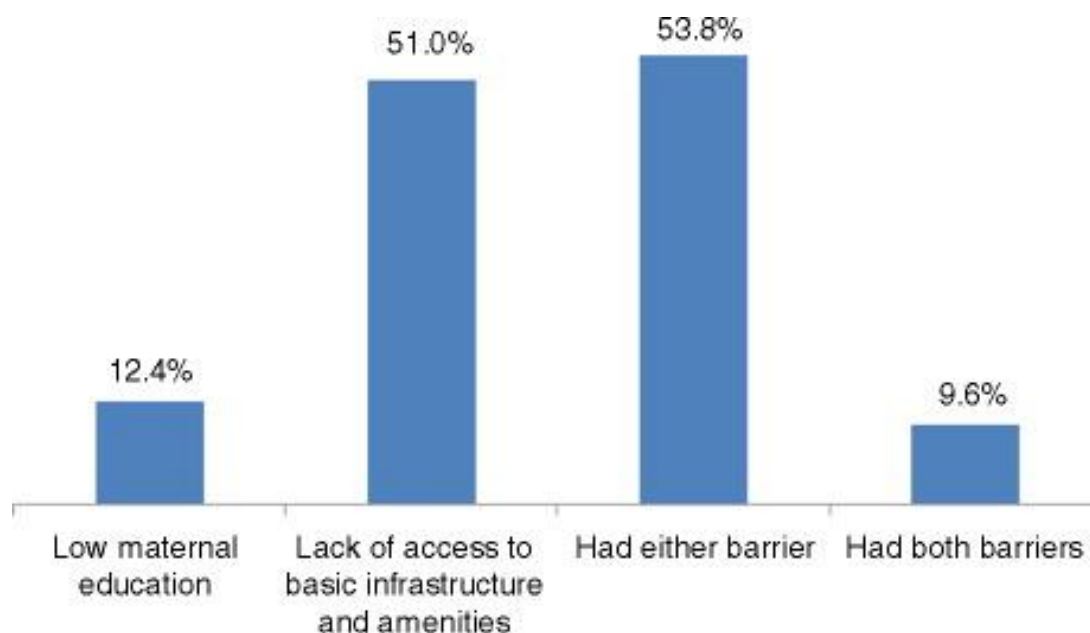
### **4.1. Medications**

There is lack of data about shortage of drugs for ethnic women in provision MHC services. Averagely, many studies illustrate that vital medications were mainly deficient at commune level, such as lack of antibiotics, sedatives, aseptic and antiseptics, vitamins and minerals (32). CHC have a scarcity of drug and they finish quickly. In Phong Nam and Ngoc Khe, the maternal health staff assumed that they cannot deliver the drug for people, since these persons at present want to have medicine for tiny uneasiness such as headache or bruises. There is no constraint on the occurrence of receiving new prescription. But the CHC still not make a supervision of the medicine and be required to take it by hand at the district hospital to acquire the pill. In response they obtain the similar amount of tablet they need regarding to the quantity of medicaments (74). Concerning medicine supervision, as controlled by the MOH, drug stock must be particularly arranged, drugs must be kept in check in box with fair trademark, and reserved at structured position. Some studies expose that drug managing and storing is moderately good at district and communal level. Conversely, not all health centres have especially designed drug stock, particularly at CHCs. For example drug obtainability is fairly good at 2 levels: 100% of district level facilities have list of crucial drugs. Nevertheless, 25% of CHS of Kien Giang and 12.5% of CHS of Ha Tay have no drug series (81).



## 4.2. Health facilities

Health facilities is considered as great concern for both health staff and patient in Vietnam. Common thoughts detained that native CHC facilities could not meet the care requirements of antenatal women, specifically (77). For example, the consequence of CHC status of ethnic minority and deprived women was perceived to demonstrate a limitations inside the provincial system (50). Besides, the absence of hygienic water and practical rooms for principal healthcare were mentioned as problems to deliver competent health services (82) (70). In one study about maternal health service coverage in ethnic and minority groups, the graph shows a high percentage of Vietnamese women, aged 15–49 years, experiencing barriers to basic infrastructure and amenities: (a) safe energy, (b) safe water, (c) sanitation, or (d) safe energy for cooking (56).



**Figure 5: The percentage of women in Vietnam facing types of barriers in accessing MHC services**

*Source: Analysis of selected social determinants of health and their relationships with maternal health service coverage and child mortality in Vietnam, 2011.*

## 5. Information and research

### 5.1. Maternal Child health (MCH) databases

There are few studies has been found about information and research related MHC in Vietnam. In the country, various home-based records (HBRs) for maternal and child well-being have been applied in several regions of the country in an uneven way. It is still lack of standardization and integration for current HBRs. To tackle the problem, firstly the Vietnamese MOH declared that the MCH Handbook conducted in the Dien Bien, Hoa Binh, Thanh Hoa and An Giang provinces as a pilot (83).MCH Handbook intervention has made a positive effect on health education promotion in Vietnam. The handbook also provides a good database for the information regarding patient refer and could be used for other health studies (84). However, it requires health staffs at commune health centres must have skills to recommend pregnant women to take at minimum three antenatal examinations at first visit before using

MCH Handbook intervention. Thus, involvement of MCH Handbook interference to the rise in awareness of prenatal care requirements seems to be incomplete (84, 85) (86).

## **5.2. Reporting system and information**

A several of studies about MHC in Vietnam reported that inadequate and incompetent countrywide and worldwide reporting management create this challenging in information organization for health staffs. Health-care developers must to count on estimations and statistics gained over surveys. For instance the Demographic and Health Surveys (DHS) and the Multiple Indicator Cluster Surveys (MICS) 4, 6 and though when analysis data are accessible, they are seldom inclusive or used by policy-regulators (4, 7) (3). In Quang Ninh, of wholly infants who died at district hospitals, around three quarter had their casualty recorded. Largely, the health system only informed one quarter or more of new born fatality. Studies indicated several obstacles to procreative health/sexuality material and service providing are from civic leaders and health workers. For example, various educators in schools were also feel nervous to deliver such “sensitive” information (32) (84). Ethnic minorities and a large number of Vietnamese youngster have inadequate admission to maternal and reproductive health facts and services. There is also lack of material and information at residential health facilities printed in some ethnic language (3, 87). Besides, it has been assessed that only half of Vietnamese females are learnt on the processes for the duration of ANC and the women’s participation in choice constructing is unusual (77) (4). A study in 2004 showed that the value of recording and documents is appeared doubtful. For safe motherhood actions, there are 11 sorts of paperwork at health infrastructure. The table below offerings book records at the nominated health facilities. It is prominent that vital books about transferal management, complications management after birth, new born nursing. They are normally noted with additional books such as giving birth book or have not been taken responsiveness for (81) (32) (88) (89).

