

# **FACTORS INFLUENCING UNINTENDED PREGNANCY AMONG YOUTH IN VIETNAM**

**Trinh Thi Mai Anh  
Vietnam**

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Development Policy & Practice/  
Vrije Universiteit Amsterdam

## **Factors influencing unintended pregnancy among youth in Vietnam**

A thesis submitted in partial fulfillment of the requirement for the degree of

Master of Public Health

by

Trinh Thi Mai Anh

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 in accordance with departmental requirements.

The thesis "**Factors influencing unintended pregnancy among youth in Vietnam**" is my own work.



Signature:.....

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## **Abstract**

**Background:** In Vietnam, youth pregnancy is becoming a pressing issue. The adolescent birth rate in 2011 was 46 per 1,000 women aged 15-19, and on the increasing trend. Vietnam is ranked the fifth highest adolescent abortion rate country in the world. 20% of the total abortion rate in Vietnam belongs to adolescents (10-19 years), of which 60-70% belongs to youth aged 15-19 years.

**Objectives:** To explore factors that influence youth unintended pregnancy, and to recommend solutions to reduce the rate of pregnancy among youth in Vietnam.

**Methods:** A literature review was conducted, using a framework for adolescent reproductive health (ARH) program monitoring and evaluation of Adamchak et al. (2000).

**Results:** Lack of reproductive health knowledge, low sexual communication self-efficacy, peer influence, gender inequality, little communication on sexuality between parents-children, parents' lack of ARH knowledge, lack of youth friendly services (YFS), sex education is not an official subject in curriculum at school, lack of youth development programs, various ideologies on social and gender norms are factors influencing youth pregnancy. Four groups of interventions found to be effective in reducing youth pregnancy are interventions in schools, in health facilities, in the community and multi-component interventions.

**Recommendations:** multi-component interventions should be implemented, including expanding qualified YFS to the whole country; teaching comprehensive sex education as an official subject in schools' curriculum; developing and promoting interventions in the community, containing youth development programs. Creating supportive social environment for youth's sexuality and RH right through advocacy, mobilizing community is all recommended.

**Key words:** youth unintended pregnancy, sexual behaviors, sexual health outcomes, reproductive health, Vietnam

**Word count:** 13,025

## List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ARH	Adolescent Reproductive Health
ASRH	Adolescent Sexual Reproductive Health
BCC	Behavior Change Communication
CHS	Commune Health Station
DHS	Demographic and Health Survey
DOH	Department of Health
FP	Family Planning
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IEC	Information Education Communication
KIT	Royal Tropical Institute
MICS	Multiple Indicator Cluster Survey
MOET	Ministry of Education and Training
MOH	Ministry of Health
NGO	Non-governmental organization
RH	Reproductive Health
SAVY	Survey Assessment of Vietnamese Youth
SRH	Sexual Reproductive Health
STI	Sexually Transmitted Infections
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USD	United States Dollar
VDHS	Vietnam Demographic and Health Survey
VND	Vietnamese Dong
VU	Vrije Universiteit Amsterdam
WHO	World Health Organization
YFS	Youth Friendly Service
YU	Youth Union



## **INTRODUCTION**

My recent job at the National Centre of Reproductive Health Care for Adolescent and Youth as a Program Manager required me to develop, implement and manage programs relating to RH care for adolescent and youth. My academic background is in English and Economics; despite that, through years of working here, I gained somewhat reasonable understanding about the reproductive health situation of young people in our country.

Though many programs are being deployed in Vietnam in the field of ARH, youth pregnancy is still a pressing issue. It even becomes alarming recently when Vietnam is ranked the fifth highest adolescent abortion rate country in the world. Youth pregnancy is not only the problem of Vietnam but also an increasing problem in the world.

This situation urges me the need of understanding thoroughly what the root of the problem is, so we can design and implement interventions effectively. And this thesis will be the opportunity for me to explore the issue in a systematic way.

With that rationale, this thesis is to review the factors that influence the unintended pregnancy among youth in Vietnam. The findings will contribute to improve the programs for them. This thesis contains 6 chapters: Chapter 1 is for background information of Vietnam and health system with regard to reproductive health care; Chapter 2 presents the problem statement, objectives and methodology of the study. The findings are discussed in Chapter 3 while effective interventions aiming to reduce youth pregnancy are discussed in Chapter 4. Chapter 5 presents discussion on the findings, and Chapter 6 is for conclusion and recommendations of the thesis.

## **CHAPTER 1 - BACKGROUND**

### **General information**

Viet Nam is a tropical country in Southeast Asia with total land area of 330,951 square kilometers and a population of 89 million people by 2012 (1). Viet Nam has border with China in the North, Laos and Cambodia in the west and a Pacific Ocean coastline of 3,260 kilometers in the south and east, excluding islands. The country is divided into 63 major administrative units (59 provinces and 4 municipalities) and six geographical regions with Hanoi as the capital (see Annex 1).

Vietnam has a young population with 25% below 15 years old, 8.3% of the population from 15 – 19 years and over 7.4% from 20 – 24 years old, the rest accounts for 59.3% of the population. The average annual population growth rate of Vietnam was 1.2% by 2009. The female population accounts for 50.5% of total. Over 70% of the population lives in rural areas (2).

There are 54 ethnic groups in Vietnam of which Kinh/Viet is the main one representing 86.2% of the population. The remaining 13.8% is thinly spread in the mountainous and remote areas. Vietnamese is the official language in Vietnam. Literacy rate of Vietnamese adult was 94% (2).

Viet Nam is a socialist republic country. In 1986, the Government of Vietnam launched the 'Doi moi' (reform program – transition from centrally control to market economy). As a result, positive impact has been seen in the development of the country. Vietnam has become a lower middle income country with per capital income of US\$ 1,130 by the end of 2010, economic growth of approximately 6% yearly (3).

### **Health situation and health system**

Like other low-middle income countries, Vietnam's disease pattern is shifting dramatically towards non-communicable diseases. In 2010, the country's burden of non-communicable diseases accounts for 71% of the country's total disease burden. Beside diseases of a tropical country like malaria, dengue fever; the number of cardiovascular diseases, diabetes, cancers, major depressive disorders, poisoning and injuries are on the rise (4). Many dangerous infectious diseases have tendency to reoccur like cholera, tuberculosis (multi-drug resistant TB); while at the same time, 'newly emerging diseases' like influenza type A H1N1, H5N1 are expanding and putting Vietnam health system on the alert of quick response (5).

Prevalence of HIV/AIDS has increased in recent years, the HIV infection rate per 100,000 inhabitants in 2009 was 187 people; this rate in 2012 was 224.3 (6, 7). Reproductive tract infections and sexually transmitted diseases have the same growing trend, with more than 200,000 new cases of STI reported nationwide annually (8). The contraceptive prevalence rate of age group 15-19 years old was lowest (32.4%), then 20-24 years (53.3%), the highest rate was in age group 35-39 years (87.6%) (9). The unmet need for contraception of females aged 15-19 and 20-24 years are 15.6% and 10.3% respectively. This rate among single, sexually active females is 50.4% (10).

Together with the country's socio-economic development, Vietnamese health status has been improved remarkably over the past years. In 2011, the average life expectancy was 73 years. There has been improvement in child health in recent years with infant mortality rate and under five mortality rate (per 1,000 live births) of 15.8 and 23.8 respectively in 2012, reducing from 16 and 25.5 in 2009 (2, 11). The maternal mortality is decreasing when comparing this ratio of 69 per 100,000 births in 2009 with 64 in 2012 (11, 12).

Vietnam spent 6.8% of GDP for total health expenditure in 2011. Only 3.1% of total health expenditure comes from international donors. The share of household out-of-pocket payment for health is still very high and accounts for 59.6% of total health expenditure (13). Setting target of achieving universal health insurance coverage, Vietnam has regulated the national health insurance scheme in 2012, with which 80% of Vietnamese citizens is expected to have health insurance by 2020 (14). The private sector is expanding in Vietnam, and posing great pressure on demand for health workers, especially highly qualified ones (7).

Vietnam health system is organized at four levels from national to provincial, district and commune level (see Annex 2), which facilitates the consistent direction and management as well as reaction to disease prevention and treatment from central to local health facilities, and supports the reporting and feedback system from bottom up (4).

### **Public reproductive health services in Vietnam**

The reproductive health services are available at all four levels of state health facilities (see Annex 3). In addition, there is one Provincial Centre for RH care, established as a technical agency affiliated with the Provincial Department of Health (DOH) to assist in the RH programs' implementation (4).

The commune health stations (CHS) have responsibilities as the primary access point to provide primary RH and FP services. Every CHS is staffed by at least midwife who acts as the focal point for RH services. There is a network of population collaborators affiliated with local CHS to conduct outreach communication activities, providing RH counseling and contraceptives to couples (4).

## **CHAPTER 2–PROBLEM STATEMENT, OBJECTIVES AND METHODOLOGY**

This chapter aims to present the problem statement, justification, thesis objectives, and methodology including the conceptual framework.

### **Problem Statement**

According to the United Nations Population Fund (UNFPA) and the World Health Organization (WHO), there are 1.8 billion youth and adolescents between 10 and 25 years of age in the world (15), among whom about 16 million adolescent girls aged 15 to 19 years give birth every year (16). 10 to 40% of young unmarried women had an unintended pregnancy (17). Three million girls aged 15-19 are estimated to undergo unsafe abortions every year (16) which result in some 68,000 deaths (17).

In Vietnam, the adolescent birth rate (measuring annual number of births to women 15 – 19 years of age per 1,000 women in the same age group) in 2011 was 46 per 1000 (10). Comparing with this rate of other countries in Asia, for example, Myanmar (17.4), Malaysia (12) and Singapore (5.2), Vietnam's adolescent birth rate is higher (18). There is an increase in this rate in Vietnam when over 3% of youth aged 15–19 were recorded having begun childbearing in the survey in 2002 (19), this number was 7.5% in the survey in 2010 (10). While for some of the youth, pregnancy and childbirth are intended, for most of the others they are unintended (20).

Unintended pregnancy, which is defined as a pregnancy that is unplanned, mistimed or unwanted at the time of conception (21), among youth is a pressing public health problem in Vietnam (22, 23). It may lead to abortion, especially unsafe abortion, maternal mortality and morbidity due to complications from pregnancy and childbirth, stillbirth, newborn deaths and low-birth weight in infants of adolescents mothers (16). The complication from pregnancy and childbirth will put youth aged 15 – 19 years at risk of death as twice as higher comparing to mothers in their twenties. Babies of these young mothers have a 50 – 100% increased risk of dying (stillbirths and newborn deaths) and suffer higher rates of perinatal morbidity (low birth weight) compared with infants born to adult women (24, 25).

