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Pregnant Adolescents in Vietnam

Social context and health care needs

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ABSTRACT

Background: The number of childbearing adolescents in Vietnam is relatively low but they are more prone to experience adverse outcome than adult women. Reports of increasing rates of abortion and prevalence of STIs including HIV among youth indicate a need to improve services and counselling for these groups. Midwives are key persons in the promotion of young people's sexual and reproductive health in Vietnam.

Aim: The overall aim of this thesis is to describe the prevalence and outcome of adolescent pregnancies in Vietnam (I), to explore the social context and health care seeking behavior of pregnant adolescents (II), as well as to explore the perspectives of health care providers and midwifery students regarding adolescent sexuality and reproductive health service needs (III, IV).

Methods: The studies were conducted from 2002 to 2005, combining qualitative and quantitative research methods. A population based prospective survey was used to estimate rates and outcomes of adolescent pregnancies (I). Pregnant and newly delivered adolescents' experiences of childbearing and their encounters with health care providers were studied using qualitative interviews (II). Health care providers' perspective on adolescent sexual and reproductive health (ASRH) and views on how to improve the quality of abortion care was explored in focus group discussions (FGD). The values and attitudes of midwifery students about ASRH were investigated using questionnaires and interviews (IV). Descriptive statistics was used to analyse quantitative data (I, IV) and content analysis were applied for qualitative data (II, III, and IV).

Findings: Adolescent birth rate was similar to previously reported in Vietnam but lower when compared to other Asian countries. The incidence of stillborn among adolescents was higher than for women in higher reproductive ages. The proportion of preterm deliveries was 20 % of all births, higher than previous findings from Vietnam. About 2 % of the deliveries were home deliveries, more common among women with low education, belonging to ethnic minority and/or living in mountainous areas (I). Ambivalence facing motherhood, pride and happiness but also worries and lack of self-confidence emerged as themes from the interviews; and experience of 'being in the hands of others' in a positive, caring sense but also in a sense of subordination in relation to husband, family and health care providers (II). Health care providers at abortion clinics and midwifery students generally disapproved of pre-marital sex, but had a pragmatic view on the need for contraceptive services and counselling to reduce the burden of unwanted pregnancies and abortions for young women. Providers and midwifery students expressed a need for training on ASRH issues (III, IV).

Conclusion: Cultural norms and gender inequity make pregnant adolescent women in Vietnam vulnerable to sexual and reproductive health risks. Health care providers experience ethical dilemmas while counselling unmarried adolescents who come for abortion and this has a negative impact on the quality of care. Integrated ASRH in education and training programmes for health care providers, including midwives, as well as continued in-service training on these issues are suggested to improve reproductive health care services in Vietnam.

Keywords: Adolescent sexual and reproductive health, adolescent childbearing, adolescent abortion, gender, midwifery education, midwifery ethics, Vietnam.

LIST OF PUBLICATIONS

The papers will be referred to by their Roman numbers I-IV.

I. Klingberg-Allvin M, Graner S, Ho Dang Phuc, Hojer B, Johansson A. Pregnancies and births among adolescents. A population based prospective study in rural Vietnam. Manuscript.

II. Klingberg-Allvin M, Nguyen Thanh Binh, Johansson A, Berggren V. One foot wet and one foot dry. Transition into motherhood among married adolescent women in rural Vietnam. Submitted.

III. Klingberg-Allvin M, Nguyen Thu Nga, Ransjo-Arvidson A-B, Johansson A. Perspectives of midwives and doctors on adolescent sexuality and abortion care in Vietnam. Scand J Public Health 2006;34:414-21.

IV. Klingberg-Allvin M, Vu Van Tam, Nguyen Thu Nga, Ransjo-Arvidson A-B, Johansson A. Ethics of justice and ethics of care. Values and attitudes among midwifery students on adolescent sexuality and abortion in Vietnam and their implications for midwifery education: A survey by questionnaire and interview. Int J Nurs Stud 2007;44:37-46.

CONTENT

LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ANC	Ante Natal Care
ASRH	Adolescents Sexual and Reproductive Health
CHC	Commune Health Center
CRC	The Convention on the Rights of the Child
D&C	Dilatation and Curettage
FCI	Family Care International
FGD	Focus Group Discussions
FP	Family Planning
GA	Gynecological Age
HIV	Human Immunodeficiency Virus
ICM	International Confederation of Midwives
ICPD	International Conference on Population and Development
IHCAR	Division of International Health, Department of Public Health Sciences, Karolinska Institutet
IUD	Intra Uterine Device
LBW	Low Birth Weight
LMP	Last Menstrual Period
MoH	Ministry of Health
MMR	Maternal Mortality Ratio
MVA	Manual Vacuum Aspiration
NGOs	Non-Governmental Organizations
NSRH	National Strategy on Reproductive Health
SAVY	Survey and Assessment of Vietnamese Youth
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
RTI	Reproductive Tract Infection
TFR	Total Fertility Rate
UBGH	Uong Bi General Hospital, Quang Ninh, Vietnam
UN	United Nations
UNICEF	United Nations Children's Fund
UNFPA	United Nations Family Planning Association
VDHS	Vietnamese Demographic and Health Survey
WHO	World Health Organization

DEFINITION OF TERMS

Adolescence	As defined by the WHO is the period between 10 and 19 years of age.
Attitudes	Derive from our values and beliefs and are thought to influence our behavior.
Child	Defined by The Convention on the Rights of the Child (CRC), adopted by the UN, is said to be a person below the age of 18 years. CRC is a human rights instrument to be used to safeguard children's and adolescents´ needs to ensure their overall well-being.
Gender	Is the socially defined attributes and responsibilities assigned to men and women, in a given culture, location, society and time.
Gynecological Age	Is defined as women's chronological age minus age at menarche.
Low birth weight	Is defined as less than 2500 grams at birth.
Miscarriage	Foetus dead before 169 days of gestation.
Sexual health	Is defined as the ability to enjoy mutually fulfilling sexual relationships free from the risk of contracting STI/HIV, unwanted pregnancy, sexual abuse or coercion.
S*exual rights*	*A*re based on universal human rights and include the rights to sexual autonomy, bodily integrity, voluntary sexual relationships, sexual pleasure and privacy and access to adequate information and reproductive health care services.
Sexual and reproductive	
health care	Includes: contraceptive services and counseling, pre- and postnatal care, delivery care, treatment of STI and RTI, safe abortion and post abortion care (PAC) and access to information and education in relation to the above.
Stillbirth	Birth of a dead foetus after more than 169 days and /or intrapartum death.
Perception	Is the process of acquiring, interpreting, selecting, and organizing sensory information.
Pre-term delivery	Is defined as a live birth earlier than 37 weeks gestation.
Values	Are subjective and may vary across people and cultures and are general guides to behaviour.