Type of book	District level (%)			Communal level (%)		
	Hà Tây	Kiên giang	Quảng Trị	Hà Tây	Kiên giang	Quảng Trị
General book	100	100	100	37.5	87.5	12.5
Delivery book	100	100	100	100	100	100
Newborn monitoring book	100	0	0	87.5	62.5	37.5
Gynecological examination book	100	100	100	100	100	75
Transferral monitoring book	50	100	100	62.5	62.5	37.5
Family planning book	100	100	100	100	100	100
Complications monitoring book	100	100	100	75	87.5	25
Death records	100	100	0	100	75	62.5
Iron tablet distribution book	0	100	0	62.5	75	50
AT injections	0	50	0	100	75	87.5
Drink Vitamin A book	0	50	0	100	50	75

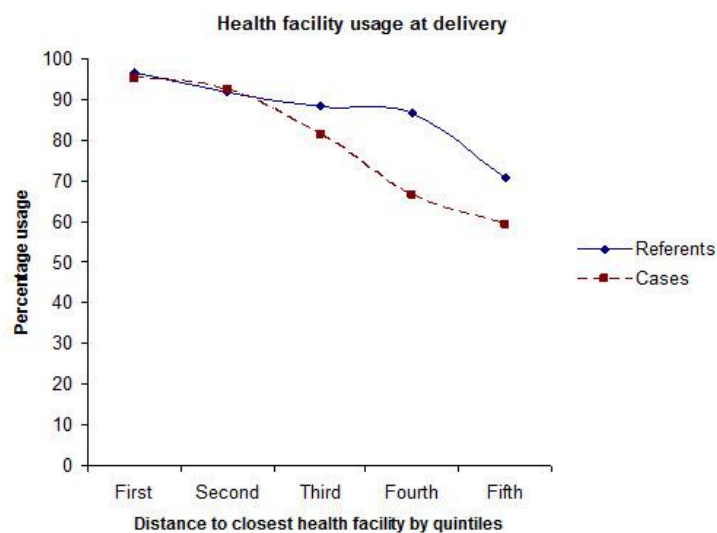
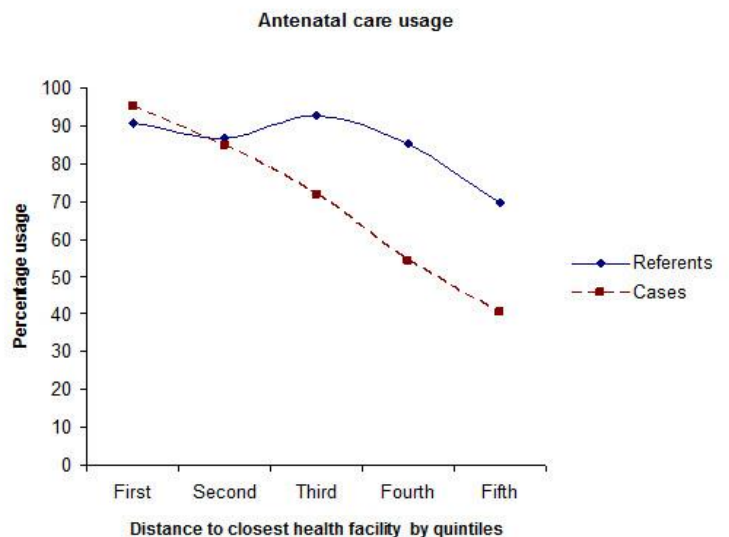
**Table 5: Book records related birth at facilities of Vietnam**

*Source: Compendium of Research on Reproductive Health in Vietnam for the Period 2006-2010, 2012*

## 6. Service delivery

### 6.1.Distance

The service delivery in Vietnam diverse enormously between areas, subsidizing to disproportions in maternal health services that not facilitated the deprived (32). Ethnic minorities almost reside in isolated and hilly areas to a greater range than Kinh groups. This reveals that there is a lengthier space to health services, which in causes a time-consuming transportation to access capable care. One ethnic woman described that giving birth at home was frequently due to ‘the extended and costly remoteness to a healthcare locations’ (50) (90) (91). Nevertheless, further remote communities have less access to the transportations and several of them are impacted by severe flooding. These reasons effect driving time and appear to encourage people for self-treatment and birth delivery at home (42). A studies in some provinces also indicated that a lengthier remoteness to the nearby hospital were together related with considerably lesser odds of consuming antenatal care and birth delivery in a hospital, because were unnoticed commune-level physical characteristics (92) (91) (93).



**Figure 6: Health facility use of prenatal period on the distance from mother's house to the nearest health facility in Quang Ninh province, Vietnam**

*Source: Maternal healthcare professionals' perspectives on the provision and use of antenatal and delivery care: a qualitative descriptive study in rural Vietnam, 2010.*

## **6.2. Transportation**

Shortage of transport and resources to facilitate women are reasons recognized for the smaller proportions of MHC utilization in areas occupied mostly by ethnic minority people (4, 51). There is, however, lack of data about the mean of transport which ethnic groups using when access to MHC services. The result only showed a number of considerable evidence from poor areas instead. (4, 42, 94). The mortality proportion of giving birth at home was as large one-third in mountainous and low-lying areas, and one-fifth in inner-city regions (4) (3). In remote areas, there is 15% of death occurred when going to a health centre. The usual time to the area of casualty was 74 minutes. More importantly, several CHCs did not vigorously bring up women facing hard delivery to higher-level care centre. Therefore the patients have to cope with situation by themselves. Nevertheless, service provision was incomplete (32) (77). A study about safe motherhood service provision in three provinces in 2004 reveal that the most popular way of transport is bicycle, motorbike, on foot. Fast means of conveyance are not obtainable in certain health hospitals. There was a patient who get haemorrhaged after give birth and pass away three hours later as lack of transportation for her to reach the clinic timely (95). Generally, transportable time from commune to district is smaller than from district to province by total ways of vehicle. The regular travel interval from CHS to District health centre is fewer than 30 minutes by bike or motorcycle. This is the furthestmost suitable situation for patients to reach the hospital (81).