The adolescent abortion rate is alarming nowadays in Vietnam. Vietnam is ranked among countries of highest adolescent abortion rate in Southeast Asia and the fifth highest in the world (26). Estimates suggest that adolescent abortion accounts for 20% of the total abortion rate in Viet Nam which is about 1.2 – 1.6 million abortion cases every year (27). 60 to 70% of these annual approximately 300,000 adolescent abortion cases belongs to youth aged 15–19 years (26). According to the Vietnam Demographic and

Health Survey (VDHS) in 2002, 27.3% of unmarried young females aged 15–19 having begun pregnancy underwent abortions (28). Research carried out in Tu Du Obstetric Hospital in Ho Chi Minh city showed an increase every year in the number of adolescent abortion when this hospital recorded 512 abortion cases of adolescent in 2008, up 32% from cases in 2005 (29). In practice, the real abortion figures are much higher, as unmarried young females have tendency of hiding their pregnancies and have abortions done in private clinics where data are not recorded (30).

In Vietnam, there has not been a comprehensive survey giving out an exact number of the consequences of youth unintended pregnancy. However, Hong (2003) estimated a 37% of the pregnancy among youth aged 15-24 years old resulted in abortion, 48% in birth and the remaining in miscarriage (30). Unfortunately, we have no figures for 2013.

Youth who have unintended pregnancies also face a number of challenges such as inability to complete school which influences their future education, societal, employment and economic opportunities. These long-term socio-economic consequences will, in turn, contribute to adverse health outcomes, gender inequity and poverty of young mothers, their families and communities (31).

## **Justification**

So far, the Government of Vietnam has issued and implemented a number of policies and interventions on health care and protection for youth in the field of sexual and reproductive health (SRH). The National Strategy for Reproductive Health (2001-2010) included adolescent and youth as one of its target group in the family planning (FP) and reproductive health (RH) program interventions. In 2008, the Ministry of Health (MOH) issued and deployed the national guidance on friendly services for adolescent and youth. The Ministry of Education and Training (MOET) and the MOH also collaborated to implement a number of interventions on adolescent sexual and reproductive health (ASRH) both in and out of schools, with support from many international organizations and non-governmental organizations (NGO) like UNFPA, WHO, UNICEF, UNESCO, Save the Children etc. Social mass organizations like Vietnam Youth Union, Women Union, Vietnam Red Cross were also mobilized into ASRH programs. However, the situation of Vietnamese youth pregnancy has not been improved.

In Vietnam, till now, it is known that early premarital sex, lack of knowledge on and inconsistent use of contraceptives and sexual stigma are among the contributing factors to pregnancy among youth, but there is a need for a more comprehensive exploration (30, 32-34). Failure to know all the factors

that influence youth unintended pregnancy will lead to unsuccessful interventions in dealing with the matter.

## **Thesis Objectives**

### ***General Objectives***

To identify and analyze factors influencing unintended pregnancy of youth aged 15 – 24 years in Vietnam, and to recommend solutions to reduce the rate of pregnancy among youth in Vietnam.

### ***Specific Objectives***

1. To explore the reproductive health behaviors of Vietnam youth.
2. To identify and analyze main factors that influence unintended pregnancy among youth in Vietnam.
3. To identify effective interventions in reducing youth pregnancy in similar setting countries, and how they can be applied in Vietnam.
4. To recommend the possibilities to improve the reproductive health care for youth in Vietnam.

## **Methodology**

### ***Literature review***

Search strategy:

I searched PubMed, Google Scholar, Scopus and Cochrane Library for articles on unintended adolescent and youth pregnancy, its associated factors, use and access of youth friendly services and family planning services of adolescent and youth in Vietnam using the keywords alone and in combination: 'unintended pregnancy', 'adolescent and youth pregnancy', 'youth sexual behaviors', 'adolescent reproductive health', 'youth friendly services', 'family planning services', 'adolescent birth rate', 'adolescent and youth abortion', 'culture', 'sexual stigma', 'sex education', 'parent-child communication', 'sexuality', 'peer pressure', 'sex communication', 'premarital sex', 'sexual behaviors', 'media', 'coerced sex', 'condom', 'contraception', 'availability', 'accessibility', 'cost', 'prices', 'health workers', 'attitude', 'reproductive health knowledge', 'best practices', 'interventions', 'Vietnam', 'developing countries' and 'middle-income countries'.

Besides, I searched in Google using those words in Vietnamese to look for data, policies and reports published in Vietnamese. The references lists of articles and reports identified by the search strategy and selected were also

searched. Data from articles and books from library of the Royal Tropical Institute (KIT) and Vrije Universiteit Amsterdam (VU) was also searched. The languages used for searching were both English and Vietnamese; time limit is from 1991 to international literatures and 1997 to Vietnamese literatures. Documents from other countries of the similar contexts may be included if relevant.

### ***Conceptual Framework:***

To analyze collected information and to find out what is known about factors influencing the unintended pregnancy among youth in Vietnam, I searched literature for a suitable conceptual framework to guide the study. In searching, I found a framework developed by Adamchak et al. (2000) for monitoring and evaluation of adolescent reproductive health (ARH) programs in the framework of the project Focus on Young Adults of Pathfinder International in partnership with The Futures Group International and Tulane University School of Public Health and Tropical Medicine (35). Adamchak et al. developed this framework to analyze a broad range of sociocultural factors that influence young people's reproductive health outcomes. In this review, I focus on unintended pregnancy of youth which is one of those outcomes. The application of this framework in the context of Vietnam can be useful in discovering factors that influence youth unintended pregnancy. These factors fall broadly into five categories:

*Individual characteristics* of young people include their knowledge, attitudes, beliefs, sexual communication self-efficacy, values and substance use.

*Peers and partners* refer to peers' influence, type of partners and coerced sex.

*Families and household* refer to communication on sexuality between parent and children.

*Institutions* refer to health services (including their availability, accessibility, affordability and acceptability), availability of sex education in school, and availability of youth development programs.

*Communities* refer to ideologies, availability of entertainment venues and media exposure.

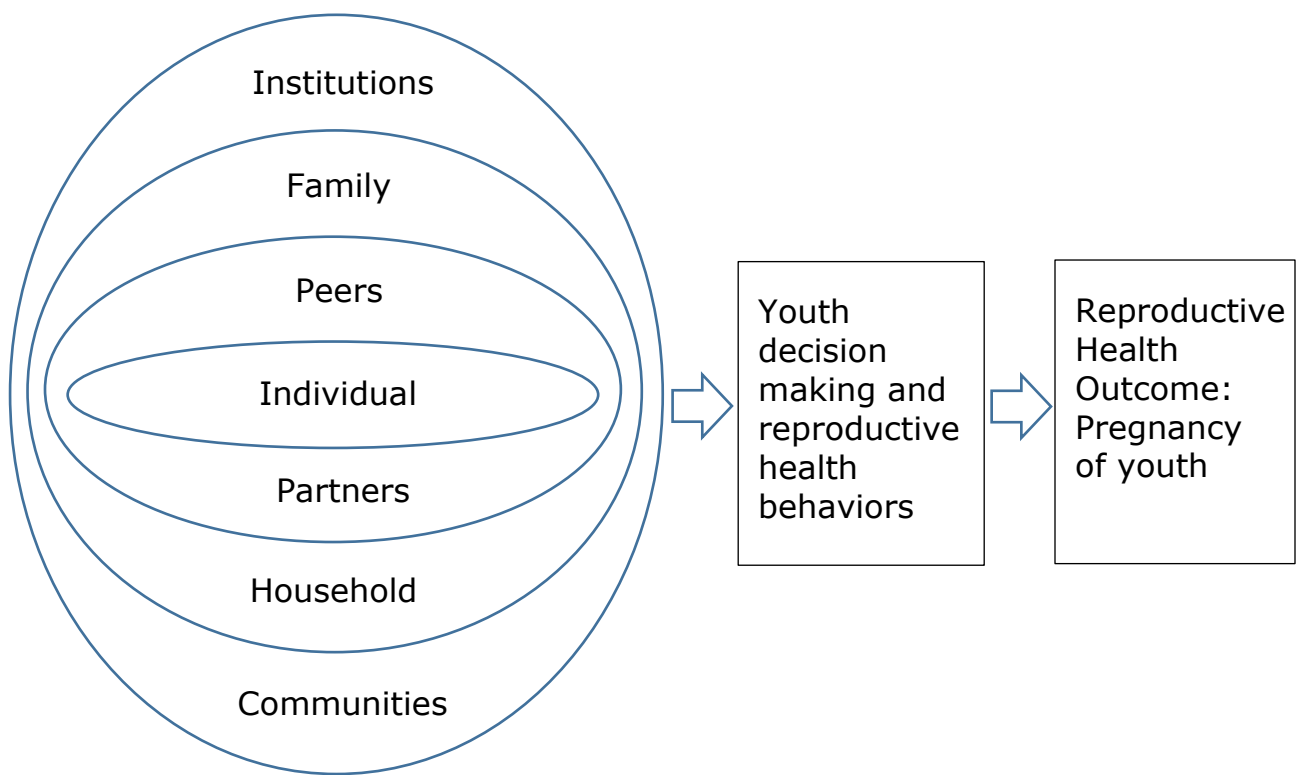
All these above-mention factors precede and influence how youth make decisions about sexual and reproductive health behaviors that lead to their pregnancy.



In addition, I also use this framework to review the effective interventions aiming to reduce pregnancy among youth.

The framework for exploring factors that influence youth unintended pregnancy will make the analysis of collected information more systematic and easier.

**Figure 1 – Conceptual framework for analyzing factors that influence youth unintended pregnancy**



*Source: A framework for ARH Program Monitoring and Evaluation by Adamchak et al., 2000*

## **CHAPTER 3 - FACTORS INFLUENCING UNINTENDED PREGNANCY AMONG YOUTH IN VIETNAM**

In this chapter the findings of a literature review looking for factors associated with the increase of youth pregnancy in Vietnam using the conceptual framework will be presented.

### **Youth decision making and RH behaviors**

#### **Mean age at first sex and mean age of marriage**

The mean age at first sex of Vietnamese youth 14–25 years recorded in the Survey Assessment of Vietnamese Youth<sup>1</sup> (SAVY) round 2 (2010) was 18.1 years (18.2 years for males and 18 for females). There is a decreasing trend in this age when in 2005 it was recorded at 19.6 years (36, 37).

In SAVY 2, the mean age at first marriage of Kinh/Viet male and female youth was 22 and 21 years, this age of ethnic minorities' youth was 2 years lower respectively. Comparing with results in the 2009 population and housing census, this age in SAVY 2 is lower. In 2009 census, the mean age at first marriage for men was 26.2 years and for women was 22.8 years (12). Although there is difference in the study subjects of the two studies which resulted in difference in these numbers, there is evidently a disparity between the age at first marriage and age at first sex of Vietnamese youth. The disparity among male Kinh/Viet youth in SAVY 2 (2010) is 3.8 years, among male ethnic minorities' youth is 1.8 years; those numbers among females are 3 years and 1 year respectively. Also in SAVY 2, among single youth aged 14-25 years, 6.4% are sexually active, with more males compared with females and more urban compared with rural youth.