PREFACE

I graduated as a nurse from Karolinska Institutet in 1998, worked as a nurse in Sweden and England and then specialized as a midwife in 2001 and started my work as a midwife at the delivery ward in Mora. I applied to The National Research School in Health Care Sciences at Karolinska Institute in the Spring of 2001 and was l accepted as a research student in 2002. It was through the Research School that I met Dr. Annika Johansson and was introduced to her research area and ongoing projects in Vietnam. The specific project offered a PhD student which embraced several of my own interests, namely exploring sexual and reproductive health among adolescents in a low income setting from a public health perspective. During fieldwork in Vietnam, I had the opportunity to live with a Vietnamese family in Hanoi with teenage children and came to understand how globalization impacts their lives. My meetings with the young midwifery students and long hours at hospitals and abortion clinics gave me further understanding about the context in which Vietnamese adolescents live and the difficulties they face. My first fieldwork was conducted from February-April 2002 and the women I met at the abortion clinics, many of them undergoing far too many induced abortions, motivated me to continue to work within this field. During the first half of my field research period I collaborated with Uong Bi General Hospital while during the second half I also got involved in the activities of FilaBavi in Bavi District, a socio-demographic surveillance site for health systems research and research training. The institutions collaborating in the Health Systems Research Project (HSR) are Hanoi Medical University, Ministry of Health, IHCAR (Division of International Health) at Karolinska Institutet, Stockholm, and the Department of Epidemiology and Public Health, at Umeå University.

BACKGROUND

Adolescence is a period of transition from childhood to adulthood and is, biologically, regarded as a period of health. Biological and psychological changes and the state of socio-economic dependency transforming into relative independency are part of the developmental processes which comprise adolescence. However, adolescents can not be regarded as a homogenous group as different patterns of transition exist depending on the context (Cook et al., 2003). Adolescence is mostly described as a dynamic period which, in some countries, is seen as a well-established phenomenon while, in many low income settings, this definition is a relatively new concept. Thus biological, legal, socio-historical, demographic and behavioral markers determine the nature of adolescence. Biologically the adolescence period for young women begins with the onset of menarche – puberty. However, wide variations in age at menarche exist between regions due to differing health and socio-economic conditions (Cook et al., 2003). Persons over the age of 18 are legally considered as adults in many countries. A variety of definitions exist among international organizations with regard to the age span inherent in the adolescence period (Dehne & Riedner, 2001). Young people, youth and young adult are synonyms used for these individuals. For this thesis the age group 15-19 is focused on and the terms adolescents, youth and young people are used interchangeably.

Adolescent health and development are closely intertwined and both individual and external factors underlie the decisions they make about their lives and how they behave (Blum & Nelson-Mmari, 2004). Variations and trends in sexual behavior in a population may be explained by demographic changes in age structure and a trend towards later marriage age. Furthermore, globalization that increases social mobility for young people and exposure to western influences also affect adolescents' lifestyle (Wellings et al., 2006). A deep concern about increasing sexual activity among unmarried adolescents has been voiced internationally over the last decades. Strong societal controversy about premarital sexuality in most cultures reflects the strength of sexual moral values for cultural cohesion and identity (Sandfort & Ehrhardt, 2004). Cultural conflicts appear in societies were intergenerational interdependency is threatened by adolescents' increased individual autonomy (Caldwell et al., 1998; Friedman, 1999). To illustrate the complexity of the issue, Friedman (1999) suggested some 'modern' health promotion messages directed to adolescents in contradiction with 'traditional' cultural values of the adult world (Table 1).

As defined by Friedman, these conflicting values may act as obstacles to the promotion of adolescent health (Friedman, 1999). Other researchers state that young people's sexual behavior is a reflection of a changing society and that health care services have seldom developed to meet adolescents' special needs and rights (Arulkumaran, 2001; Guest, 2006). Adolescents are poorly informed about their legal rights to adequate health care services and this, together with social stigma related to pre-marital sexuality, makes them more vulnerable to sexual and reproductive ill health than adults (Cook et al., 2003; Hessini, 2004).

Table 1 Conflicting values and practices as obstacles to promote adolescents' health

Modern health promotion messages	Traditional values
Sex education	Immoral and dangerous
Condom access	No pre-marital sexual relations
Equal education and delay marriage	Girls should marry to be protected from pre-marital relationships
Access to media	Dilutes cultural values
Interactive education	Undermines authority
Counselling	Diminishes family role

Source Friedman, 1999

The rate of married adolescents in low income countries is substantial. Data based on demographic surveys from different Asian countries (2003) report that 60 % of women in the age group 25-49 married before the age 18 (McIntyre, 2006)**.** Marriage is often seen as a landmark, sometimes called a "rite of passage" when a young person goes from one stage to another and from childhood to adulthood. In certain more traditional settings with early marriage and childbearing, many young women experience a quick transition from childhood into motherhood (Dehne & Riedner, 2001). Marriage is often associated with a process of social and economic change, depending on the cultural setting, and has a direct impact on young women's autonomy and reproductive health (UNICEF, 2001). Older age at marriage has been positively, although not consistently, linked with women's autonomy and reproductive health (Mensch et al., 1998). A young married woman's social mobility is often decreased as, following marriage; she is frequently removed from previous social support and familial networks. Marriage age is an important indicator, as it is often linked to early childbearing which impacts young women's health and their social and economic status (Mensch et al., 1998; Haberland et al, 2003) The birth of a child is commonly seen to increase women's status and young women must, therefore, handle the pressure of bearing a child soon after marriage (Nicole et al., 2003). Due to their young age, pressures due to marriage and gender inequalities adolescent mothers are often socially and psychologically vulnerable (McIntyre, 2006).

The principal risk of early childbearing in relation to adolescent health are not medical conditions, but mostly social, behavioral and environmental factors (Cook, 2003). The most important causes of ill-health, disability and death among adolescents have been identified to be: unintentional injury, mental health disorders, suicide, homicide, tobacco and alcohol use, unprotected sex and early childbearing (Blum & Nelson-Mmari, 2004). Both protective and risk factors are important to identify in order to design effective policies and programmes to promote adolescent health (Blum, 2004).

Adolescents' sexual and reproductive health care needs

At the International Conference on Population and Development (ICPD) in 1994, the topics of ASRH and rights were analysed and discussed for the first time. All governments present during the conference agreed to take action to safeguard the special needs of adolescents (FCI, 1999). The reproductive health needs of adolescents differ depending on their cultural context, but are mostly related to the consequences of early

and unprotected sex (Rivera et al., 2001). High rates of unintended pregnancies, induced abortions and STI/HIV among adolescents are reported globally (Wellings et al., 2006). In general both married and unmarried adolescent have difficulties in accessing information in order to make well-informed choices regarding contraceptive methods (Rivera et al., 2001). It is estimated that only 5 % of young people in the poorest countries use modern contraceptive methods (de Bruyn, 2004). Of the annual global number of 45 million abortions, 2 to 4.4 million occur among adolescents (de Bruyn, 2004). Two of the leading causes of morbidity and mortality among young women globally are related to early childbearing and induced unsafe abortion provided by unqualified providers using harmful methods (Olukoya et al., 2001, Blum & Nelson-Mmari, 2004).

Worldwide, women aged 15 to 19 give birth to about17 million of the 131 million children born each year (Population Action International, 2001). The average adolescent birth rate reported for South East and North East Asia is 56/1000 which includes extremes from 5/1000 in China to 115/1000 in Bangladesh (Treffers, 2004). As pregnant adolescents often are exposed to greater social, economic and cultural challenges the result is reflected in more complications during pregnancy, in adverse neonatal outcomes (Ehlers, 2003; Blum & Nelson-Mmari, 2004; Conde-Agudelo et al., 2005). Both hospital/clinical- (Watson-Jones et al., 2007) and population-based studies demonstrate higher rates of preterm delivery among adolescent women (Treffers, 2004). Population-based studies indicate that low maternal age serves as an independent risk factor; and that young women with gynecological age (GA) of less than 2 years run the highest risk for both preterm delivery and LBW (Scholl et al,. 1989; Treffers, 2004). If antenatal care (ANC) is a protective factor to attain a successful pregnancy outcome has been discussed globally (Treffers, 2004; White et al., 2006).