Travel time to the nearest higher level health facility	District to province			Commune to district		
	Hà	Kiên	Quảng	Hà	Kiên	Quảng
	Tây (%)	Giang (%)	Trị (%)	Tây (%)	Giang (%)	Trị (%)
On foot : <i>under 30 mins</i>	0	0	42.9	0	0	42.9
<i>From 30' to 60'</i>	100	50	50	25	0	0
<i>over 60'</i>	0	50	50	75	100	57.1
Motor bike, car <i>under 30 mins</i>	50	0	50	87.5	66.6	100
<i>From 30' to 60'</i>	50	0	0	12.5	33.3	0
<i>over 60'</i>	0	100	50	0	0	0
Bicycle <i>under 30 mins</i>	0	0	25	75	0	71.4
<i>From 30' to 60'</i>	0	50	75	25	0	14.3
<i>over 60'</i>	100	50	0	0	50	14.3
Boat <i>under 30 mins</i>	0	0	0	0	0	0
<i>From 30' to 60'</i>	0	50	0	0	0	0
<i>over 60'</i>	0	50	0	0	0	0

**Table 6: Travel time to the nearest higher level health facility categorized by means of transport**

*Source: Assessment of the Capacity of SM Service Provision - Client Needs in 3 Provinces in Vietnam, 2004.*

## **II. Community factors**

### **1. Culture**

There is lack of detailed evidence and data in terms of relationship between culture and MHC. In Vietnam the ethnic groups, for example the H'Mong people, reside mainly in isolated and difficult areas. They are well-known for their family bonds and resilient traditional customs and culture (1). In H'mong ontology, a new-born baby soul can be grabbed by devils or monsters spirit. Usually, the family member of those women will support childbirths and practice numerous tricks to look after the baby's soul in order to keep them safe from evils. Almost women in this ethnic trust on mental state, magic in their daily routines habit. Females are likely to undertake weighty cargos, on the other hand they are deprived of reproductive health permission. In this culture, H'mong men can have multiple partner. People get married at an early age, when boys usually married at 16 and girls married at 14. Females often are forced under a burden to have sons. Those culture refrain various H'mong women from gain access to maternal health services as of now. (96, 97). In history, Vietnamese traditions has been prioritized. A number of instances of strong adjustment policies, encouraging Vietnamese culture has been reported. Though ethnic minorities groups nowadays are accepted by the country's official document, and some agendas has been recognized in give directions on ethnic minority in latest years, there are few information of judgment to ethnic minorities inside the health system. (64, 98, 99).

### **2. Gender**

Vietnam is a public with a male-controlled family structure founded on standards where women's rights on daily life choice is restricted. In some studies, this was completed in the FGDs by the explanation of the importance and influence of the woman's spouse for the duration of prenatal period and delivery. Male's impact on female's maternal health situation and outcome have been more and more reported universally. In the meantime, maternal health is mainly noticed as a female's problem, with insignificant info accessible for husbands. In many poor regions in Vietnam, various husbands, nevertheless, were reflected ignored and the outdated opinion that pregnancy is wives' duty persisted in the inhabitants (77). The necessity to include men has been emphasized when increasing outlines for maternal health agendas. Male participation has been revealed to be an essential approach in enlightening maternal health status of women in a related background. (77, 100). The gender inequity also displayed regarding to the training and customs of Vietnamese culture. The son of the household will be the person who receive family possessions and reserve the family career. The son also the person who is permissible to make expense to the descendants and take care for their burial place. Therefore, for some women who is unable to bear son will be reviewed as harassment to their dynasties (3, 101).

### **3. Income**

There is absence of data related to income of ethnic minority groups. A few of studies showed that earnings hardship is unreasonably upper in the middle of ethnic minority people. Participants of ethnic minority groups account below 15 percent of the country's inhabitants but make up for 70 percent of the starvation. Regarding to the study in 2014 directed by the MOLISA, the occurrence of deficiency amongst ethnic minorities groups was considerable at around 47 percent, in comparison to 10 percent for the Kinh people (2, 102).

### **III. Other Asian countries**

In several Asian countries, a number of studies provided worthy lesson regarding improvement of equity in MHC services. For instance in Thailand there is a success in filling the gap between poor and rich in MHC services by multi-sectorial policy and commitment for UHC in the country. Moreover, investment in infrastructure in hospital since 1970s in this country has led to benefits for patients in the future (20). The Thailand's good quality health-care service is aided by the government pro-rural strategy. The strategy purpose is aiming to help the very deprived in the rural area of obligatory community service by all medical, pharmacologist, and nurse graduates at the district level. The support and invest for local hospitals and sub region health centres has sustained to increase over the past 30 years. Health systems at district level, including hospitals and clinics, are favour in given a wide-range medicinal, preventive and health-upgrade services, as well as MCH (103). In terms of information improvement, a lesson from India suggested using E-Portal to increase accessibility of customers in national wide to health data (104). Regarding to decrease informal payments, lessons from Cambodia shows the positive achievement by reinforcing expenses and applying effective source administration. For example, Takeo Referral Hospital organized out-of-pocket expenses, guaranteed clients of stable fees, secure patients from the randomness of hospital fees and encouraged fiscal durability (105).



## CHAPTER 4: DISCUSSION

This chapter discuss the findings of the paper. And at the same time analyse carefully the strength and weakness, also the limits of the methodology. Two most striking findings was found are leadership and health workforce.

### 1. Findings

As reported in the result, the absence of relevant data to ethnic groups in maternal health care utilization somehow restrict the competence for the findings. The result still general because it was based on six block of health system. And could not detailed discover other aspects which link to MH services using in remote areas.