Those data means that Vietnamese youth have the tendency of having earlier age of sexual debut, and practice more premarital sex. There is a large disparity between their age of sexual debut and their age of marriage and this disparity will be one risk factor of their unintended pregnancy.

#### **Reproductive health behaviors**

As analyzed above, Vietnamese young people nowadays have tendency of having premarital sex. It is also shown by the increase in the number of youth reporting premarital sex: 9.5% of youth in SAVY 2 (2010) compared with 7.6% in SAVY 1 (2005)) (36, 37). Youth who are males or live in urban

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<sup>1</sup> The Survey Assessment of Vietnamese Youth (SAVY) is the first nationwide baseline survey of youth ever undertaken in Viet Nam. The SAVY 1 was carried out in 42 provinces; SAVY 2 was carried out in 63 provinces across the country.

areas have higher rate of reporting premarital sex than youth who are females or live in rural areas. In SAVY 2, the proportion of male youth reporting premarital sex (13.6%) was more than twice compared with female youth (5.2%), this rate in male urban youth was 16.1% compared with 8.8% of male youth in rural areas (36). In reality, premarital sex rate among youth could be much higher; since they have tendency of hiding their sexual experience due to being afraid of stigma to premarital sex.

Early marriage (before age 18<sup>2</sup>) was also reported among youth, with prevalence rate higher in rural areas in comparison with urban area and highest in ethnic minorities and mountainous areas. In the 2009 census, a rate of 2.2% of male and 8.3% of female youths aged 15–19 were recorded in marriage relation (36). This data is consistent with findings in the Multiple Indicator Cluster Survey (MICS) in Vietnam in 2011 when 8.4% of young girls aged 15-19 years in the study are in current marriage or in cohabitation relation (10). The proportion of early marriage among female youth in rural areas is 9.9%, doubles that in urban areas (4.5%), and reaches a peak at 16.5% in Northern Midland and Mountainous areas and 11.2% in Central Highland (10).

Beside, youth are found to have low rate of contraceptive use. 50% of youth who had sexual intercourse in SAVY 2 did not use condoms at their first sexual experience (36). This finding is consistent with other studies. Bui et al. (2012) recorded a rate of 33% of female undergraduate students not use any contraceptive method during their first sexual intercourse (38). In study of Kaljee et al. (2007), 46.9% of sexually active youth reported “rarely” or “never” using condom as contraception (33). In MICS 2011, 79% of young females, married or in union, aged 15–19 were found not using any contraception, this number in females aged 20-24 were 47% (10).

In brief, youth’s reproductive health behaviors like having early premarital sex, having early marriage while not using or using inconsistently contraception will be one factor that leads to youth’s unintended pregnancy.

## **Individual characteristics**

### **Knowledge**

In Vietnam, studies showed young people have limited knowledge on RH issue, contraception, STIs, HIV, AIDS and this may be one factor that leads to youth’s unintended pregnancy (32, 36, 37, 39).

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<sup>2</sup> The Vietnamese Law on Marriage and Family sets the legal minimum marriage age at 20 for males and 18 for females

Only 28% of Vietnamese youth aged 14 – 25 years in SAVY 1 and 2 had correct knowledge on the fecund times in the menstrual cycle (36, 37).

Evidence from elsewhere suggests higher levels of contraceptive knowledge will help youth to avoid pregnancy (40, 41). Vietnamese youth's knowledge on contraception's benefits and how to use contraceptive methods in right way is found limited (32, 36, 37, 39). Some young girls were found to have very naive knowledge of contraceptives when believing they could not become pregnant if having infrequent sexual relations, during breastfeeding periods or having sexual intercourse in sitting/standing position (32). In some small-scaled studies in provinces, only 10% of youth could answer correctly the appropriate time for abortions' performance, approximately one fifth did not know the harm of abortion to their health (42, 43). Other studies show young women who experienced abortion have limited and poor knowledge about fertility and contraception (34, 44). Kinh/Viet youth were found to have better knowledge on contraception than those of ethnic minorities. In SAVY 2, 4% of Kinh/Viet youth had low condom knowledge compared with 9% of ethnic minorities (36).

In SAVY 2, below two-third respondents heard of STIs (36). Only one among two girls in MICS 2011 had a comprehensive knowledge of HIV, more than three in five knew a place to go for an HIV test (10). Having low knowledge in STI, HIV and AIDS will lead young people to have unsafe sex behaviors which are also a cause of youth's pregnancy.

### **Sexual attitudes**

Culturally, premarital sex is unacceptable in Vietnamese society (45-47). Nowadays, not only having more premarital sex practice as analyzed above, young people are also found to have more accepting attitude towards sex before marriage. This is proved by the increase in the number of youth responded to accept it in SAVY (44% of youth in SAVY 2 compared with 36% in SAVY 1) with more males than females, older youth accepted more than younger one (36, 37).

In current Vietnamese society, sexual activity is more likely perceived as a way to express love, romance and trust among lovers (48, 49). With many young people, having sex before marriage is a way to ensure their sexual compatibility before entering into their marriage life (34). Many others have tendency of considering sexual activity just as a way of providing pleasure (50, 51).

Global literature shows having more permissive attitudes to premarital sex greatly increased the likelihood of having had sexual activity among youth

(52-55). Therefore, a more acceptance attitude toward premarital sex among Vietnamese youth may be a risk factor of their sexual initiation leading to unintended pregnancy.

### **Contraceptive and family planning attitudes**

From studies we know nowadays, although many youth seem to be aware of the necessity to use contraception to prevent pregnancy, in practice they do not want to use it, especially condoms (32-34, 37). This is rooted in the still common misperception among young men that the condom reduces sexual pleasure (32, 56-58). Findings of those literatures are consistent with finding in SAVY 2 when 38% of youth responded that using a condom could decrease sexual satisfaction. Besides, the belief that condom is only used for casual, extramarital sex and provides protection from STIs, HIV from sex workers is another common misperception (32, 34).

More than two thirds of youth said both men and women should equally share the responsibility for contraceptive use (39). However, some others still perceived family planning is solely the responsibility of females, particularly among ethnic minorities (59). Stigma to premarital sex or extramarital sex prevents many youth, especially unmarried girls in accessing contraceptive methods (33, 34, 57, 60). In SAVY 2, 68% of young girls reported they feel embarrassed if being seen to use a condom compared with 49% of young men. The perception that oral contraceptive causing side effects and infertility makes many young females afraid of and hesitate in using it (32, 34, 57). Many unmarried youth think family planning is just for married couples (32, 34). Some believe obtaining abortion is easier than using contraception regularly (60). Many others, unmarried and married, prefer applying withdrawal and rhythm as contraception (32, 38, 57, 58).

So we can conclude misperceptions, improper attitude about contraceptives is one of the factors leading young people to not using them when having sex and this can lead to their failure in pregnancy prevention.

### **Sexual communication self-efficacy**

Globally, there is evidence that one risk factor for unsafe sex practice and not using contraceptive method is the woman's lack of confidence and power to negotiate their use or inability to refuse unwanted sex with their partners (61-64).

In Vietnam, some studies show little discussion on family planning or sexual communication actually occurred among couples (56, 60, 65, 66).

Passiveness of unmarried and married young girls in making decisions on using condoms and/or other contraceptives was also commonly reported (33, 56, 58). Bui (2010, 2012) conducted studies and found sexual communication self-efficacy was associated with actual use of condom and contraceptives among undergraduate female students in the Mekong Delta of Vietnam (38, 67). This lack of power and ability was shown to be rooted in gender inequality and cultural norms. These findings are consistent with many other studies in Vietnam (32, 56, 58).

Unmarried young girls feel embarrassed from initiating conversation with their boyfriends about contraceptive or condom use. Since they are supposed to be still virgin and innocent to sexual issues if being unmarried; showing their knowledge, skills or experience related to contraceptive use may cause suspicion from their boyfriends that they are not virgin anymore which is seen as immoral conduct; then they will be looked down by their boyfriends (30). Being hampered by traditional norms, many young girls accept their subordinate status, resulting in low confidence and ability to communicate about contraceptive or condom use with their partners (38).

For married women, refusing sex and asking their husbands to use condom or contraceptives would violate cultural norms which demand women's obedience and submission to their husbands, leading them to find it difficult to insist on the use of contraception (65, 68). As we have seen, sex is still a sensitive issue in Vietnam and talking about sex and related issues, even between husband and wife could be considered impolite and lustful or even promiscuous. Many feel uncomfortable and ashamed when talking about this topic with their husbands (56).

To conclude, low sexual communication self-efficacy of young Vietnamese may be one different contributor of their unintended pregnancy.

## **Value**

According to Adamchak et al. (2000), motivation to have good academic performance, active engagement in learning at school appears to be protective factors for youth from taking sexual risks. Besides, youth's reproductive health decisions are also influenced by their community and family values about reproductive health and sex (35).

On average, Vietnamese youth spent 7.3 years in school (69). Half of youth participating in the SAVY 2 reported dropping out of school, of whom 24% dropped out of school by age 15 years and 16% stopped between the ages of 20 and 25.8 years (36). The drop-out rate after grade 12 of youth accounted for 18% of the total school departure number, of whom 17% said

they did not want to go to school any more (36). This data means many Vietnamese youth have early dropping-out of school.

Among reasons for youth's early discontinuation of education is their engagement in marriage, especially among young girls in rural, mountainous and minorities' areas (30, 70). In MICS 2011, the adverse association was found between the proportions of early marriage with level of female's education; 26.9% of girls aged 15-19 years with no education in current marriage or cohabitation relation compared with only 1.2% of their peers with tertiary education level (10). Getting married and forming a family are important Vietnamese social norms that impact both males and females. A man will gain recognition in society as an adult through marriage and fatherhood (58). Females if not getting married before age 20 will be considered "on the shelf" (30). Although this finding is now not common in urban areas, in my observation, it still exists in many rural and ethnic minorities' areas. So early marriage is often a measure used by parents to manage their young daughter's sexuality, due to stigma to girl's premarital sex and out-of-wedlock childbearing which will be the shame of the family. As a result, with many young girls in rural and ethnic minorities' areas, discontinuing education and waiting for marriage proposal is a common reality. Studies in Vietnam show both male and female youth in the rural areas felt pressure from families and society to marry early and begin childbearing, even though they themselves would preferred to postpone marriage and parenthood (30, 58, 70).

In short, early dropping-out of school, high value on early marriage and childbearing may be one factor leading to youth's pregnancy.