Unfavorable outcomes such as preterm delivery and LBW infant could also be explained by the pregnant woman's social conditions and behavioral factors (Treffers, 2004). Adolescent reproductive health care needs differ, to some extent, from those of adult women (Treffers et al., 2001). Adolescents' needs have been investigated internationally from the perspectives of both health care providers and clients (Hobcraft & Baker, 2006). Barriers for adolescents in receiving adequate sexual and reproductive health care, including ANC, have been identified to depend on legal and policy constraints, high costs, long distances from home to place of service, providers' negative attitudes, religious and moral concerns, and lack of information (Olukoya et al., 2001). Little or non-existent sexual education in school and hesitance within the family to discuss sex with their children, are additional obstacles to adequate sexual and reproductive health care for adolescents (Meuwissen et al., 2006). Providers' judgmental attitudes towards adolescent clients and unwillingness to provide them with reproductive health services further undermines adolescents' use of services (Hassan & Creatsas, 2000; Erulkar et al., 2005). Basic characteristics to facilitate youth friendly services include specially trained staff who are sensitive to adolescents' needs, confidentiality, low cost, and short waiting times (WHO, 1999a; McIntyre, 2002; Erulkar et al., 2005).

Midwives' role in adolescent sexual and reproductive health care services

Midwives are, by number, education and their broad scope of practice in a unique position to promote ASRH and provide reproductive health care services. An international definition of the midwifery profession was adopted in May 1992 by the World Health Organization (WHO), Federation of Gynecologists and Obstetricians (FIGO) and the

International Confederation of Midwives (ICM). By this definition the work of a midwife comprises sexual and reproductive health care services during the whole life cycle and care of the newborn child (ICM, 1996). Midwifery competence includes care during normal pregnancy, delivery and postpartum periods (42 days after birth), contraceptive counselling and prescription and extends to areas of gynacology and child care. Important tasks are sexual and reproductive health counselling and education not only to the woman but also to the family and the community.

Midwives are thus expected to promote adolescent health and development (Braumbaugh et al., 2004). Midwifery care is based on primary health care principles (health promotion, maintenance of health, treatment of ill-health and rehabilitation) (Braumbaugh et al., 2004). Characteristics of the midwifery profession are the ethical values and ethical conduct related to protection and respect of both women's and men's sexuality, the perinatal period and women's health problems (ICM, 2000).

Most health care professionals have "Codes of conduct and practice" to rely on which include various ethical approaches (Tschudin, 2003). Different ethical perspectives may be used among health care providers facing ethical dilemmas. It is common to distinguish between two concepts; 'ethics of justice' and 'ethics of care' (Tschudin, 2003). The literature suggests that these two perspectives comprise opposite poles in some respects. The main attributes defining the *ethics of justice* are fairness and equity, autonomy and decision-making based on universal principles and rules. Attributes used to define *ethics of care* are empathy and involvement, contextual, individual-centred and holistic. Mutual understanding concerning ethical decisions is fundamental in a health care team in order to avoid conflict (Botes, 2000).

Health staff education and training are important components and means to assuring the provision of high quality reproductive health care and in preventing reproductive ill health (Braumbaugh et al., 2004). Since the 1980s, educational programs for midwives, in many industrialized countries, have been guided by evidence-based knowledge and practice. This is meant to equip students with necessary skills to provide health care in a changing environment, remaining sensitive to clients' needs (Braumbaugh et al., 2004). To meet the changing needs of the ASRH and to prepare midwives for this complex task requires the constant revision of midwifery curricula. The specific cultural context that each country's midwives work within should shape the curricular content for both basic and in-service training (Braumbaugh et al., 2004).

To asses the quality of care, Donabedian`s is a useful model and is also applied in this thesis (III). According to Donabedian, quality of care consists of three components; structure, process and outcome. *Structure* refers to the set-up and resources available to carry out the prescribed tasks. *Process* incorporates two dimensions; activities carried out and the level of interaction between the client and provider. Activities include technical tasks such as examination of client, explanation of findings, drug administration, drug prescription and information about prescriptions. More interpersonal qualities are client-provider interaction, which is especially essential in reproductive health care where clients need help processing their personal circumstances and choices. A basic element in client-provider interaction is respect, meaning sensitivity to the client's context and willingness to identify the client's needs in order to provide relevant information and services. *Outcome* includes patient satisfaction and patients' understanding of information (Donabedian, 1988).

THE VIETNAMESE CONTEXT

Country Profile

Table 1 Selected socioeconomic and reproductive health indicators, Vietnam

Indicators	
Total population	84.2 million
Population growth rate (%)	1.3
Urban population (%)	26.7
Proportion of population aged 15-24 (%)	20.7
Median Age of total population	24.9
Maternal Mortality Ratio (MMR) per 100,000 live births	130
Infant Mortality Rate per 1000 live births	33.6
Under age 5 Mortality rate per 1000 live births	45
Mean age at first marriage Women Men	 23.1 24.4
Adolescent women 15-19 begun childbearing (%) Urban area Rural area	 1.6 3.7
Contraceptive Prevalence Rate, Any method, Women 15-49 (%)	78.5
Estimated HIV/AIDS prevalence age 15-24 (%)	0.2

Source: World fact book 2007

The North and the South of Vietnam were unified after the end of the American war in 1975 under a socialist government. Vietnam experienced rapid social and economic transition following the market-oriented reform – *doi moi* – initiated in 1986. The changes have led to economic growth and the majority of the population has experienced improved living standards, but Vietnam is still considered a low-income country(Bondurant et al., 2003).

Most of the population live in rural areas and around 17 % of all households live below the international poverty line, with ethnic minority people and people living in the Central Highlands, Northern Mountains and North Central areas worst-affected (Bondurant et al., 2003).

A dramatic fertility decline has taken place in Vietnam in recent decades. The total fertility rate (TFR) has fallen from around 6 in the year 1969 to 2.11 in 2005 (General Statistics Office, 2005). Several factors have led to the fertility decline. A national population policy officially was adopted in 1961, well before similar policies were adopted in other low-income countries (VDHS, 2002). With increasing concern over the high population growth rates of the 1980s, population policies were reinforced and couples were recommended to limit their family size to two children, to delay the birth of the first child and to space their births with 3-5 years. Other components were access to contraceptive services, with IUD being the most common method used among women. Induced abortion has been legal since 1945, available on a limited scale from 1960s and widely-available from the 1980s (Johansson, 1998).

Vietnam has better reproductive health indicators than many countries at the same socioeconomic level (UNFPA, 2003) but despite lower MMR and TFR, many basic reproductive needs of women of all ages remain to be solved. There are great differences in reproductive health care needs between the high fertility pattern typical for women born during the 1940s and 1950s and the low fertility pattern of most younger women in Vietnam (Johansson, 1998). With only two children, married women today spend most of their fertile period trying to avoid pregnancies, which places greater demands on both contraceptive and abortion services. The dramatic political and social transition has created greater inequity, mostly with regard to access to reproductive health care, disfavoring ethnic minorities living in mountains area (ARROW, 2005). Most reproductive health services are provided within public health services, but in the late 1980s market reforms allowed the provision of care by private health care providers as well.