As mentioned in the results, the influence of informal charges is overwhelming for the deprived. As it not only rises the expense load but also deteriorates the impact of financial policies. Furthermore, it creates barriers to the right to use of health services and generates inequity in a very straight way (3, 53). Informal charges restrict governments' opportunities to performance on unfairness. And also decline the capability to generate the properties and control funding of the health segment, which will displeasure almost deprived groups. In Vietnam the system of illegal payments or "pocket money" is common in the public and in the health area is no exclusion. In order to growing admission and resolving the fiscal problem of healthcare use, the monetary and non -monetary obstacles to health services must be solved. The informal expense is still happen through utilization of MHC service. Alternatively, there is an absence of reliable and regulation to address the issue. This extremely effects the entire development of transformation in the health sector. Thus, it is need to reduce the informal payment in health services generally in order to decrease burden of health expense for the poor.

Our findings in the paper shows that there is still a gap in workforce distribution and shortage of health staff. Since 1990, Vietnam's government has experienced several important reforms such as acknowledgement and authorization of the private health sector. And broadening the pharmacological market place. This strategy has a double effects on the supply of health workforces. Firstly, it inspired the productivity of the health staffs to meet requirements of the health business. On the other sides, it created the unfair spreading of health staffs through the different areas. Though the country has produced inducements to employee, and preserve health staffs in poor and hard-to-reach regions. This problem may be viewed as a main task to deal with in the country (20, 63). Moreover, the medicinal business has continually appealed pharmacist from civic clinics, health centres, and organizations. Consequently, the scarcity of druggists in health amenities has become more serious. More significantly, the druggist's occupation is still not suitably acknowledged in Vietnam. Yet druggists often undertake vital responsibility as guidance counsellor and health suppliers. Their tasks are included regularly in delivering proper information to patients together with provision drugs. As a result, they should be considered carefully in the Principal Plan for Health Workforce Improvement. The mass of midwives is specifically important to three main health outcomes and has larger influence on mortality proportions and life expectation than mass of nurses and doctors. EMM has great impact on dropping child mortality and refining motherly well-being (32, 71). Admission to capable midwives can guarantee fair admittance to MHC services especially for people in difficult areas like ethnic minorities. Therefore, the MOH should create a stronger strategy for health workforce. The human resources growth will be founded on the precise

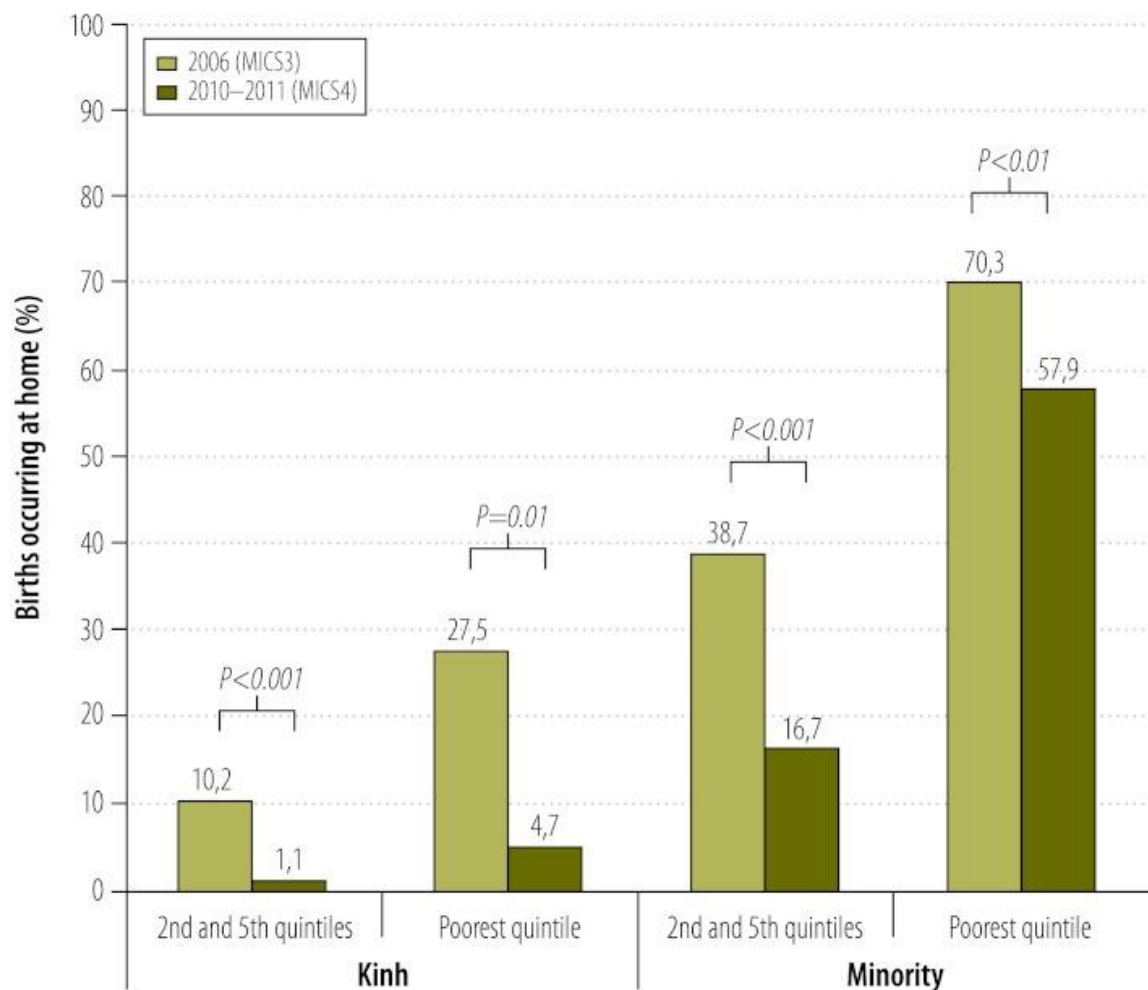
requirements of every segment and district with an explicit emphasis on distant and mountainous regions (76) (71). It is suggested that if succeeding a detailed strategies, SBA at villages, midwives will become an applicable health labour force for the poor and people at distant regions. They ought to be a portion of the national workforce strategy. The MOH and government also need to increase the inducements for specialists in rustic isolated areas to attract persons from these parts into teaching and tutoring. This also imply that disproportions in MHC utilization can be reduced by creation out-distance services by field workforces like CHW and VHW. And focus mainly in countryside and isolated areas. It will help to enable antenatal care appointments for women in prenatal period; increase appointments for mothers who have lately gave birth; health checking and development of intensive care for offspring. As mentioned in result, all ethnic midwifery and VHWs is severe lack of professional skills. Therefore, there is a need to tailor a curricula of the teaching plans to the topics covered. The quality of training must to evaluate during and after the training programme. As revealed above, the UHC still not widely reach numerous areas and other sections. As a result, there was a necessity to expand the UHC for remote groups, particularly in demanding areas, such as people living in coastline and mountainous regions.