### **Substance use**

Global studies found substance use increased youth's risk of not only engaging in unprotected sex, but also in becoming parents at early age (52, 55, 71-80). In Vietnam, 48 - 70% of youth aged 14-25 years in SAVY 2 reported having ever finished an alcoholic drink, two and a half times of males more than females drinking. Among youth who started drinking, about 31% to 60% of youth aged 14-25 years had ever been drunk; with 18% having been drunk once over a month, 14% drunk 2-3 times; and 5% more than three times. (36). According to the Global Adult Tobacco Survey in Viet Nam in 2010, the prevalence of current users of any smoked tobacco product among youth was about 13% (81). This rate is lower than findings in SAVY 2 when over 20% of youth had smoked tobacco (36). In both surveys, female smokers accounted for very small number. Among 172,000 officially registered drug-users by the end of 2012 in Vietnam, 50% aged 16-29 years, of whom 96% are male (82). Studies in Vietnam pointed

towards a strong association between smoking, drinking alcohol with engagement in unprotected sexual behaviors of youth (83-86). Although this risk is much higher in male than female but male will demand sex from female, so substance use may be one risk factor of Vietnamese young girls' pregnancy.

## **Peers and partners**

### **Peers**

Researchers in Taiwan, Zambia, Kenya and Ghana found if youth believe their friends have premarital sex, smoke, drink alcohol and use drugs, they are more likely to engage in those behaviors and have more likelihood of having sexual activity (74, 87-89).

In Vietnam, Nghi et al. (2010), found having friends who engage in smoking and drinking is a risk factor of youth sexual intercourses among both males and females (90). Another research also concluded peer influence increased the likelihood of having premarital sex among youth by at least 2.6 times (91). Although in those two small sample studies, the statistical power might be insufficient to detect the association, however, they show that peers' influence on youth's sexual behaviors is found in Vietnamese youth. Literature also confirmed peers as one of the major sources of reproductive health knowledge and information of youth (32). Youth prefer to discuss and study about sexual issues with their peers, both married and unmarried (37, 70, 92, 93). More urban youth reported peer pressure to have premarital sex than rural youth; young males in age group 18-25 years also reported peer pressure in watching pornography and this rate was also higher in urban group (36, 37). Peer pressure has higher level of influence on males than females when only less than 1% females consistently reported negative peer pressure (37). 76% of youth responded that they seek and shared with their peers information and experience on sexual activities (36).

From findings in the world and in Vietnam, we can conclude peer influence would be one factor contributing to the rate of youth's unintended pregnancy in Vietnam.

### **Partners**

A study by Shelley (2006) analyzing data from the DHS in 27 countries in the world shows marriages between young girls and much older men are less equitable since girls are often weaker in their bargaining power within the relationship which can contribute to those girls' vulnerability for infection



with an STI or HIV and becoming pregnant (94). In Vietnam nearly 5% of young women aged 20–24 years were in 2010 married to or in a union with a man/partner who was ten or more years older (10). This number of females aged 15–19 years increased to 7.4%. More young females aged 20–24 years lived with husbands who were 10 or more years older in urban areas (8.5%) than those in rural areas (3.7%) (10). Since the age of male partners/husbands relates to the extent of their previous sexual experience and the income they earn; a large gap in age between young girls and their partners/husbands often puts these girls in a disadvantageous position to avoid violence and negotiate for safe sexual behaviors, including use of contraception (95). To conclude, power imbalances in this type of marriage/union may also contribute to the number of unintended pregnancies among Vietnamese youth.

### **Coerced sex**

Studies in the world show a relation between coerced/forced sex and the risk of unintended pregnancy among youth (96-104). In Vietnam, coerced sex may also be one factor leading to youth unintended pregnancy.

The UN Millennium Project (2006) in the world pointed out women who accepted the husband could beat his wife in some circumstances, had more likelihood of experiencing violence, including coerced sex (105). In Vietnam, 6% of women aged 15-49 years in MICS (2011) said a husband/partner has a right to hit/beat his wife/partner if she refuses to have sex with him. Coerced sex is more prevalent among the poorest, having lower education level, and ethnic minority households as this group was found to have more acceptance attitude (10).

Literature in Vietnam repeatedly reported sexual coercion happened to young girls, both unmarried and married, as a result of their common passiveness in deciding their own reproductive health and contraceptive use (32, 56, 106-108). Study by Vu (1999) showed sex coercion within marriage is also the consequence of son preference practice when many women are forced to give birth until they have a son (107). Many young unmarried girls accept sex demand from their partners even when they do not want as a way of keeping their boyfriends (34). In studies of Bui et al. (2010, 2012), female undergraduate students in Mekong Delta of Vietnam could not refuse unwanted sex or request condom use from their boyfriends as a result of lack of negotiation ability (38, 67).

## **Family and households**

Global literatures proved communication of parents with children was a key factor decreasing the likelihood of engaging in risk behaviors, including sexual risks and delaying sexual debut among youth (109-113). Consistent with these results, three small sample studies in Vietnam found an association between weak family connectedness, parent's low level of communication on sexuality with children with the increased likelihood of having premarital sex, sexual activities and pregnancy of youth (90, 91, 114).

Parents and youth in Vietnam were reported to be engaged in limited communication on reproductive health and sexuality. In SAVY 2, only 15% of youth reported knowing about FP and contraception through their mothers, and 3% reported knowing through fathers (36). Literature in Vietnam also shows Vietnamese parents are unwilling to provide information on sexuality for children (32, 115). Parents think their children are still too young to know about sexuality so they are afraid sexual education will encourage their children to engage in sexual activities too early (116, 117). This perception has existed for long in Vietnam, even in a recent small scaled study of Kaljee (2011), about 87% parents still had this thinking (115). Another reason is parents think it is best for youth to self-study or leave them for schools for knowledge on sexuality (32, 115). Moreover, many parents think they do not have enough information on and would feel embarrassed to talk about sexuality with their children (115). Trinh et al. (2004), however, found that communication between parents and children in Thai Binh province was quite open, but shyness, lack of knowledge and the belief of encouraging children to have early sex if talking about it restricted the depth of parent-child conversation (116).

Literature shows Vietnamese parents just provide general information on sexuality for their children like practice of sex abstinence or remind daughters to keep virginity, avoid pregnancy which, if happens, will result in negative consequences including a bad reputation for family and impacted future for the girls (33, 116). Parents do not to teach their children how to avoid unwanted pregnancy or how to use condom/contraceptives (32, 115, 116).

Besides, in her study Kaljee et al. (2007) found an association between parents' level of education and the frequency of and comfort level when talking about sexuality with children. And parent's lower level of education has association with lower level of RH knowledge and comfort in discussing on sexuality with their children (115). Although this study included small sample size so the association might not be strong enough, its finding is consistent with findings in the world that children of families with lower

educational and economic levels will be more likely to be found at sexual risks (118, 119).

To conclude, family and households with characteristics like little communication on sexuality between parent-children, parent's low knowledge on RH issues will be one factor leading to young people's risk of unintended pregnancy.

## **Institutions**

In this section the institutional settings namely health services, schools and youth development programs will be discussed.

### **Health services**

#### ***Availability and accessibility***

Availability is defined as adequate resources, appropriate health workers available to provide the quality care to those who need it. Accessibility or geographic accessibility is defined as the distance from service location to the consumer (120).

In Vietnam, before the year 2000, there were no RH services for young people as the health and population policy just focused on fertility control and providing FP services for married couples. Those services have been recognized for young people from 2001 onwards when the National Population Strategy and then the National Strategy on Reproductive Health, period 2001-2010 considered them as one target group. However, the focus was more on provision of information than on services (121, 122).

#### ***Youth Friendly Services (YFS)***

Since 2004, YFS were introduced and piloted in Vietnam through some projects with support from some international organizations like European Union/UNFPA, Pathfinder International and Germany KFW Bank. These projects covered about seventeen provinces and targeted in- and out-of-school youth aged 10-24 years. YFS were provided at government health care facilities, schools and communal cultural sites. Although these services were evaluated to work efficiently during the project life, their sustainability as well as expansion after the project's completion faced difficulties due to lack of funding, inappropriate facilities and inadequate health staffs (121, 123-125).

Until 2008, the MOH issued the National Guidelines on provision of adolescent and youth friendly health services and guided provinces to develop implementation plans in their own provinces. However, with the limited budget, only 31 out of 63 provinces could develop this plan and deploy activities such as training and piloting YFS (121). There are only 60 health facilities deploying these YFS points in the whole country (7).

SRH services including counseling are found not widely available to young people in Vietnam. Only about 70% of youth were aware of RH counseling services, and over 60% of youth reported to have easy access to RH care services. Kinh/Viet youth and youth in urban areas have easier access than those in the rural and ethnic minorities' areas (36). At present, in each province, counseling service for youth is provided by the provincial Centre for RH in forms of direct counseling or through telephone. However, with only one center which is located in the central provincial district, this counseling service cannot cover the need of youth in the whole province.

With the present health system of Vietnam, young people can access for RH/FP services at every state-owned health facilities at all levels, of which commune health stations (CHS) will act as the primary access point. However, a recent study of UNFPA in Vietnam (2010) showed that ARH at CHS was ignored; there was neither counseling service nor clinical/medical service for youth (126). Ngo et al (2011) had the same conclusion when they found sexual education for youth was almost neglected at CHS (127). Information and counseling on post-abortion or post-partum contraception are found often to be ignored by health providers in CHS as well as in main hospitals, or if existing, the information is provided very briefly (70, 128, 129).

### *Budget investment*

An amount of one billion Vietnamese Dong (VND) (equivalent to approximately 50,000 USD) was allocated from the MOH to one province for period 2006 - 2010 (39, 130) to implement the National Master Plan on Protection, Care and Promotion of Adolescent and Youth Health period 2006-2010 and orientation to 2020. Combining with the local budget, an average of 1,000 VND per one adolescent/youth (approximately 1/20 of one USD) was arranged for the protection, care and promotion of adolescent and youth's health (131). This investment were evaluated to be neither feasible nor sufficient (132, 133). With this low investment level, YFS cannot be available to and accessed by all young people in the whole country.

### *Human resource and infrastructure*

Regarding health workers working in the RH area in general and ARH in particular, Vietnam is facing a shortage (39, 121). It is reported there is a big gap in number of health providers trained in obstetric care at all health levels in mountainous areas (134, 135). Obstetricians only account for about 19% and 21% of all doctors in the Northwest and Central Highlands (136). Although by 2010, 91% of CHSs had at least one midwife; only 65% of CHSs nationwide have a doctor (137). Although post-graduate training is occasionally provided on RH/FP services for these workers, it primarily focuses on technical and clinical aspects of health services. Training on ARH, service provider attitudes and counseling skills is rarely provided (121, 138). As a result, there is an inadequacy of health workers well-trained on providing friendly health services for youth (121).

Infrastructure at every level does not meet demand of clients, especially with regards to ASRH demand (39). At commune level, over half of CHS are in deteriorating situation; there is no separate room for different services (127). About 10% of district hospitals have no separate delivery room; nearly two thirds of district hospitals did not have health education and counseling rooms. At provincial level, 60% of hospitals are not equipped with counseling rooms (139).

### *Contraception*

FP services and contraception can be accessed at hospitals and public health clinics at every level, however, many young unmarried people, being afraid of social stigma, dare not go to these places for contraception. Oral pills and condoms are also distributed by a network of population collaborators who would visit households at least once per month for this job (140). However, many young people in remote areas, because of geographical difficulties or social barriers, could not access these services and FP information (141). Young people in urban areas have better access to contraceptives than those living in rural areas (142).