Adolescence in a changing society

The concept adolescence has not been defined as a developmental phase in contemporary Vietnam, as marriage traditionally occurred at an early age and was considered an entry point into adulthood. The term *thanh thieu nien* is commonly used to refer to young people aged 10-24. However, adolescence, *thanh nien*, is now used and seen as a transition phase between childhood and adulthood (Khuat, 2003). Vietnam was the first Asian country to ratify and sign The Convention on the Rights of the Child (CRC). A report for implementation, including policies and plans of action, has been submitted; this highlights that discrimination against girls and women in rural areas persists, mostly in relation to their health status and educational attainment (Bondurant et al., 2003).

The traditional Vietnamese family

Typical characteristics of the traditional family system in Vietnam have been early age at marriage, patrilineal family structure, polygamy, and the importance of female chastity before marriage. Strong imprints of Confucian ideology and norms have supported a strictly hierarchical order within the family, in which women have been obliged to the "three obediences" (*tam tòng*) – to obey their father before marriage, their husband after

marriage, and their oldest son when their husband has died (Johansson, 1998; Le Thi Nham Tuyet, 1999; Pham, 1999). These characteristics affect the whole socialization process for both males and females. Masculinity in Vietnam is closely connected with high social status; being good, desirable and preferable are core values of the masculinity concept and these values have influenced the society and created a superior status for men (La, 2005). One central meaning of patrilineage is that females, due to their "non-male bodies", hold an inferior status within the hierarchical and patrilineal social structures. The inferior status of females is demonstrated in girls' socialization, which is much more intensive than that of boys. Boys' bodies are thought to incorporate inborn patrilineal morality and honor, whereas girls' bodies are thought to be blank slates at birth. Girls' daily social interactions are marked by the practice of sentiment *(tinh cam),* meaning adjusting oneself to others, in order to accumulate good morality and honor for themselves and for their fathers' lineage. Vietnamese women were expected to develop "four virtues" (*tứ đức*) consisting of domestic skills (*công*), beauty (*dung*), calm speech (*ngôn*), and virtuous character (*hạnh*) (Rydström, 1998). Strong family ties and girls' subordination of their own wishes and interests to their responsibility for family and siblings is described among rural girls working in Hanoi (Rubenson et al., 2004).

Marriage

The Marriage and Family Law, endorsed in the 1950s and revised in 1986 and 2000, posed a minimum legal age for marriage for women at 18 and stated that marriage must be voluntary and can not be prohibited (Bondurant et al., 2003). It is described how in 'traditional' Vietnam young people were, by family and surrounding society, pressured into early marriage. Marriage was often arranged by parents or elderly persons in the extended family and young couples usually obeyed the arrangement (Minh, 1997). Socio-economic and political changes over the last few decades have led to a transformation of marriage patterns. The right to decide about marriage, increased educational attainment and the expansion of job opportunities have limited the close family's control over individuals and have given them the opportunity to delay marriage (Minh, 1997). However, the recent Survey and Assessment of Vietnamese Youth (SAVY) found that only one-third of married youth independently chose their spouses. The other two-thirds shared the decision with their families (Khe et al., 2005). Early marriage (marriage prior to the legal age) still occurs, mostly in rural areas (Khuat, 2003). According to the Vietnamese Demographic Health Survey 2002, ever-married young people aged 15-19 years account for 6 % of the married population, and the rate is approximately double in rural areas as compared to urban areas (6.5 % versus 3.2 %, respectively).

Education

The level of literacy in Vietnam is 91 % among people aged 10 years and over. Among boys and girls attending primary school, which is compulsory, there are no major gender differences in educational attainment. However, gender gaps in education emerge in the higher grades in rural areas. Among adolescents aged 15-19 around 49 % of males and 39 % of females currently attend school (Khuat, 2003). The introduction of a market economy was followed by a return from a collective to a family economy and a removal of the subsidy system, mainly within schooling and health care services. Therefore, rural girls often tend to discontinue their education after the compulsory five years due to high costs and community expectations on young women to assist their families by working

(Rubenson et al., 2004). Discontinued education and working for the family while waiting for a marriage proposal is reality for many rural girls (Khuat, 2003).

Adolescent sexual and reproductive health care needs in Vietnam

Adolescents' sexuality and related reproductive health problems are sensitive issues in Vietnam where Confucian morals strongly condemn premarital sex. "Social evils" is a term commonly used in Vietnam; it refers to drug use, prostitution, STI/HIV and pre-marital sexual relationships (Mensch et al., 2003). However, the increasing numbers of sexually transmitted infections including HIV, unwanted pregnancies and abortions among adolescent girls have raised awareness among policy makers, health care providers and society at-large of the challenges present in protecting adolescent reproductive health (ARROW, 2005). In Vietnam, most studies on adolescents' reproductive health focus on pre-marital sexuality, abortion, STI/HIV and related problems (Dang, 2003; Mensch et al., 2003). Findings demonstrate an increase in premarital sex (Dang, 2003) and unprotected sex among adolescents (ARROW, 2005). A recent survey among married youth (ages 14-25) in Vietnam reports that around 22 % had ever experienced pre-marital sex (15 % among the young women and 29 % among the men). Two-thirds of the married respondents report having ever used contraception and a corresponding figure of 4 % was reported among unmarried sexually active (Khe et al., 2005).

Unmeet need in regard to contraception among all women (Belanger & Khuat, 1998; Gorbach et al., 1998; Le et al., 2004; Xinh et al., 2004) in combination with inexpensive and accessible abortion services have created an "abortion culture" in Vietnam with similar levels of abortion rates as those in the former Soviet Union (Agadjanian, 2002). Abortion rates from the mid 90s estimate a lifetime abortion rate of 2.5 per women (Goodkind, 1994) which is among the highest in the world (Guttmacher Institute, 1999; Henshaw et al., 1999). While overall abortion rates have decreased slightly in recent years in Vietnam, the proportion young unmarried women is said to have increased dramatically (Bondurant et al., 2003) and many of these seek abortions through private sector health care providers (WHO, 1999b). Repeat abortion is further reported to be common among young unmarried women attending abortion services (Belanger & Khuat, 1998). Social stigma and privacy are reasons that adolescents are thought to seek abortions at private clinics where the quality of care is frequently inadequate (Dang & Nguyen, 2001). However, reliable statistics on abortion incidence are difficult to obtain due to the sensitivity around induced abortion and the fact that abortions conducted at private clinics are not included in official statistics (Dang & Nguyen, 2001).

The Vietnamese midwives' role in reproductive health care services

Shortages of staff and low levels of competence among staff at the communal level have been reported by clients, creating a lack of confidence and a tendency to seek health care at overloaded hospitals (World Bank, 2001; MoH, 2003a; van Duong et al., 2004). The Vietnamese midwife works mainly with maternity care at primary and hospital levels. Midwives provide pregnant women with antenatal examination and, in some areas, conduct menstrual regulation (MR) at the primary care level. They further assist the doctor with abortion procedures but are not authorized or trained to give counselling in connection with abortion. According to Vietnam's Standards and Guidelines for Reproductive Health Care Services, counselling and information in connection with

abortion should be provided to clients to decide about the appropriate method as well as to be informed about risks and available contraceptive methods (MoH, 2003b). There is now an emphasis among health planners in Vietnam to strengthen the role and competence of midwives in providing reproductive health services that include contraceptive and abortion counselling and care (Dang & Nguyen, 2001).