As the results of this thesis suggest the insufficiency of health capacity structures and the absence of vital health machineries at CHCs created the inadequate application of the official performs as defined in the Nationwide Guiding principle. In that situations, the inspiration of health workers was confronted by their incompetence to response the quality criteria, along with customers beliefs. Shortfalls in any constituents connected to working circumstances will impact the value of health provision and decline workforce job pleasure and inspiration (70). Thus, there is an urgent necessity to recover health infrastructure and wide-ranging investment in working conditions for health staffs. It also advocates that resolving monetary and other admission obstacles must to supplement funds in the health system.

In general, a potential weakness of the paper was that two blocks are Information and research and Service delivery has found with smallest evidence. There for it would not be able to fully analyse in chapter 3. Geographic problems and remoteness could not be the main obstacles to right to use the MHC services. Because ethnic minorities frequently take a long travel to make their daily livings. Nevertheless, the small rate of service attending is regularly attributed to geographic separation (42, 81). The studies about information management in ethnic minority are still limited. Basically, the findings shows that the information management in commune level and in poor areas are remain poor. Besides, there is lack of proper information sources for patients. To improve the situation, the principle and the gathering of consistent data on numbers and reasons of maternal mortality is needed. Further, the reinforcement of public registration arrangements must be implemented. These actions will be a crucial step to allow advancement and durability of mother healthiness.

In chapter 3, there is only few evidence of the community factors that strong link to access to MH services. It is reported that deprived education, linguistic obstacles and financial condition are three considerable causes which lead to the unfairness in MHC services among many areas in Vietnam. Almost ethnic minority people are living in worse conditions and less trained and thus influenced by health inequity because of lower social status. Healthcare use is extremely impacted by level of awareness and understanding by patients in Vietnam. Incomplete understanding of risk through prenatal period and in the new born phase have been revealed to contribute to the raise of maternal fatality and new-born mortality rate (3). There is need to

enhance woman awareness and empower them in terms of economics status and especially for those who living in poor and mountainous areas. The graphs below displays the raised odds of women with low economic conditions (7).



**Figure 7: The odds ratios (ORs) for deficiency of capable prenatal care and giving birth at home of women in countryside areas, by motherly and house features**

*Source: Maternal healthcare utilization in Vietnam: increasing ethnic inequity, 2011.*

In Vietnam, a latest information from UNICEF presented substantial variances in MHC because of financial position (3). For instance, it is hard for Kinh nurse in district hospital to get through what the patient be able to and not be able to comprehend. Thus they must to discover a method to clarify to them. The nurse also have to request a persons who be acquainted with ethnic lingos so that they could assist health staff to connect with patients. For midwives who cannot speak Thai minority's language, the Kinh midwives must to study Thai language in order to dialog with the patients (50) (1). Ethnic minorities must to be emphasized as a cause of unfairness in MHC utilization, through earnings and education. There is a serious absence of statistics and study to comprehend how these unfairness are intervened and have impact to every vulnerable group. Lacking such investigation programs, health policies will endure to object poor and hard-to-reach groups unproductively. There is a need to conduct more research about MHC utilization of ethnic and poor areas to find out their demand and to

detect how effective to cover those with the highest necessity. It is also important to implement further sensitive programmes in cultural terms.

Characteristics	Frequency	Unweight percentage	Weighted percentage
Age			
15–19	1,443	12.4	12.4
20–24	1,654	14.2	13.9
25–29	1,638	14.0	14.2
30–34	1,741	14.9	15.5
35–39	1,789	15.3	15.5
40–44	1,629	14.0	13.7
45–49	1,769	15.2	14.7
Education			
None	612	5.3	3.8
Primary	1,883	16.2	16.0
Lower secondary	4,244	36.4	38.8
Upper secondary	2,830	24.3	24.8
Tertiary	2,094	18.0	16.6
Ethnicity			
Ethnic minority	1,827	15.7	10.4
Kinh	9,836	84.3	89.6
Living area			
Rural	6,480	55.6	67.4
Urban	5,183	44.4	32.6
Economic status (asset-based wealth index quintile)			
Poorest	2,152	18.5	16.9
Second	1,924	16.5	18.5
Middle	2,222	19.1	20.8
Fourth	2,529	21.7	21.5
Richest	2,836	24.3	22.3
Total	11,663	100	100

**Table 7: Socio demographic characteristics of the study sample of mothers aged 15–49 years: frequency, unweight, and weighted percentages.**

*Sources: Analysis of selected social determinants of health and their relationships with maternal health service coverage and child mortality in Vietnam, 2016*

Several findings to reveal lessons in Asian countries has been found. The lesson from Thailand shows that there is a necessity of establish and develop more multi-sectorial policies and enhance the commitment of government to improve MHC services. They also has successfully achieved to finish the inequity in the providing of MHC by implementing pro-poor strategies

and UHC. Even though Vietnam has proposed and implemented numerous multi-sectorial policies, the commitment and determinant from Vietnamese policy makers in focusing in improvement of ethnic minority's health still weak. There is a need of strong commitment from government to conduct more low-cost programmes or cost-effective projects to improve the maternal and child health of ethnic minority people. Policy makers, doctors, scientists, and health workers from lower to higher level must to work altogether, utilizing accessible capitals to confirm that the equity health attained in a beneficial way. Moreover, some other lessons in several different countries seems hard to apply in Vietnam. The application of these programmes still faces many difficulties because of norms, political and social situation.