With such barriers, many youth can only obtain condoms, oral pills and emergency contraception in pharmacies/shops where neither information nor counseling is provided. Although prescription is not required, in practice, many pharmacies are reported to be reluctant to sell these contraception to youth (34).

### *Information – Education – Communication (IEC)*

IEC on population and FP including ARH is a content of the National Target Program on Population and FP of the MOH. Those activities are carried out in form of mass events like propagation campaign, exchange activities,

contests, integration events, broadcasting on mass media like television, radio, peer education, RH clubs for unmarried youth, development of IEC materials, etc. Since these IEC activities are usually carried out on large scale, youth is just one among other target groups, this communication approach just raised awareness among young people on issue of population and FP, seem not to be effective enough to change their behaviors as well as reach all of them (143).

### *Abortions*

Abortion has been legal in public health facilities in Vietnam since 1954, and expanded to private providers since late 1980s (34). This service is provided at every health service level including central, provincial hospitals; district health stations and CHS. Since 1988, with the FP policy, this service has been provided freely to married women and women in poor, rural and mountainous areas; unmarried women were not included in this policy (144). Abortion services are evaluated to be widely available and easy to access (60). However, many young unmarried girls were often reluctant to access public services, because they were afraid of not being accepted in public services or being recognized by an acquaintance (30). Many others seek private sector for abortion or the services which are far from their residences due to anonymity and social stigma (30, 60). Literature in Vietnam shows that post abortion counseling service is usually not provided (70, 128, 129). Availability and easy accessibility of abortion services may increase the neglect of practicing safe sex to avoid pregnancy among youth.

### ***Affordability***

Previously, with the population and FP policy, most of the contraceptives used to be provided free of charge to married couples (30, 32, 142, 144). However, from 2010, there has been change in the MOH's policy due to effect from the cancel of international contraception support; married couples now have to pay for contraception. Although they can access for contraceptives at cheaper prices through the partially subsidized social marketing program of the government, data from the MOH reported a low amount of modern contraception was sold out in social marketing program (145, 146). As of April 2010, the modern contraceptive prevalence rate in Vietnam was 67.5%; however, the amount sold out in this program in 2011 only reached 40%, while the commercial market share only accounted for 6% (146).

SAVY 2 suggested the price of condom/contraception has no influence on youth's use of it since only 11% of youth responded condoms were very expensive and this prevented them to use it (36). However, in practice, this

number may be higher since knowledge about price of contraceptive may prove youth had premarital sex which brings about stigma to them. In commercial market in 2013, the price of one pack of cheap condom like OK brand is 280,000 VND (14 USD) for one package of 144 pieces of condom. The price of emergency pills fluctuates from 5,000 VND to 35,000 VND (1.75 USD), and of oral pills is from 8,000 VND (0.4 USD) to 150,000 VND (7.5 USD). With this price, for many young people, they can afford to buy. However, for many others, especially younger youth and youth live in rural or mountainous areas, in my judgment, price of contraception may be one barrier for them in using it.

To conclude, cost of contraceptive may be one factor contributing in the increase in pregnancy of young people.

### ***Acceptability***

Perceived quality care, provider-client interaction and gender of the provider are crucial for promote satisfaction and acceptability of health services (Peters et al., 2008).

Studies in Vietnam show health providers, in general, are reluctant to provide services for young unmarried people due to disapproval to premarital sex of young people. Even married youth also felt being ignored with their concerns and intimidated with information provided by health care providers (60, 70, 147). Young aborters were reported being treated unrespectedly and impolitely, shouted at or scolded by health staffs (128). Health staffs don't consider contraception counselling as part of abortion or post-partum care but as an extra activity they have to do, so they do not want to perform it (70, 128). Even providers who believe youth should have access to information and services of ARH also don't feel confident to provide counselling for youth because lack of training on ARH (70).

Perception that CHSs provide low service quality made many young people bypass to district or provincial hospitals or private clinics for basic RH care (70, 127). Others were shown to be unsatisfied with the services they received at tertiary-level FP services (129). Lack of privacy, confidentiality at public health services hindered many youth to access these places for services when most of those facilities don't have separate room for counselling and clinical services. (127, 128). Providers' poor interpersonal communication skill prevented them seeking information about RH issues and contraception (128, 129). Gender of provider, inconvenient opening hours, long waiting times, absentee of health workers is also reported to be factors delaying young females in seeking health care (70, 127).

To conclude, health service factor with characteristics of inadequate availability, accessibility, affordability and acceptability may contribute to the prevalence of unintended pregnancy among Vietnamese youth.

### **Availability of sex education in school**

Sex education was initially piloted in schools in Vietnam in the early 1980s (30). From 1994, this program was institutionalized in the official general education system with the integration of basic RH topics into subjects of biology, geography, literature, civics education and extra-curricular activities (30, 148). From 2002-2006, it was shifted to focus on RH and HIV prevention education in secondary schools and piloted in some pedagogic universities (149). From 2007-2010, with support of international organisations like UNFPA, Save the Children, UNESCO, UNICEF, a new 'RH and HIV/AIDS prevention education' program was implemented in secondary schools with the involvement of parents and provincial authorities (150, 151). From 2012, this subject has been deployed in every educational levels in Vietnam (152).

Although Vietnam is evaluated as a country succeeded in overcoming barriers to introduce a national sexuality education program with strong commitment expressed by the Government; the implementation of sex education in schools, in practice, showed many problems (151). Through evaluation, shortcomings of this program was identified as lack of detailed guideline or instruction for the policy implementation (149). Teachers are little equipped with and have insufficient knowledge and teaching skills in this subject (30, 149, 153). Many teachers think sexuality is a sensitive issue, not suitable with oriental culture of Vietnam to teach in schools. As a result, teachers are not comfortable, even feel shy/ashamed to talk about sexuality with their students (30, 149, 151, 153). Most teachers teach mainly on theory while passing through the practice session (154). Students feel dissatisfied with what they receive from sex education at schools since it is too general, do not meet the practical need of young people in RH information, practising safe sex, preventing unwanted pregnancy and other adverse SRH outcomes (93, 155). An assessment in 2009 found, even with students of Teacher Training Universities – the future teachers of young people, also just had an average level of knowledge on RH and HIV/AIDS prevention, which is lacked in specialised knowledge and practice skills, and they all expressed the need of further training on this subject (156).

Internationally, UNESCO developed the 'International Technical Guidance on Sexuality for scaling up a Comprehensive Sexuality Education' and recommended countries to apply it (157). In Vietnam, incomprehensiveness



of sex education as it is not taught as an official subject in schools' curriculum may be one factor leading to youth's pregnancy.

### **Availability of youth development programs**

In Vietnam, the Youth Union, a socio-political organization of the Vietnamese youth, plays a core role in youth movements, organizing and guiding activities of youth. Beside youth development activities, since 1990s, this organisation has piloted many ARH programs with fund from international donors (30). However, interventions were mostly carried out in IEC methods and effected only within the project scale (30).

International evidence proved the usefulness of youth development programs in improving youth's health, including their reproductive health and pregnancy reduction (31). Youth development programs usually combine some forms of opportunity and support as vocational training, youth-led business ventures, community service work etc. Education on youth pregnancy prevention and connection to RH services can be integrated in those programs. Policies supporting youth development will include funding and facilities for the programs, for example, expanding budget for youth employment and offering internship opportunities in businesses. By providing such a supportive, protective environment this strategy can gain even greater improvement in health outcome for youth rather than just focusing on risk reduction (31, 158).

Although Vietnam government issued and implemented a number of policies, laws and programs on youth development such as Youth Law (since 2005), National Programme on Youth Employment (2006 - 2010), Vietnamese Youth Development Strategy (period 2011 - 2020) requesting all branches and ministries participating in youth development process, their implementation has not received appropriate attention, investment and collaboration of many sectors at different levels. Youth programs are, therefore, still not widely available in Vietnam (159-162). Lacking of these programs may be one factor leading to Vietnamese youth's adverse RH outcomes, including unintended pregnancy.

### **Communities**

This section will discuss about ideologies, availability of entertainment venues and media exposure.

## **Ideologies**

Vietnamese culture nowadays is influenced by various ideologies and religions such as Confucianism, Buddhism, Taoism, Communism and Socialism.

Historically, Confucianism co-evolved with Buddhism and Taoism for many centuries and formed the heart of Vietnamese culture (Jamieson 1993) (163). The ideology of Confucianism acted as guideline for moral conduct and relationship among people (46). Vietnamese people worshiped their ancestors, only sons should pray for the souls of their ancestors who, in return, are believed to protect and bless the living members. The "son preference" practice (having a son to continue the family line) is hereby rooted (46). Confucianism stipulated gender norms as males are superiors and females are subordinate. The woman is subordinate to men in all stages of her life: to her father, her husband, and her son (in widowhood) (65, 164). In Confucianism, sex and sexuality is considered taboo and forbidden to discuss about. Sex is only accepted in formal marriage, sex before or outside marriage is harshly punished. A girl is supposed to be virgin before marriage and faithful to her husband for all her life (45, 47). In sexual activity, women play a submissive role to men (33, 47).

At independence in 1945, Vietnam followed Socialism. President Ho Chi Minh declared women and men as equals. The Communist Party of Vietnam put a stress on abolishing "backward and feudal Confucianism" and several laws on gender equality were passed. Since 1930, the Women Union has worked in Vietnam to promote the women's position. However, Confucian tradition still existed together with Communism/Socialism (165).

After renovation policy from the late 1980s, there has been a lot of change regarding lifestyle and view on sexual and gender relations. Society is more open to the world outside and imported the Western culture, with a more liberal view on sexual and gender relations. In contradiction with the past, premarital sex has become more acceptable and women have been more empowered and participated in every socio-economic sector and confirmed themselves equally with men, including in their marriage relationship (66, 93, 166). Despite these changes, traditional ideologies with stigma to premarital or extra-marital sex and social expectation about gender norms still embed in and impact Vietnamese people's attitude and behaviors as analyzed in above sections (58, 65, 167).

Apparently, various ideational influences from culture is one factor leading to the increase in youth's unintended pregnancy in Vietnam.

## **Availability of entertainment venues**

With the rapid growth of the country's economy during the last years, there has also been a widespread appearance of discotheques, karaoke bars and massage parlors in urban areas of Vietnam. Many of these points operated as brothels or "hugging bars" which are served by young women who are often sex-workers (107, 168). The availability of the entertainment venues like this were showed to have influence on young men who then insist their sexual demand on their girlfriends/wives, which may in many cases become coerced sex (107). Young girls who frequently access these points were also found more likely exposed to sexual risks (169, 170). So the presence of massive entertainment venues in Vietnam may be one cause of youth's pregnancy.