Midwifery education and training in Vietnam

In the past, to qualify for licensure as a midwife a 2.5 year secondary school level degree programme was required; an additional year of study gave licensure as a nurse". According to recent policy, no education at secondary level should be longer than 2 years and midwifery education has, therefore, been shortened to a 2 year education programme. The Nursing and Midwifery Action Plan of 2002 was developed and approved by the Ministry of Health (MoH) in order to upgrade and improve professional competence for nurses and midwives (VNA, 2002; Jarrett et al., 2005). Challenges and problems have been identified within the present nursing and midwifery education system, which has not yet been standardized. Further, there is a lack of qualified lecturers and clinical teachers (VNA, 2002). Also, health care providers who already work in the health care services, especially in rural areas, rarely receive continuing education. These providers' competence levels often remain low and this leads clients to refrain from seeking care from these providers at the community level (MoH, 2003b; van Duong et al., 2004).

Rationale for the studies

A wide range of research studies and reports are available in relation to ASRH in Vietnam. The focus is mostly on adolescents' attitudes, knowledge and values in relation to their sexuality, risk-taking and contraceptive use. Little research has been conducted on the outcome of adolescent women's pregnancies, their experiences in relation to childbearing and motherhood and their encounters with reproductive health care services. Reports of high rates of abortion and increasing prevalence of STIs including HIV among unmarried youth indicate the importance of research to be able to improve services and counselling for these groups. Vietnamese midwives work within reproductive health services and should be key persons in the promotion of young people's sexual and reproductive health in Vietnam. However, little is known about the content of the basic education for midwives and how they are prepared to meet all clients' sexual and reproductive health care needs. Inadequate basic education and little in-service training evidently counteract development towards client-centered sexual and reproductive health care in Vietnam. It is, therefore, important to understand more about health care providers' and midwifery students´ perspectives towards young clients and the quality of the reproductive health care services they provide.

STUDY AIM

The overall aim of this thesis is to describe the prevalence and outcome of adolescent pregnancies in Vietnam, to explore the social context and health care seeking behavior of pregnant adolescents, as well as to explore the perspectives of health care providers and midwifery students regarding adolescent sexuality and reproductive health service needs.

Specific objectives

- To analyse birth rates and pregnancy outcomes, specifically stillbirth, preterm delivery, low birth weight and place of delivery in relation to socio-demographic characteristics among adolescent women in a rural district in northern Vietnam (I).
- To explore pregnant and newly delivered married adolescents' perceptions and experiences related to childbearing and transition into motherhood and their encounters with health care providers (II).
- To explore health care providers' perspectives towards adolescent sexuality and abortion, and what they consider to be quality abortion care for adolescents, barriers to care quality, as well as to their own training needs (III).
- To describe midwifery students' values and attitudes towards adolescent sexuality, abortion and contraception, and their views on the adequacy of their education for work within adolescent sexual and reproductive health (IV).

RESEARCH PROCESS AND METHODS

Institutional Context

The studies included in this thesis were undertaken during a period when the Vietnamese Ministry of Health was in the process of developing a national Adolescent Health Strategy with a major focus on the reproductive health needs and rights of adolescents. Throughout my research I was in close touch with this process, which in a broad sense can be said to have provided the context for my own research. Our findings were continuously shared with the Ministry of Health and at times input into the work of developing the national strategy. The findings of two of our studies (studies III and IV), conducted in collaboration with Uong Bi General Hospital (UBGH), were shared with the Ministry of Health and several other national and provincial institutions in a workshop organized by UBGH and IHCAR in 2004, discussing the roles of midwives in abortion care for adolescents and how to increase their competence and responsibilities.

The chronological order of the studies differs from how they are presented in the thesis. The first study, conducted during my first period of fieldwork in Vietnam was study III, exploring health care providers' perspectives on adolescent sexuality and abortion. The findings from this study evoked questions regarding the professional preparation of the health care providers working within sexual and reproductive health care services for adolescents in Vietnam. In particular, the midwives' education and training program came into focus and after visiting different Medical Colleges providing midwifery education, study IV was designed. Interviews with the midwifery students revealed their experiences of how adolescent clients were met with negative attitudes at abortion clinics, at out-patient clinics and at the delivery ward. To probe deeper into young pregnant women's social context, their experiences of childbearing and their encounters with health care services, we conducted individual interviews with young women (study II). Parallel with that study, we analyzed data on women's reproductive events using an epidemiological field laboratory (Bavi), investigating birth rates and pregnancy outcomes among adolescent women in a rural district (study I).

Study team

Both Vietnamese and Swedish researchers were part of the study team, representing different disciplines, such as medicine, sociology and midwifery, which is my own background. Without knowing Vietnamese and with limited knowledge about the social and cultural context, I was dependent on Vietnamese colleagues during all phases of the research process. For studies III and IV, I took part in planning, data collection, analyses and report writing. However, when interviewing the midwifery students (IV) we first tried to simultaneously translate directly into English during the interview but found this to interrupt and disturb the interview process. We therefore decided that the Vietnamese researcher should conduct the interviews while I took part as an observer, asking some questions at the end and inviting the students interviewed to ask me questions.

Based on this experience, we decided that the pregnant adolescents in study II should be interviewed by a culturally competent Vietnamese woman. Thus, in study II, I took part in all stages except for data collection where I followed the process through close

communication with the researcher doing the interviews. In study I, I took the lead in data processing, analysis and writing.

Study setting

Studies I and II were performed in two rural districts in Northern Vietnam. Study I was conducted in Bavi district located in Ha Tay Province situated in North-East Vietnam. The district was selected as a socio-demographic surveillance site for health systems research as typical for the rural northern part of the country in terms of socio-economic conditions and health status. Study II was conducted in Soc Son district situated 60 km North of Hanoi and similar to Bavi district in terms of ecology and population characteristics. The structure of the health care system is also similar in the two districts. The Commune Health Centre (CHC) provides antenatal care (ANC), tetanus vaccination, delivery and postpartum care and contraceptive counseling. Cases that are diagnosed as complicated during antenatal care and delivery are referred to higher levels, mainly to the District Health Centres or to specialty hospitals in Hanoi.

Study III was conducted in Quang Ninh Province, a mixed rural – industrial province with an important coal mining industry and a growing tourist industry in the area of Ha Long Bay. The province has among the highest abortion rates in the country, and serious problems of prostitution, drug abuse and HIV infection. The study was carried out in two areas and at three health facilities in Quang Ninh: Ha Long Provincial Hospital (the provincial capital); the maternal child health (MCH) clinic, also in Ha Long Town; and the Department of Gynaecology of Uong Bi General Hospital (UBGH) in Uong Bi town. Study IV was conducted among four of the total sixteen Secondary Medical Colleges that provide midwifery education in Vietnam.

Sampling and participants

For study I, a random sample of villages in Bavi district was drawn, with probability proportional to population size in each unit. FilaBavi includes 67 clusters randomly selected from a total of 352 clusters, comprising about 12,000 households with about 50,000 inhabitants, which constitutes approximately 20 % of the total population of the district. A prospective cohort of 32,950 women was followed from January 1999 to December 2005 (the total population under observation during the whole period counted 62,987). Women reporting a pregnancy were identified and a sub-cohort of women aged 15 to 19 years were further selected and included in the study. A total number of 7,734 pregnancies were reported during the study period. Among those, 1021 pregnancies were reported by 926 women in the age range 15 to 19 years.