## **2. Methodology**

Some missing is attitude and knowledge of clients about quality of services still not analysed in the findings. This factors also have a strong influence to usage of MHC service in the context of Vietnam. However it is not included in six blocks of analytical framework. In terms of human, this framework only mentions about health workforce. Because the six block building framework was built on larger components which focus mainly on health systems. For that reason, it creates a limitations such as lack of other small factors which considered important to health system like clients and their attitude with services. Clients is essential feature reflecting the effectiveness of health system through their feedback and satisfaction. For example, during process of findings factors contributed to services quality, we found that perceptions of clients has close relationship with utilization of services. The delivery services in CHCs in Vietnam are rarely accessed because of low valuation from women for the value of MHC services providing in the facility. Furthermore, patients gained more confidence in health workers at the hospital at district level than at the commune hospital. It could be explained due to the health workers are appreciated as further skill fully qualified. However, when selected six block building framework for analysis in this thesis, we think that these six chosen blocks would be comprehensible for both researchers and policy makers because of transparency and popularity. Also, those findings were exposed to be relevant to policy or program following progress toward MDG4, MDG5 in Vietnam.

# CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

## I. CONCLUSION

Regarding to results from six block building, the findings showed that factors associated to health system like governance, finance system, training, facilities are contributed to the inequity in MHC utilization among poor and ethnic women in Vietnam. Inequality is enormous problems in route of getting great coverage in usage of MHC services in Vietnam. Poor and ethnic minorities in Vietnam are reported have restricted right to use maternal health material and services. Furthermore, the deficiency of facilities and low working situations in CHC in remote regions generates a lack of medicinal care suppliers. In addition, the evidence that they have a habit of living in rural and hard-to-reach areas, shortage of training and have low income moderately clarifies their bigger possibility of not getting important MH services.

In short, Vietnam has successfully in addressing maternal mortality in the country. Base on the fact related to maternal health situation, the country has modernized and distributed Standard Guidelines at national level on Reproductive Health Services. In addition, increase intensive care and assessment of safe maternity and new-born maintenance agendas and services. Conversely, Vietnam did not reinforce management ability and not did it clearly strategy for assessments of the Healthcare Financing Agendas. Consequently, it is an essential of advancement of an enabling situation for example medications, amenities to develop MHC as a whole. It was well-known that partnership between associates in assistant government is very vital. Every organization has its own qualified improvement. Thus, this should be on the boards of cooperate together. According to Information Administration System, perform the regularization of the health statistic organization to deliver consistent evidence about maternal and child health, as well as recording of deliveries and casualty is necessary. The multifaceted connections and combined effect among diverse causes underlined in this paper emphasized the significance of funds and support from further segments than health sector, for example training, culture, women authorization, and investment in health facilities and structure, in order to stimulate MHC utilization in Vietnam.

Generally, this framework greatly helps to complete three first objectives of the paper. However, the thesis have limitation such as the second study question, as well as the final specific objectives has not answered fully. The first three objectives seems bigger and the paper focused on those objectives rather than the last one. Therefore, the effectiveness of the interventions have been applied to improve quality of MHC and health system in Vietnam and in several Asian countries was not clear and detailed. The findings mostly emphasized analysis of factors contributing to inequity than current domestic and international policies. As mentioned in few parts throughout the paper, several interventions generally analysed by naming, listing instead of exploration of their efficiency. Currently, MOH is expanding associated strategies and procedures to authorize new name of EMM as an approved certified title inside the health personnel. The guidelines will be tremendously significant since all skilled and energetic EMMs will be identical and they can obtain formal title and income. Moreover, the Draft Policy on Reproductive Health 2011-2020 has been reviewed by the Prime Minister. This will support policy makers and leaders to solve inequalities amongst areas and

remote groups. And formally identify the role of EMM in delivery of MHC services in distant and ethnic minority regions.

For a limited time and word count, the final objectives still not completely discovered. Some lessons from Asian countries has been applied to withdraw the recommendation but the amount of findings was not considerable. Thus, in the near future, this objective could be reached by investing more time to examine more thorough literature. Only with this way, the research could have more comprehension and confidence.

## II. RECOMMENDATIONS

In context of Vietnam, the recommendations was propose based on evidence and experience in real situations, also ensure the feasibility and suitability to implement for policy makers and other related stakeholders. The context-specific recommendations was built based on six blocks of framework and especially focused in improve quality of heath workforce and leadership component. Due to the importance of leadership and urgent to improve quality of health workforce, the recommendations should be prioritized on those two factors. SMART criteria was used to write recommendations and prepare the plan to deploy. Those criteria include: Specific, measurable, attainable and time bound. Several recommendations could be suggested for MOH and stakeholders to improve quality of MHC systems are as bellows:

### ❖ Short term (2017-2022)

1. To enhance woman awareness and especially for those who living in poor and mountainous areas. Encourage ethnic minority women to take part in behaviour change curriculums about reproductive and maternal healthcare. Improve and assess community-based awareness curricula to decrease unexpected pregnancies and boost women to look for support timely. This will be taken by MOH; Women's unions; health provider and counsellor.
2. To strengthen and develop the principle and the gathering of consistent data on numbers and reasons of maternal mortality. The reinforcement of public registration arrangements must be implemented. Find out more technologies and effective tools for the efficiency of MH information management. This will be taken by MOH and Ministry of Science and Technology (MOST).
3. To include druggist, VHW and EMM in the Principal Plan for Health Workforce Improvement. Their certified duty in the health system should be broadly simulated to other poor and remote areas. This will be taken by MOH, MOET and MOF.
4. The training programs for EMM should be commonly developed to poor and hard-to-reach regions. The VHW and midwife curricula should tailor the teaching plans to the topics covered and to evaluate the knowledge and skills of students during and after the training programme. This could be done by increase the inducements for specialists in rustic isolated areas to attract persons from these parts into teaching and tutoring. To create out-distance services by field workforces like CHW and VHW. With the aim of reach the MDGs in each province, and amongst each ethnic minority group, in both rural and urban areas in Viet Nam. This will be taken by MOH, MOET.
5. To include men in strengthening agendas for maternal health agendas for Vietnamese women in order to refining MHC for women's utilization. This will be taken by MOH, Vietnam Women's Unions.