## **Media exposure**

In the most recent survey on Vietnamese youth, nearly 80% of youth reported watching television and 61% surfing internet for an average of one hour every day. 65% of youth reported knowing about pregnancy/contraception through television (36). Clement et al (2005) carried out an online survey on sex education and found that 49% of youth participants used internet as a resource for obtaining information on sexual health. Beside a positive effect of providing a source of SRH education for youth, exposure to media also implies an increase in exposure to pornography and sexually permissive or violent media enhanced risk-taking that can lead to pregnancy among Vietnamese youth. In study of Martin (2010), many young urban Vietnamese people, both male and female, learn about sex through pornographic DVDs and internet, and then apply that learning in their sexual relationship. Through internet, Vietnamese youth learn about the sexual lives of teenagers in western/USA societies who have early sexual debut and apply it for their relationship (50). Other study shows learning about sex from internet and watching pornographic videos/movies is related to more permissive attitudes to premarital sex and a higher level of sex-related behaviors of young people (171). Therefore, we can conclude exposure to media is another factor of youth unintended pregnancy in Vietnam.

## CHAPTER 4 – EFFECTIVE INTERVENTIONS AIMING TO REDUCE PREGNANCIES AMONG YOUTH

This chapter presents effective interventions in improving youth RH outcomes that can help reduce youth pregnancy from other developing and middle-income countries as well as in Vietnam.

**Table 1 - Description of interventions and strength of evidence**

Study, Program, location	Target population and objectives	Description	Strength of evidence
<b>Multi-component:</b> Health facility (service provider, clinic, community, other sector) + Community (community-wide activities)			
Ghana, African Youth Alliance (172, 173)	<ul style="list-style-type: none"> <li>Youth aged 17-22 years</li> <li><i>Health service objective:</i> increase access to, enhance SRH services for youth, increase contraceptive use</li> <li><i>Community objective:</i> reduce sexual initiation and number of sex partners; increase condom use</li> </ul>	<ul style="list-style-type: none"> <li>Establish/enhance clinics to improve youth-friendliness</li> <li>Staff training to improve performance</li> <li>Peer-educators provide information at health facilities, in the community, in “youth talks”</li> <li>Communication campaigns on ARH through television, radio, magazine</li> <li>Life skills education</li> <li>Policy, advocacy and institutional capacity building</li> </ul>	<ul style="list-style-type: none"> <li><i>Knowledge, attitude:</i> increase in HIV/AIDS knowledge, positive attitude toward condom users, self-confident in negotiating condom use and where to get contraception</li> <li><i>ASRH behaviors:</i> delay of sexual debut; abstains from sex; have fewer than two sex partners; condom use at first sex, last sex, consistent condom use with current partners</li> </ul>
<b>Multi-component:</b> School based (teacher/adult-led, curriculum based) + Health facility (service provider, community, other sector)			
United Republic of Tanzania, MEMA kwa Vijana (174)	<ul style="list-style-type: none"> <li>Youth aged 12–19 years in rural areas</li> <li>Targeted sexual initiation, condom use, number of</li> </ul>	<ul style="list-style-type: none"> <li>In-school teacher-led and peer-assisted program</li> <li>Interventions to make government health services more youth friendly; youth condom promotion</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge, reported attitudes and some reported sexual behaviors were substantially improved, especially in boys (174).</li> </ul>

	partners, use of health services	and distribution; limited community-wide interventions	
<b>Multi-component:</b> School: peer led, non-curriculum based + Health facility (service provider, community, other sector) + Community (community-wide activities)			
Thailand, Demonstrating Comprehensive Young People's RH Programs through South-South Collaboration (155)	<ul style="list-style-type: none"> <li>• Youth aged 10–24 years in rural areas</li> <li>• Targeted negotiation skills, sexual debut delay, use of condoms/ contraceptive, avoid unwanted pregnancy, STIs, HIV/AIDS, reduce multiple sexual partners</li> </ul>	<ul style="list-style-type: none"> <li>• A Provincial Working Group formed to manage the project (involving MOH, teachers, parents, community leaders, media)</li> <li>• Peer educators trained to carry out peer education program in their schools, factory</li> <li>• YFS established through forming Youth Friendly Centers and referral systems to hospitals</li> <li>• Media engaged through a call-in radio program to provide counseling to youth on RH, YFS and referral system</li> </ul>	<ul style="list-style-type: none"> <li>• Positive change in youth's attitude and behavior on ARH from baseline to end-line assessment: increase in use of condom, pills, use of counseling services, RH information and sex education through peer educators, places to obtain correct information, level of knowledge of STIs.</li> <li>• The end-line assessment recorded remarkably increase in community involvement, including parents</li> <li>• Interventions are sustained after the project ended by local budget.</li> </ul>
Vietnam, Model Approach for ARH Care (125, 175, 176)	<ul style="list-style-type: none"> <li>• Youth age 15-24 years, in- and out-of school, in rural and urban areas</li> <li>• Targeted ARH's needs; anonymous information services for youth; awareness of</li> </ul>	<ul style="list-style-type: none"> <li>• Project management units at central, province and site level set up, trained to manage project</li> <li>• Master trainers from sites and provinces trained to provide retraining, coaching to peer educators</li> <li>• Peer educators trained to provide knowledge, skills on</li> </ul>	<ul style="list-style-type: none"> <li>• Positive changes in youth's knowledge, attitudes, behavior on ARH from baseline to end-line assessment increase in right knowledge of condom use, fecund time, recognizing pregnancy signals; appropriate time for abortion; practice of condom use in right</li> </ul>

	<p>youth on ARH; access to condoms, oral pills; better coordination, understanding of youth's needs of managers from three concerned agencies (Population, Education, Youth Union)</p>	<p>ARH to youth in their sites through peer education sessions, ARH clubs, mass integrated events</p> <ul style="list-style-type: none"> <li>• Youth Friendly Corner established at each site to provide youth with counseling, pills, condoms, IEC materials, referral information</li> <li>• Counseling provided by professional counselors at each site once a month</li> <li>• IEC materials, website on ARH developed and disseminated/run</li> <li>• M&amp;E and supervision system set up and run at all levels</li> </ul>	<p>way; knowledge of HIV transmission and prevention; increase in seeking ARH information through peer educators, increase in youth reporting to seek ARH information from parents, teachers</p> <ul style="list-style-type: none"> <li>• The end-line assessment recorded remarkably increase in community involvement, including parents</li> <li>• Interventions are maintained and expanded by government and local budget after the project ended</li> </ul>
<p><b>Interventions in health facilities</b> (service providers, clinic, community, other sectors)</p>			
<p>Botswana, African Youth Alliance (177)</p>	<ul style="list-style-type: none"> <li>• Youth aged 17–22 years</li> <li>• Health service objective: increase access to, enhance SRH services for young people, increase contraceptive use</li> </ul>	<ul style="list-style-type: none"> <li>• Establish/enhance clinics to improve youth friendliness</li> <li>• Staff training to/and improve performance</li> <li>• Peer-educators worked at health facilities, in the community, in “youth talks”</li> <li>• Behavior change communication (BCC) in community</li> </ul>	<ul style="list-style-type: none"> <li>• Clinics were improved from baseline to end-line assessment (facilities, client satisfaction)</li> <li>• There was an upward trend in the number of youth visiting the facilities</li> <li>• More condoms were distributed</li> </ul>
<p><b>Interventions in schools:</b> adult-led, curriculum based</p>			
<p>South Africa, Health Wise Program</p>	<ul style="list-style-type: none"> <li>• Youth mean age 14 years</li> <li>• Target sexual debut, sexual activity,</li> </ul>	<ul style="list-style-type: none"> <li>• In-school teacher-led SRH and substance use program</li> <li>• Youth Development Specialists were</li> </ul>	<ul style="list-style-type: none"> <li>• Youth participating in the program were evaluated to have delayed sexual initiation, reduced</li> </ul>

(178)	condom use, number of sexual partners, substance use	hired to liaise between schools and communities <ul style="list-style-type: none"> <li>• Twelve lessons in grade 8 and six booster lessons in grade 9, each lesson taking two to three class periods</li> </ul>	rates of current sexual activity, increased use of and perceived access to condoms; lower rates of lifetime, past use of multiple substances comparing to youth not participating in
South Africa, Life skills Education (179)	<ul style="list-style-type: none"> <li>• Youth aged 14–24 years</li> <li>• Targeted sexual debut, secondary abstinence, number of sex partners, condom use</li> </ul>	<ul style="list-style-type: none"> <li>• In-school teacher-led program</li> <li>• Based on national curriculum but each school developed their own program, implemented to varying degrees in all schools</li> <li>• Sessions at least once per week for 20 weeks</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in knowledge about HIV prevention</li> <li>• Youth exposed to life skills education have higher perceived condom self-efficacy</li> </ul>
<b>Interventions in communities</b> (community-wide activities)			
Guinea, Youth Campaign (180)	<ul style="list-style-type: none"> <li>• Youth aged 15–24 years in rural and urban areas</li> <li>• Targeted sexual initiation, number of sexual partners, condom use, knowledge, stigma against PLWHA, treatment, care of HIV/STIs</li> </ul>	<ul style="list-style-type: none"> <li>• BCC campaign to prevent STI, HIV, unwanted pregnancy</li> <li>• Condom use demonstrations by peer educators, health providers</li> <li>• Dissemination of posters, brochures, in community campaign events</li> <li>• Peer educators trained to reach and refer youth to ASRH information</li> <li>• Advocacy meetings with community, government, religious, youth leaders</li> </ul>	<ul style="list-style-type: none"> <li>• Youth participating in the campaign were evaluated to have higher level of knowledge, more positive perceptions, behaviors regarding STI, HIV/AIDS, unwanted pregnancy prevention, comparing with youth who did not participate</li> </ul>
India,	• Unmarried,	• Peer educators	• There was significant

<p>Sehore District of Madhya Pradesh, Empower out-of-school adolescent with life-skills (181)</p>	<p>out-of-school adolescents and married youth in the rural area.</p> <ul style="list-style-type: none"> <li>• Targeted life skills focused knowledge on ASRH, demand generation of primary RH services</li> </ul>	<p>trained on life skills in ASRH to carry out interactions with village youths</p> <ul style="list-style-type: none"> <li>• Generating demand by mobilizing clients to receive primary RH services by outreach nurse midwife once a month</li> <li>• Youth conventions to raise awareness of government officers</li> <li>• Contraception counseling for young married couples</li> </ul>	<p>improvement in antenatal registration and check-ups, institutional deliveries, primary immunization of children, and responsiveness to contraception, birth spacing methods in project villages compared with other villages in the district</p> <ul style="list-style-type: none"> <li>• Interventions are sustained after the project ended</li> </ul>
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*Weiter: HIV Prevention in Young People in Sub-Saharan African: A Systematic Review (182).*

The effective interventions in improving ARH outcomes that help reduce youth pregnancy collected in this study are categorized by the implementation setting which includes: (i) interventions in schools, (ii) interventions in health facilities, (iii) interventions in communities, and (iv) multi-component interventions. According to the target population the interventions aim, they will have different effectiveness and impact.