In study II, participants were recruited from three of the twenty-five communes in Soc Son district. Communes that were typical for the district regarding geographical characteristics and socioeconomic conditions were selected by consulting district health care staff. Women were purposively selected from lists provided by the staff at the CHC in each commune. The main criteria for inclusion were: (a) being married; (b) being under 20 and; (c) being at least three months pregnant or newly delivered (less than six months

ago). All women approached agreed to participate. Of the 22 interviews, 10 were carried out with pregnant women and 12 with newly delivered mothers.

In study III, the study population was selected from three health facilities in Quang Ninh Province, two general hospitals and one MCH clinic. The clinic was chosen as it differed from the two other sites by participating in a project to upgrade abortion services, including staff training on abortion care and contraceptive counselling. All health care providers at each site were invited to take part in the study. A total number of 40 midwives (all women) and 28 doctors (including 2 men) agreed to take part, which represented the large majority of all staff working at the sites.

Table 1 Subjects and methods.

Study	Title	Study population	Method	Time period
I	Pregnancies and births among adolescents. A population-based prospective study in rural Vietnam.	Pregnant women (n=926) between15-19 years.	Prospective questionnaire survey	January 1999-December 2005
II	”One foot wet and one foot dry” Transition into motherhood among adolescent women in rural Vietnam.	Pregnant (n=10) and newly delivered (n=12) adolescents	Individual interviews	December 2004- February 2005
III	Perspectives of midwives and doctors on adolescent sexuality and abortion care in Vietnam	Midwives (n=40) and doctors (n=28) experienced in abortion services	Focus group discussions (n=8) and observations (n=11)	February-April 2002
IV	“Ethics of justice and ethics of care” Values and attitudes among midwifery students on adolescent sexuality and abortion in Vietnam and their implications for midwifery education: A survey by questionnaire and interview.	Midwifery students (n=235) undergoing second and third year of training.	Questionnaire survey and individual interviews.	October 2003 – May 2004

In study IV, a convenience sample of four of the total of sixteen Secondary Medical Schools were included: Secondary Medical College in Hanoi, the capital city, and three schools within two hours distance from Hanoi in medium-to-small size provincial towns in Quang Ninh, Nam Dinh and Hai Duong provinces. Altogether, 235 midwifery students agreed to be included in the study; only a few students (three to five) in each class refused to participate. In order to probe deeper into certain issues, eighteen students were interviewed individually.

Research design and methods

In this thesis we have combined perspectives derived from both quantitative and qualitative methodologies. It has been suggested that quantitative and qualitative approaches complement each others and are useful in exploring complex public health issues (Dahlgren et al., 2004). Most studies concerning adolescent pregnancy and motherhood use quantitative methods which provide a rather one-dimensional image of their situation, often related with mainly negative outcomes (Corcoran, 1998). Through the use of qualitative methods, a more nuanced picture can emerge, revealing the multiple dimensions inherent in the lives of pregnant adolescents (Clemmens, 2003).

Prospective survey

In Study I a prospective, population-based survey design allowed us to follow a group of pregnant women over time and describe pregnancy outcomes in relation to their socio-demographic status. Furthermore, this large-scale survey enabled us to make calculations on important reproductive health indicators and to analyse associations between background variables and selected adverse outcomes. Socio-economic information of all households and all their members were collected at the Household Baseline Survey completed at the beginning of 1999 and followed by Re-census Surveys conducted every second year in 2001, 2003 and 2005. Following the Baseline Survey in 1999, quarterly demographic surveillance of all vital events was carried out among the study population for the entire duration of the study (Chuc & Diwan, 2003). All households were visited every third month by 36 trained and full-time employed female interviewers. Questions about births, deaths, migration and personal changing of marital status were asked. If a woman reported a pregnancy, the date of last menstrual period was asked and the pregnancy outcome noted in subsequent quarterly surveillance. Questions regarding the entire household were normally asked to the head of household, usually a man, or to other adult family members, while all questions regarding each woman's pregnancies and related issues were asked to the individual woman. When analyzing and presenting the findings the women's identification number is only known by the researchers involved.

Individual interviews

In studies II and IV, individual, qualitative interviews were used to understand the experience of the interviewees and the meaning they constructed out of that particular experience (Kvale, 2000). A sensitive, empathic and probing conversation with the interviewees is an essential feature of the qualitative interview in order to avoid feelings

of subordination and to reach understanding of the underlying meanings of the topic discussed (Pope & Mays, 2000; Berg, 2001).

In study II we developed a semi-structured interview guide covering three main areas: (i) adolescent women's experiences in relation to the process of childbearing and transition to motherhood; (ii) their attitudes towards child spacing and contraceptive use; and (iii) their perceptions of encounters with health care providers. The interviews were conducted in the homes of the young women by a young female Vietnamese researcher with a Bachelor's of Psychology.

In study IV, a semi-structured interview guide with open-ended responses was developed by the research team and used (Pope & Mays, 2000) to explore students' values and attitudes towards adolescent sexuality, abortion and contraception and perceptions of their own preparedness for future professional tasks. The interviews were conducted in Vietnamese by a Vietnamese researcher together with me, either at a student hostel or at my temporary home in Hanoi.

Collecting data through the use of qualitative interviews made it possible for us to be aware of existing power dynamics at family and couple level and to better understand the young pregnant and parenting women's social and family situation (study II). In study IV, the combination of survey data and the qualitative interviews provided depth to the midwifery students' attitudes and values on adolescent sexuality and abortion.

Observations

In study III, observations were conducted to achieve deeper knowledge about the health service context and the provision of abortion services in the study areas. The guide for the observations was based on Donabedian`s definition of quality of care (Donabedian, 1988) and adapted by the research team to the Vietnamese setting. In total, three days were spent at each of the study sites during the time of abortion services, which was Monday to Friday mornings. Socio-demographic information, such as age, parity, gestation, number of pregnancies and occupation of the clients was collected from each client's medical record kept at the hospitals and clinics.

Focus group discussions (FGD)

In study III, we used FGDs as the main research method. While the qualitative interview is thought to give more depth into the topic studied (Berg, 2001), FGDs are considered helpful when sensitive topics are being explored and the person may feel constrained in giving his or her personal view (Bender & Ewbank, 1994). We decided to use FGDs as they allow participants to share their experiences, opinions and queries as they operate within a social network. This provides insight on how points-of-view are constructed and expressed in a given cultural context (Barbour & Kitzinger, 1999). FGD as a research method is flexible and provides the ability to observe interactions at low cost in relation to the sample size (Barbour & Kitzinger, 1999).

Findings from the observations were used to develop a thematic guide for the FGDs. The major topics discussed were participants' values and attitudes towards adolescent sexuality and abortion; what they considered to be barriers to providing high quality counselling and care for this group of clients, and their own responsibilities and training needs in the area of adolescent reproductive health. Counselling, in this study, was seen as one component within quality of care and was highlighted by the moderator in each discussion. The participants were divided by profession into eight groups with 6-10 participants each. The FGDs were held in a conference room at each facility, led by a Vietnamese moderator with prior experience conducting FGDs. On average, discussions lasted one and a half hour. I participated as an observer in all eight sessions together with a translator with the help of whom I could follow the discussions broadly and in the end add further questions. Field notes were taken during discussions by a third person, noting the interaction of the participants and the general atmosphere of the groups. After each group discussion the research team met to discuss any unclear points and raised issues of special interest, which were then fed into the next FGD (Maynard-Tucker, 2000).