### ❖ Long term (2017- 2037)

1. To reduce the informal payment in health services generally in order to decrease burden of health expense for the poor. Involving bonuses to productivity to stimulate health workers to deliver better quality of care. Implement transparent policies and information for patients, networks for patient's complaints. This will be taken by MOH and MOJ.



2. To conduct more research about MHC utilization of ethnic and poor areas to find out their demand and to detect how effective to cover those with the highest necessity by asking funding from domestic and foreign organizations, government authorizations for scientist and researcher. This will be taken by MOH and MOF.
3. Strengthen commitment from government to deploy culturally sensitive programmes with cost-effective to develop women's maternal health for ethnic minority. This will be taken by MOH, Department of Health in provinces, traditional and religious leaders.
4. To recover health infrastructure and wide-ranging investment in CHS and working conditions for health staffs at lower-level, especially in remote areas. Calling for investor and support for improvement every health facilities under the direction of leaders from MOH and MOF.
5. To expand the universal health coverage for remote groups, particularly in demanding areas, such as people living in coastline and mountainous regions. Enhancing fairness and monetary security by decrease an additional fees out of policy and presenting catastrophic cost protection. This will be taken by MOH and MOF.

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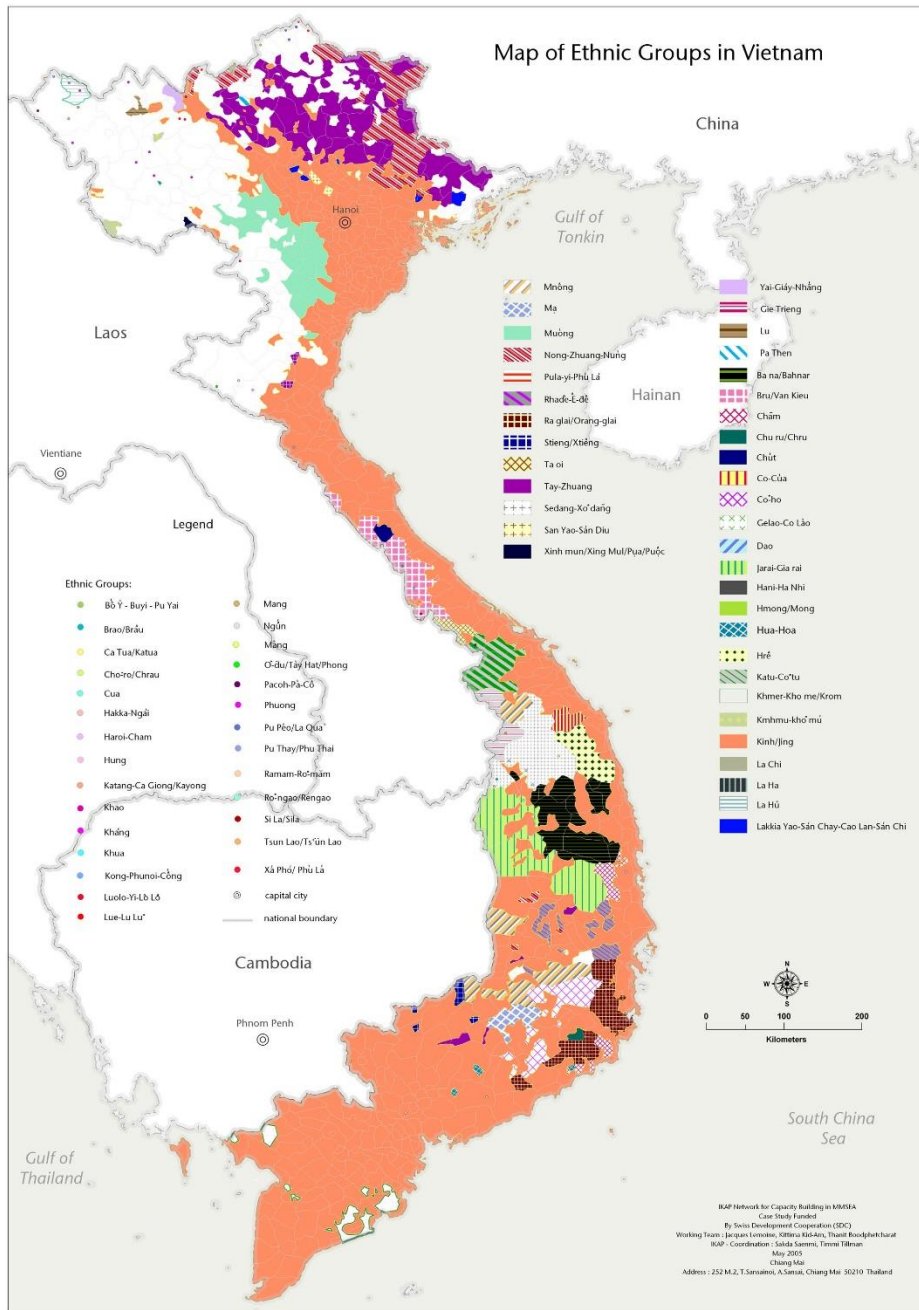
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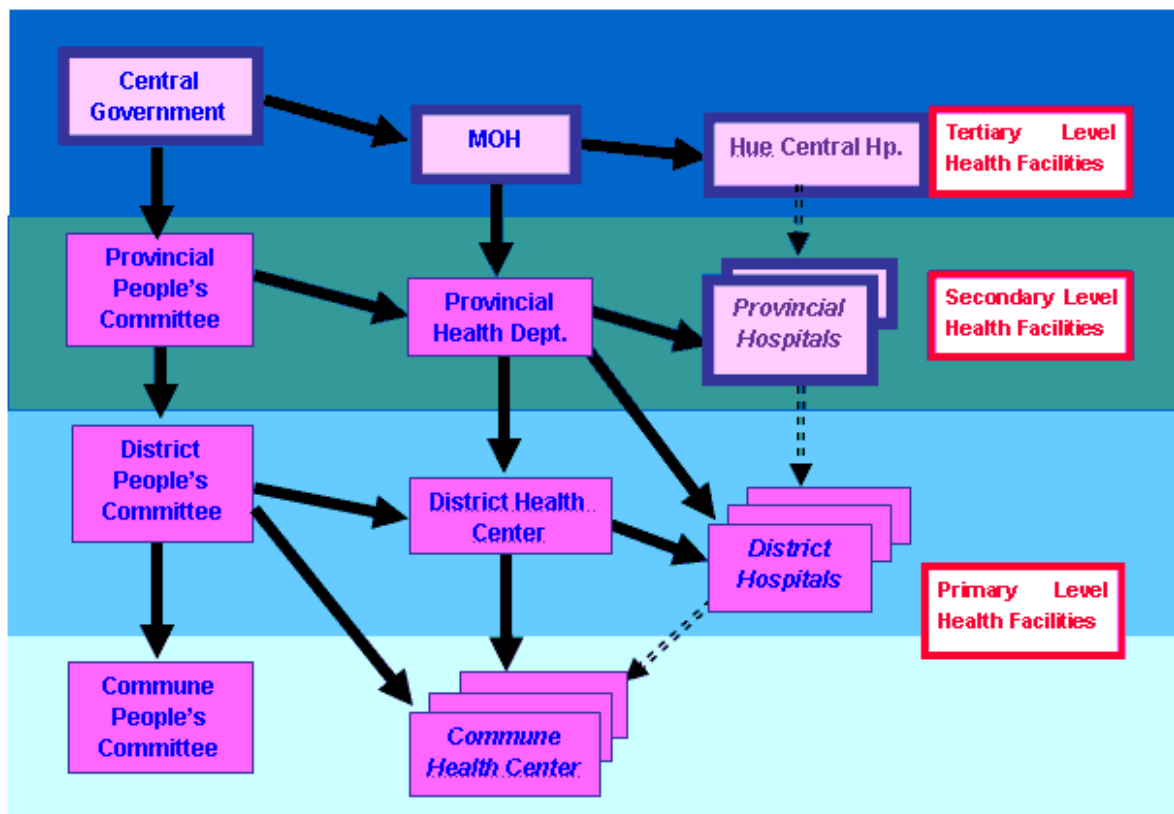
**APPENDIX:**