Firstly, the interventions in schools often include teachers/adults-led, curriculum-based or peers-led, non-curriculum-based programs (or extra-curriculum programs) targeting youth in the schools. As in-school youth are expected to attend regularly, and the majority begins attending before being sexually active, the school-based interventions can, therefore, have an impact on youth's knowledge, skills and behaviors on SRH (183). By equipping youth with knowledge, encouraging them to have healthy attitudes toward ARH issues and contraception, developing life skills including sexual negotiation skills, and then forming change in their RH behaviors; interventions in schools directly influence the individual antecedents of youth's decision making and RH behaviors that can lead to their unintended pregnancy. Intervention in schools can also influence factors at other levels when changing community/social norms to sex education for youth, strengthening institutions (schools) that support youth and encouraging adults (teachers, parents) to communicate effectively with youth.



Comparing with peers-led, non-curriculum-based programs; the teachers/adults-led, curriculum-based programs are found to have more effectiveness and show clear evidence of reducing youth's risky sexual behavior (182). The effectiveness and positive impact of curriculum-based sex education on reducing sexual risk behaviors and pregnancy among young people was also proven by Kirby et al. (2006) when they did a review of 83 evaluations of such programs in developing and developed countries (184). The WHO also recommended widespread implementation of teacher/adults-led, curriculum-based sex education (183).

The second group of interventions which are implemented in health facilities usually include provision of training for service providers in providing RH care and counseling services for youth to improve performance, upgrading health clinics so as to make them friendly to young people, increasing young people's knowledge about the availability of RH services, generating demand and support for services through outreach activities and BCC campaigns of peer educators. Therefore, the interventions address barriers from health sector to youth like availability, accessibility, affordability and acceptability. Besides, it also deals with community factor when mobilizing community support for the services targeting youth. And of course, this intervention will support to target youth who cannot access sex education in schools; so an improvement for individual factors of youth is made. The interventions in health facilities are proved effective in reducing sexual risks including youth pregnancy and recommended by the WHO to implement widely (183).

Thirdly, the interventions in the community target out-of school youth in the community through existing youths-service organizations and target the community through traditional networks or community events. They are often implemented in form of integrated events, communication campaigns on ARH organized by peers or through mass media like television, radio, and magazine. Peer education is carried out in small groups of community youth. Advocacy and institutional capacity building are also carried out when involving government, community, religious, youth leaders and other stakeholders like parents, teachers and youth in managing the program for youth.

With their large-scale spread, interventions in the community aim to improve the social environment for youth's RH. They influence factors that occur among peers, partners, families, institutions and community members. By changing social and cultural norms, these interventions support youth's healthy decision making, improve policies and programs for young people and support adults and institutions interacting with and supporting youth. With mention-above effectiveness, these interventions are also

recommended for wide-spread implementation by the WHO in a systematic review of evidence from 80 studies in developing countries (183).

Fourthly, multi-component/sectoral interventions which combine all interventions in schools, health facilities and in the communities are implemented in many countries and show great effectiveness. Kesterton et al. (2010) did a review of 74 studies in developing countries and found combined multi-component interventions most promisingly effective in generating demand and community support for SRH services for young people (185). When each of three groups of interventions separately shows their effectiveness, a combination of all of them may have greater effect since they can utilize the strength of many sectors in a joint effort. They can reach youth through a variety of complementary channels through schools, in the community, health facilities and at home; also involve all relevant stakeholders and have influence on all factors affecting youth's RH outcomes.

## CHAPTER 5 – DISCUSSION

In Vietnam, youth pregnancy is reported to be very high and increasing. However, not many researches have been carried out on factors leading to this increase. This literature review, using the framework by Adamchak et al. (2000) for ARH program monitoring and evaluation, has identified factors influencing youth pregnancy, consisting of five dimensions, including individual characteristics, peers and partners, family and households, institutions, and communities.

It is clear in the study that Vietnamese youth have the tendency of having **premarital sex at earlier age** while **getting married at later one**. Many other youth enter into **marriage at early age**. Whether they are in marriage or not, they **do not use or use inconsistently contraception** in their sexual relation. As a result of their unprotected sexual behaviors, unintended pregnancy will happen.

There are many factors influencing youth's unintended pregnancy. They may come from their own individual characteristics but may also from external factors such as their peers, partners, family, health sector, schools and communities. In considering what is more or less influential factors to youth; beside their own individual ones, family, schools, and health sector seem to play more important roles than others, as they directly link to youth's decision making in RH behaviors. Among youth's individual factors, their **lack of adequate knowledge on RH issues** and **skills to negotiate safe sex or refuse unwanted sex** seem to be the major causes that put young people at risk of unintended pregnancy, because inadequate knowledge will lead to their inappropriate attitude which then decides their behaviors.

Now, let's talk about the **role of health sector** first, since after all, youth unintended pregnancy is a matter of public health, and health sector plays more important role in addressing the issue. The present problems of health sector that hinder the access of youth contain the lack of YFS including human resource and infrastructure, which is excused as limited budget from the Government. In places where YFS are not provided, disapproval attitude of health workers to premarital sex, poor communication skills, and lack of counseling and inappropriateness of services to youth are barriers to youth. To address those issues, training and provision of knowledge and skills on providing ARH care services for health staffs is not enough. In practice, without the presence of a quality management unit, if package of services are not documented, guided clearly in policy and publicized, the breach of practice will easily happen.

However, to increase the availability of the services in the whole country, limited resource is always a challenge. Providing RH services for youth including counseling requires sufficient qualified staffs being trained on those skills. Addressing long waiting time, inconvenient hours also needs adequate staff's supply.

Beside, a very practical issue that determines the expansion of services is limited budget from government. But is it really the prerequisite determinant? The lessons learned from India, Thailand and Vietnam show that when local authority and decision makers were fully involved and aware of the benefit of the program, they maintained the interventions by their own local budget when the project ended (125, 155, 176, 181). So the answer for budget investment for YFS will depend on the awareness of policy makers who require a clear advocacy.

In addition, it is essential to ensure youth have adequate informed choice of contraceptive and use it in safe and right way, because lack of access to or inconsistent use of modern contraceptives is a major cause leading to youth's unintended pregnancies. As cost of contraception is also a barrier for youth, consideration of working in partnership with local NGOs, civil organizations or private sector in making YFS, contraceptives available, accessible, affordable and appropriate to youth may be suitable.

Regarding the **role of schools in providing sex education**, though Vietnam has managed to introduce sex education in schools, the present integration model of sex education in some subjects reflects a lower level of importance given by policy makers to sex education compared to other subjects. As a domino effect of it; a loose, weaken implementation of sex education in schools is unavoidable. Shortcomings in deploying the program may also be explained by the broader system's problem of the education sector such as limited resources. However, UNESCO recommends comprehensive sex education can be implemented in countries with limited resources. Evidence in the developing and middle-income countries also confirm how effective it is sex education in schools in reducing youth unintended pregnancy (174, 178, 179, 182, 183).

Family with the **role of parents** has a critical influence in shaping youth's aspirations and values. If parents can provide youth with necessary knowledge and skill on sexuality, they would prevent effectively pregnancy happening to youth. It is thought at first that cultural norms are the major cause of little communication on sexuality between Vietnamese parents-children. But the main reason turns out to be parents' lack of knowledge and skills to communicate with their children on sexuality. Evidence from interventions in other countries show when parents are provided with

training on ARH, they will realize youth's needs and become more supportive (155, 185). So provision of knowledge and skill for parents on ARH plays an important role, especially when 80% of Vietnamese population is still rural-based where the lowest knowledge level of parents is recorded.

Youth is influenced significantly from their **peers**. If peers have positive influence, they help to improve RH outcome for youth. From chapter 4, we can see that peer education approach is utilized in all interventions whether they are in schools, health facilities or in the communities, since the approach is very effective and of youth's favorite.

**Gender inequality** is still a problem in Vietnam, which facilitates the power imbalances in the relationship between young girls and their male partners. To address youth pregnancy, a critical component is to deal with gender issues. Promoting gender equality and equity is also an indispensable content that is included in the sex education program and in all effective interventions in the world.

Surprisingly, **youth development programs** are revealed in the study very effective in improving youth RH outcomes, including pregnancy prevention. In all interventions in chapter 4, youth development programs under form of peer education, counseling and life skill trainings were always included. They also are integrated in the interventions in the community.

Vietnam is changing, both economically and socially, with the open door policy. With the influence of changing social values and norms, youth access with **various ideologies** and in that context, they struggle to balance mixed messages and try to sort out what is best for them. So there is a need of making available clear and accurate information to young people and their adult caregivers as well as community. Evidence from interventions in the world and Vietnam shows BCC activities through variety of media channels such as television, radio and internet are very effective in disseminating knowledge and skills on RH for youth (155, 172, 176, 185). Through the widespread of proper knowledge and information on official channels, stigma to youth's sexuality from society can be reduced, as well as change in social and gender norms can happen.

Throughout the study, the **most vulnerable group** of youth to unintended pregnancy is youth in mountainous, ethnic minorities' areas and youth in rural areas. Because of their geographical, social and economic barriers, they cannot access easily RH information, services and contraception.

Unexpectedly, the study revealed that **young married girls** are also at risk of having unwanted and unprotected sexual encounters, so at risk of

unintended pregnancy. Marriage is thought, among other reasons, to have children. However, marriage, particularly early marriage, is not a guarantee that sexual relations are voluntary, safe or pleasurable. Evidence in the world shows interventions that provide outreach activities/facilities may be effective in reaching young people most at risk (183).

Above all, the study suggests that youth really need a **right for their sexual and reproductive health**. Without a right, youth cannot get a comprehensive sex education. Without the recognition of their sexual needs, they will obtain inadequate information and knowledge about sexuality. Without an official right, youth will face a lot of barriers in accessing RH care services and contraception.

Evidence of effective interventions in the world in reducing youth pregnancy presented in chapter 4 shows all interventions which are in schools, health facilities, in the communities and multi-component interventions are effective and recommended to implement widespread by the WHO. In the context of a country with limited resources like Vietnam, carrying out **multi-component interventions** would be a wise and cost-effective selection. However, implementing such interventions requires a harmony and concerted coordination and collaboration between involved sectors to bring the full effectiveness into play.

The interventions with evidence of effectiveness in the world can be adjusted to be appropriate and suitable to apply in Vietnam's context and culture. It will require, first of all, the involvement and participation of the three mainly concerned sectors: MOH, MOET and YU. As we have seen the commitment and political will from the MOET and YU in introducing sex education in schools and implementing ARH programs, the cooperation of MOH with them would be quite possible in an effort to bring down the rate of youth pregnancy in Vietnam.