Questionnaire survey

In study IV, a structured questionnaire was developed and pilot-tested on a group of 45 midwifery students at the midwifery school in Hanoi to determine whether concepts and expressions used were easily comprehended. Researchers from Vietnam took part in developing the content of the final questionnaire. Different concepts used in the questionnaire were discussed beforehand with students in a group and with researchers familiar with the Vietnamese context. Translating questionnaires into a second language is known to be difficult and requires consideration regarding content, concept and semantics. Vietnamese and English differ a lot when it comes to language structure and equivalence in this respect is difficult to achieve (Chang et al., 1999). The questionnaire used in this study was translated carefully and double-checked by different persons involved in the study.

The final questionnaire covered the socio-demographic background of the students and their educational programs. Students were then presented with a number of statements reflecting attitudes towards pre-marital sexual relations, abortion and contraception, to which they could respond on a four-point Likert scale (Spector, 1992). An example of a negative statement is: 'Abortion is morally wrong' to which the students could respond by choosing between: disagree completely, disagree, agree and agree completely, which were assigned to each statement. An example of a positively worded statement included: "Unmarried couples asking for contraception show responsibility". The midwifery students were approached in their classroom and given relevant information in order to decide if they would like to participate. The questionnaires were distributed to students in class with only persons in the research team present. The questionnaire took around 30 minutes to complete and was anonymous, coded by site and student's length of training. Aware of the problem of measuring complex issues of morals and sexuality quantitatively, we still found the Likert scale useful as the topic studied was sensitive and the method safeguards participants' confidentiality. The questionnaire survey provided an

overview of the values and attitudes of the participants on the issues investigated and the qualitative interviews gave a certain depth of understanding of the meanings behind.

Analysis

Quantitative data

Quantitative data (I and IV) was analyzed using Statistical Package for Social Sciences (SPSS) version 12.1.

Descriptive statistics (I) were used to describe socio-demographic characteristics, pregnancy rates and pregnancy outcomes among the women. Chi-square test was used in analyses that entailed comparison of proportions. Analysis was performed to study associations between women's socio-demographic background and selected adverse pregnancy outcomes.

Means and proportions (IV) were calculated, and some inter-group comparisons were made (length of education, living with parents/at hostel, born in rural/urban areas, Buddhism/no religion, and length of training). In the analyses, 'agree completely' and 'agree' were aggregated into 'agree' and, likewise, 'disagree completely' and 'disagree' were aggregated into 'disagree'.

Qualitative data

With the permission of the interviewees all interviews and FGDs were tape recorded, transcribed in Vietnamese and translated into English. As the language structure of Vietnamese and English are very different, word by word-by-word translation is impossible and it may be difficult to capture the full meaning of the original text. To compensate for this, the research group spent considerable time comparing the translated transcripts with the original text and discussing its meaning. Some of the interviews and focus group discussions were translated by an independent, professional translator in order to check the accuracy of the translations.

Latent and manifest content analysis was applied (II, III and IV), an analytical tool relevant for application to research problems regarding interactions of culture and social structures (Berg, 2001). In manifest content analysis only the evident and visible in the text is focused on, while latent content analysis focuses on the underlying meaning of the text (Berg, 2001). The analyses were performed in several steps by all authors in order to structure and categorise content. The entire research team read the transcribed and translated raw text several times to understand it as a whole and to discover essential characters within it. Reading and re-reading the text line-by-line and open coding was conducted independently. Thereafter, meaning units appearing to refer to the same content were identified and sorted into topics relevant to the aim of the studies.

Similar codes were grouped into sub-categories and later merged into main categories, critically questioned and compared within the research team (Graneheim & Lundman,

2004). In the analysis we have attempted to identify emerging themes and tendencies and discuss their meaning in a socio-cultural context (Berg, 2001). Below is the category system developed for study II to illustrate the analytical method applied (Table 2).

Table 2. Illustrating the category system emerging from study II "One foot wet and one foot dry".

Themes	**Categories**	**Subcategories**
Ambivalence becoming a young mother	Feeling happiness and pride	Proud to be able to conceive.
		Proud to become a mature person.
		Happy to please the family.
	Difficulties experienced in transition to motherhood	Feeling young and lack confidence to cope with motherhood.
		Worry and fear for pregnancy complications.
	Submitting oneself to social norms.	Adjust to family and social expectations with regard to timing of marriage and childbearing.
Being in the hands of others	Striving to please the husband.	Contraception, spacing, sex life.
		Communication between spouses.
	Being subordinated to the husband's extended family	Follow family's decision regarding health care seeking and spacing
	Being ignored and patronized by health care providers.	Feeling vulnerable/exposed.
		Feeling frustrated.
		Lack confidence.

FINDINGS

Findings derived from studies I-IV are summarized and presented below. The results section is divided into three main headings: *Adolescent pregnancies and transition into marriage and motherhood, Health care services for pregnant adolescents* and *Midwifery practice and adolescent sexual and reproductive health.*

Adolescent pregnancies and transition into marriage and motherhood (studies I-II)

Adolescent pregnancies and the women's experiences in relation to these have been investigated from different perspectives in two of the studies. Study I provides a description of birth rates and pregnancy outcomes among adolescent women in Bavi district. During the seven year study period, 1 021 pregnancies were reported by 926 women between the ages of 15 and 19 years. Seventeen percent of these women were below 18 years. Compared to the pregnant women in the age group 18-19, a larger proportion of the younger women were unmarried, belonged to an ethnic minority or lived in mountainous areas (Table I). For 961 of the pregnancies, the birth outcome was reported. Ninety-one percent (n=876) resulted in a live birth, 1.8 % (n=17) in a stillbirth, 6 % (n=60) in miscarriage and less than 1% were reported as induced abortion (n=8).

The birth rate for live birth events among the adolescent women was 27 per 1 000 women years (age of the woman calculated at the time of childbirth) during the study period. Among the live birth events close to 19 % were delivered pre-term, giving a pre-term birth incidence of 196/1000 live births. Eight percent of all live births were low birth weight (LBW) infants. There were no significant differences in terms of women's socio-demographic background for pre-term delivery and LBW. The overall stillbirth rate was 19/1000 births (live and still) during the study period. More than two-thirds (70 %) of the stillbirths were delivered pre-term and one-fifth were delivered at home. We found no association between stillbirth and women's socio-demographic background.

The overall proportion of home deliveries among all births (live and still) was 2.4 %. Analyses of place of delivery at birth in relation to women's socio-demographic characteristics showed that most of the women delivering at home belonged to an ethnic minority and had less than 6 years of education.

One-third (29 %) got married before the age of 18, which is the legal minimum age of marriage for women in Vietnam. The majority had over 6 years of primary education while 13 % had six years of compulsory education or less. There was an association between age at marriage, ethnicity and education as shown in Table 2.

Table 1. Socio-economic characteristics by age at conception of 926 pregnant women. Percentage within brackets.