**Annex1: Maps of ethnic groups in Vietnam (16)**



Annex 2: Health service system in Vietnam (17)

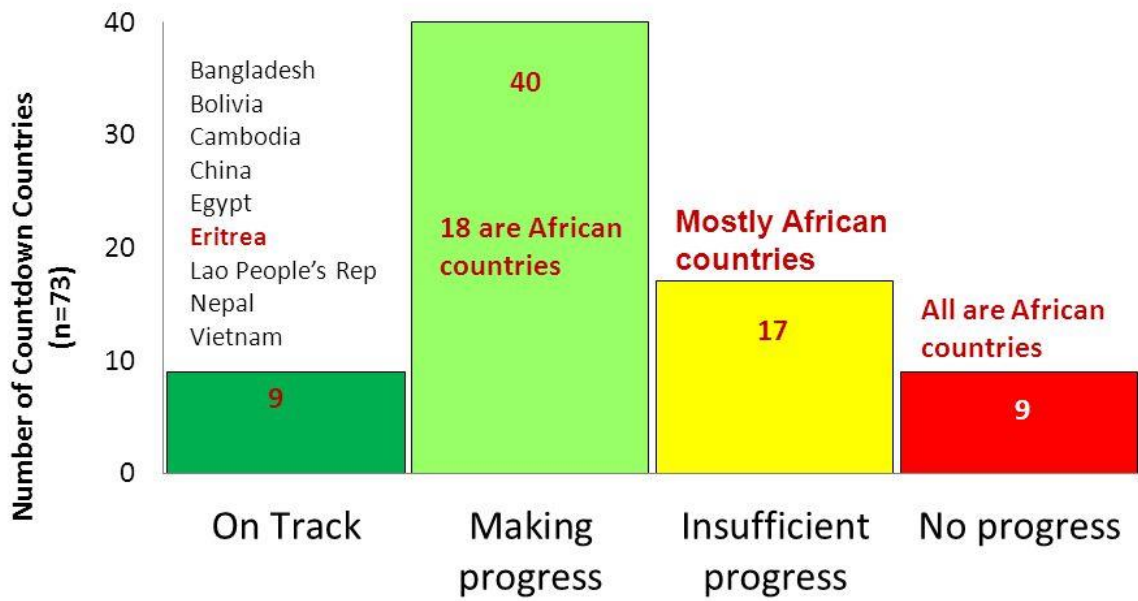
## Institutional Framework of the Health Service System in Vietnam





**Annex 3: Country progress in reducing MM (18)**

# Country progress in reducing maternal mortality (MDG5)



Countdown to 2015 report 2012, Figure 1, progress as of 2010

#### **Annex 4: WHO's recommended thirty core competencies for review (32)**

1. Take an antenatal history
2. Counsel on birth and emergency plan
3. Record findings using home based and clinical records
4. Calculate when the baby is due
5. Measurement of uterine size
6. Identify onset of labour
7. Determination of fetal position by abdominal examination
8. Identify the second stage of labour
9. Manage second stage of labour
10. Manage a normal birth
11. Manage a breech birth
12. Manage a cord prolapse
13. Active management of 3rd stage
14. Physiological management of 3rd stage
15. Inspection of placenta and membranes
16. Perform manual removal of placenta
17. Perform episiotomy
18. Suture perineum
19. Assess Apgar scores
20. Resuscitate a newborn with bag and mask
21. Assist in immediate breastfeeding
22. Perform newborn eye care
23. Recognise uterus is well contracted immediately postpartum
24. Examine newborn
25. Diagnose postpartum haemorrhage
26. Manage postpartum haemorrhage
27. Diagnose infection in the newborn and give appropriate immediate care for newborn as per national standards

28. Diagnose sepsis in postpartum women and give immediate care according to national standards
29. Recognise women with eclamptic fits
30. Manage eclamptic fits including giving magnesium sulphate