With the designated responsibilities of each sector, the group of interventions in the schools would be in charge of by the MOET, interventions in the community with youth development programs would be suitable with the YU. No other sector can replace the role of MOH in expanding and improving YFS to the whole country for youth. However, connection, support and linkage system should be designed to utilize the effectiveness of multi-component interventions. For example, Vietnam can learn from Thailand's lessons in establishing referral systems between schools and health facilities, or cooperation between health and education sectors in providing training on ARH for parents (155). Vietnam can also learn from India's interventions when cooperating with youth's organizations in mobilizing community and youth in generating demand for SRH services

or organizing BCC campaign on SRH for youth like in the interventions in Guinea (180, 181).

The **conceptual framework** used to analyze factors that influence youth pregnancy in this review has an advantage, that it considers a broad range and multiple levels of factors that influence young people's reproductive health in general and youth unintended pregnancy in particular. It allows researchers to assess these factors in a comprehensive way. Although the factors were presented independently, in fact they have significant relations with each other. For instant, factor of ideologies with traditional cultural norms about premarital sex stigma and gender inequality will influence the reproductive health behaviors of youth, it also impact the family, partners as well as institutions factors. This framework, however, still has limitation when it did not refer to the sexual and reproductive health right of youth, given the importance of SRH right for youth mentioned in above section.

This **study** also has a number of **limitations**. Firstly, there is a lack of statistical data on youth pregnancy, abortion and early childbearing, especially those data of unmarried youth in Vietnam, since the health management information system does not record it. Most of the researches on sexuality, abortion and pregnancy among unmarried youth were done in small scale or hospital based. The annual Health Statistics do not contain data on health facilities providing SRH information, education and counseling for youth, and data on their levels of RH awareness and knowledge. Therefore, the in-depth understanding on scope and magnitude of youth's unintended pregnancy is not updated.

## **CHAPTER 6 – CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusion**

This literature review can contribute as an exploration of all factors influencing youth unintended pregnancy in Vietnam. It can shed a light on what Vietnam government should do in future to improve the situation of youth pregnancy.

This study suggests that youth's individual characteristics like low level of knowledge, inappropriate attitude and belief on sexual relationship and contraception, low sex communication efficacy, youth's high value on early marriage and childbearing and substance use are direct factors that lead them to unprotected RH behaviors resulting in their unintended pregnancy.

Beside influence of peers and partners, family and household with specific role of parent in sexuality education and discussion plays an important role in forming SRH decision of youth.

Institutional factors such as the lack of YFS in health sector, unavailability of a comprehensive sex education in schools, and unavailability of youth development programs are among the causes of unintended pregnancy of Vietnamese youth.

Having an influence on all above-mentioned factors is the various ideologies in Vietnam with their norms on culture and gender. Beside, communities' factors like availability of entertainment venues and media exposure are also factors influencing youth unintended pregnancy in Vietnam.

The interventions with evidence of effectiveness in the world can be adjusted, adapted and implemented widely in Vietnam if the MOH manages to take the lead in coordinating a tri-party collaboration mechanism involving the MOH, MOET and YU in the implementation of multi-component interventions. In the short term, we can address the factors relating to availability of qualified youth friendly services, comprehensive sex education for in-school youth, and interventions for out-of school youth in the community. In the long term, we can attempt to improve social environment and policies that support the sexual and reproductive health right of Vietnamese youth.

### **Recommendations**

To improve the reproductive health care for youths in Vietnam, three groups of recommendation are developed based on findings of this study.



### **Policy-related recommendations to the MOH, including:**

1. Develop plan, proposal to work with the Government, Ministry of Finance, Ministry of Investment and Planning to advocate and raise more budget for deploying YFS to the whole country.
2. Work with the Government, MOET, YU to build up a joint National Program of Action on RH care for youth in which a tri-party collaboration mechanism is set up; with clear guidance on allocation of budget, human resource, facilities; monitoring and evaluation system. Responsibilities should be mentioned clearly for MOET to carry out interventions in schools; YU to carry out interventions in the community; MOH will be responsible for YFS and taking the lead in coordinating the implementation of interventions. Joint activities should be designed, clearly guided to ensure cost-effectiveness, avoid overlap.
3. Develop National Adolescent and Youth SRH Right Policy to address overall needs of youth with the involvement of all sectors, relevant stakeholders like youth, teachers, parents, local authority, communities' leaders. Budget allocation should always be reserved, clearly stipulated in policy, programs for youth's RH care from central to local levels. Priority should be given to youth in rural, mountainous, ethnic minorities' areas to ensure they can access easily, freely RH information and services. Policy should be made to address child marriage.
4. Promote the implementation of the Youth Law and Youth Development Strategy through advocacy to policy makers to invest adequate funding in youth development programs; mobilizing the public to support the effective approaches that help youth development. Advocate, mobilize business leaders to create internship, employment opportunities for youth; support RH, FP training programs at the work sites. Mobilize schools, communities to establish additional youth development and after-school programs for youth; build up healthy, educational entertainment venues for youth.
5. Work with local NGOs, civil organizations, private sector to set up policy in providing YFS and contraception for youth.

### **Interventions-related recommendations:**

6. Improve capacity of human resource, both in number and quality. MOH issues policy to regulate quota of health staffs for providing RH care for youth basing on number of youth registered at each locality. The MOH should play the stewardship role in allocating health staffs between

health facilities when needed, with more priority given for staffs to work in disadvantage areas like ethnic minorities and rural areas. Set up and provide trainings for groups of master trainers of health staffs on providing RH and counseling services for youth in each province, then use these groups to provide re-training to health staffs in each province. Provide training for private sector, pharmacies in providing RH services and counseling on contraception to youth.

7. Expand YFS to the whole country based on the implementation plans developed by provincial DOH. Set up quality management system to monitor and provide supportive supervision in implementation. Develop plans and deploy BCC and outreach activities, facilities to reach young people and mobilize the communities to support for youth services, with special attention paid to married girls and youth in rural, ethnic minorities' areas. Work with mass media to carry out BBC activities to promote dissemination of information, knowledge and skills on RH to youth and raise public awareness. Establish additional school-based health clinics offering RH care education and services; setting up referral system between schools, youth's organizations with health facilities providing YFS. Cooperate with MOET in providing ARH education for parents of youth in schools; using the population staffs, collaborators to provide training for parents of youth in the community.
8. Co-ordinate, provide training and technical assistance for MOET and YU in deploying the interventions. Promote SRH rights and youth's participation through: strengthening multi-sector coordination between the health and other sectors; mainstreaming gender issues in SRH programs for youth; intensive advocacy, communication campaigns at both national and local levels. Involve young people in policy dialogue to create a supportive environment for youth participation in the design, delivery and monitoring of SRH programs targeting youth.

### **Research-related recommendations:**

9. Conduct surveys on youth pregnancy and pregnancy outcome like abortion, miscarriage etc. which can provide statistics on this population. The survey should be nationwide, including statistics from private sector. In the long-term, survey on youth pregnancy should be integrated in routine data collection in HMIS, and include data from private sector.
10. Conduct research on costs of contraception and YFS to have evidence in setting up appropriate prices of YFS and contraception to youth.

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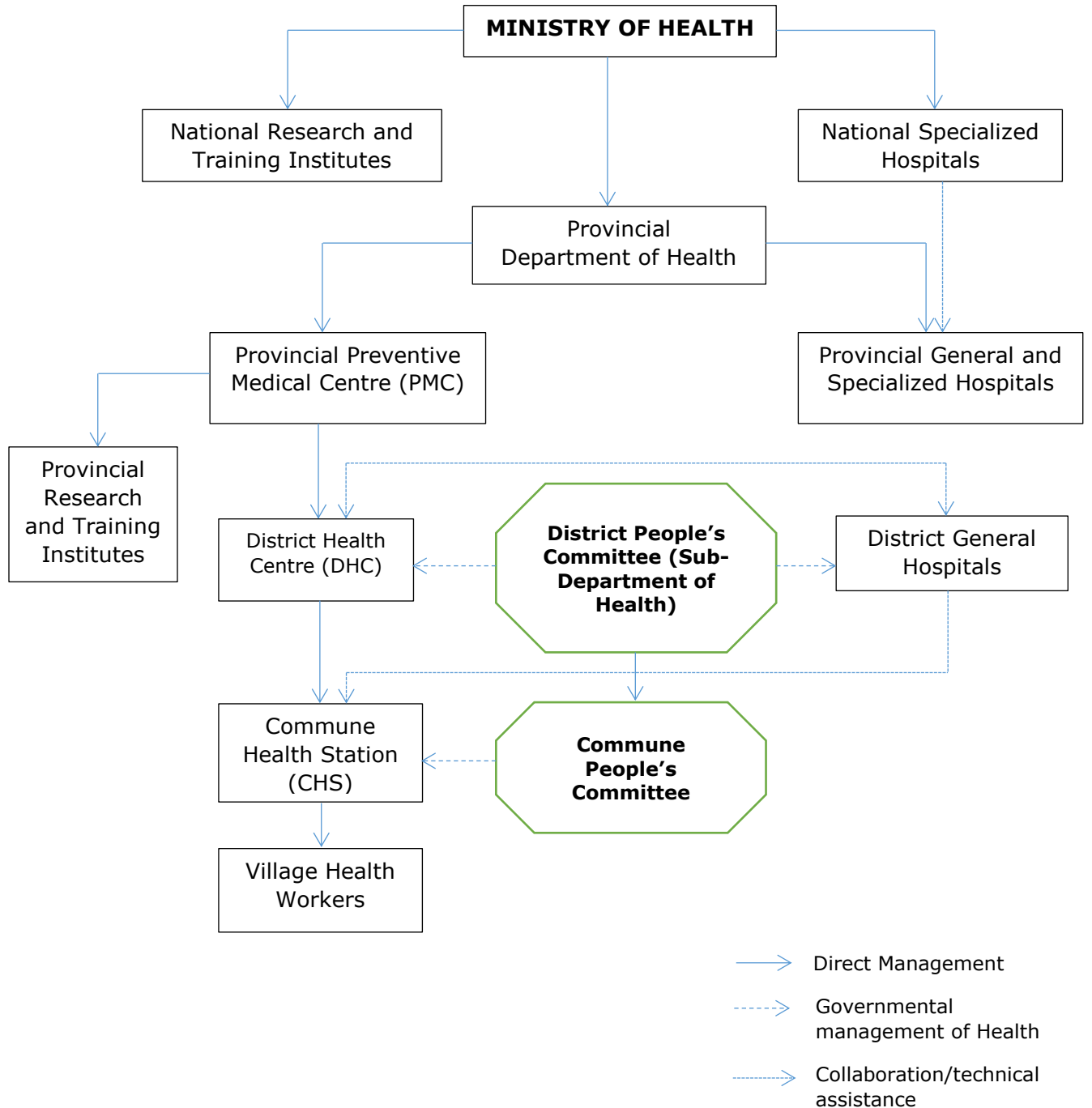
# Appendices

## Annex 1 - Map of Vietnam





## Annex 2 – Vietnam Health Structure



### Annex 3 - Organizational chart of RH health care facilities in Vietnam