Variable	Age 15-17 n= 161		Age 18-19 n= 765		Total n= 926		*p*
Age							
15	5	(3.1)			5	(0.5)	
16	25	(15.5)			25	(2.7)	
17	131	(81.4)			131	(14.1)	
18			318	(41.6)	318	(34.3)	
19			447	(58.4)	447	(48.3)	
Ethnicity							0.007
Kinh	141	(87.6)	717	(93.7)	858	(92.7)	
Minority	20	(12.4)	48	(6.3)	68	(7.3)	
Marital status							0.024
Married	154	(95.7)	753	(98.4)	907	(97.9)	
Unmarried	7	(4.3)	12	(1.6)	19	(2.1)	
Education level							0.760
Primary or less	19	(11.8)	97	(12.7)	116	(12.5)	
Secondary or higher	142	(88.2)	668	(87.3)	810	(87.5)	
Occupation							0.501
Farmer	147	(91.3)	685	(89.5)	832	(89.8)	
Other*	14	(8.7)	8	(10.5)	94	(11.2)	
Geographic area							0.001
Lowland/highland	101	(62.7)	574	(75.1)	675	(72.9)	

*government staff, worker, housewife, small business, student

Table 2. Age at first marriage by ethnicity, geographical area and education level (n=906).

Variable	Marriage age below 18 (n= 265)		Marriage age over 18 (n= 641)		*p*
Ethnicity					0.019
Kinh	237	(89.4)	602	(93.9)	
Minority	28	(10.6)	39	(6.1)	
Level of education					0.034
Primary or less	42	(15.8)	69	(10.8)	
Secondary or higher	223	(84.2)	572	(89.2)	
Geographic area					0.099
Lowland /highland	183	(69.1)	477	(74.4)	
Mountainous area	82	(30.9)	164	(25.6)	

"One foot wet and one foot dry" - Adolescent women facing marriage, childbearing and parenthood

In Study II we applied a qualitative approach to explore adolescent women's experiences, health care seeking behavior and social context during pregnancy and childbirth. All women interviewed were below 20 and married, and they were either pregnant or had recently delivered. A major theme from the analysis was the young women's strong ambivalence towards the pregnancy. This led to both feelings of happiness and pride at being able to conceive, as well as feelings of worry and fear of complications. Their lack of self-esteem and confidence to cope with motherhood was evident. All women interviewed saw themselves as young mothers, some of them 'too young'. According to both pregnant and parenting adolescents the social expectations for early marriage closely followed by childbearing are compelling:

> *"In general, for people born in 1986, getting married last year is the best. And people born in 1987 can get married this year. Actually for those born in 1987 that get married early this year are not old enough to get married. But in this rural area, you must do so. People here always get married early. They start to marry at 17, 18 years old. And at 19, they are considered to be (left) on the shelf."* (Pregnant woman, age 19).

The study shows that not all pregnancies were planned, nor indeed in line with the young women's wishes. The women described the complexity of their present situation being newly married, pregnant and in addition part of a new social context as illustrated below:

> *"I got married last month and became pregnant the next month. I did not have time to do anything. I would have liked to wait until next year to be able to earn money and relax as I am newly married. I have just got married and now I will be a mother, "one foot wet and one foot dry"[(Vietnamese proverb}.Now I cannot go anywhere. My friends normally start to have a baby one year after marriage."* (Pregnant woman, age 18).

Gender, sexuality and reproductive decision making

The second major theme emerging from the analysis was the young women's feelings of 'being in the hands of others', i.e. in relation to the husband and the extended family as well as in encounters with health care providers. This was a mixed feeling of both being cared for and protected, but also of being subordinated when it came to decision making about pregnancy, delivery and contraceptive usage. The extended families' concern regarding the pregnant women's health status was described, especially through the provision of nutritious food. They expressed feelings of helplessness and emphasized the importance of the extended family in supporting them in basic care of the newborn baby.

The interviewer, herself a young married Vietnamese woman with a small child, probed into the married adolescents' experiences regarding their sexual lives. The topic raised some embarrassment but also eagerness to talk as, according to what they said, they had hardly talked to anyone about this before. There was a clear pattern of describing

marriage life as dominated by the husband's wishes and needs in relation to both sexuality and child bearing. They described their sexual experiences sometimes as enjoyable but more as 'tiresome', always having to 'please' the husband:

> *"In general, boys always demand (sex) from girls so I have to please him. Sometimes, I try … I am aware that I should please him but I do feel tired. If I don't please him, he gets very hot tempered … so I have to please him.*" (Pregnant woman, age 19).

Preferred length of spacing between the first and second child varied between 3 to 5 years among the young women. As with sexual relations, the women described themselves as often disagreeing with their husbands but having to comply with his and his family's wishes:

> *"He wants to have another baby soon, around 2-3 years after this baby. If it is a boy I would like to wait until he is 5-6 years old and if that is a girl, I would wait longer. … but he wants to have a boy. And I prefer to have a girl first. Probably, we need to rely on traditional methods because if we use the pills, we are afraid of not being able to have baby again. And we feel shy to use condoms. I don't want to use it as he would not want to use it. Therefore, traditional methods are the only way as using pills is frightening."*
> (Pregnant woman, age 19).

In discussing contraception, the wives claimed that 'we decide together' but the final decision makers in most cases were said to be the husbands. Women's source of information about contraception seemed to be mainly magazines and other married women. Some had attended a course held by the local women's union while few brought up public health clinics as a source for information and advice on contraception. Women seemed to have many queries regarding contraception but were hesitant about where to find answers and ended up using traditional methods of contraception. Some women who actually had used modern contraceptive failed due to limited knowledge about the method and ended up with an unplanned pregnancy.

Reproductive health care services for pregnant adolescents and abortion clients (studies II and III)

This section is based on findings from two of the studies:

- the qualitative interview study of adolescent women's use of and perceptions in regard to the antenatal care received (study II), and
- the observations of abortion services provided at public health clinics (study III).

Interviews with the pregnant and newly delivered women (study II)

Most of the interviewed women (n=22) were 18 or 19 years old, only three were below 18. The average numbers of antenatal visits among the 12 parenting women were four, ranging between two and seven, including ultrasound. All the women experienced a

normal vaginal delivery, although half of them were referred to a higher level than the CHC and the same number delivered pre-term. The mean reported birth weight was 2,500 grams ranging from 2,100 to 3,000 grams. The health services used by the pregnant (n=10) and parenting women (n=12) were both public and private, including some providers of traditional medicine. The reasons for choosing certain health care services were both practical, such as distance and transportation problems, but also related to the perceived quality of care provided. The public providers were not held in high regard by most of the adolescents as illustrated below:

> *"When I came for examination to aunt Phu (private clinic), she said that my fetus was a little bit too big. But when I went to the CHC, they said it was normal and they did not say much more. They could not follow up my fetus. Moreover, there is a sister who has just started to work and she doesn't know much."* (Pregnant woman, age 17).

The health providers were described by the interviewees as patronizing and ignoring their clients' worries and concerns about the pregnancies. Their questions and queries were dismissed by the health care providers as 'everything is normal' which did not help to reassure the young primapara. Long waiting times due to staff shortages and overcrowded clinics were other complaints about the public clinics; these acted as barriers for the adolescent women in attending ANC. This is illustrated below by one of the women who gave birth to a child who was small for gestational age (SGA) (birth weight 2,300 grams at 40 week's gestation):

> *"Actually sometimes I intended to have the examination but when I came for the injection and also for examination, I had to wait. There are only my husband and I in the family. I need to go home early to cook for him and get back to work again. I usually came at 9 a.m. to the clinic but there were too many people waiting for aunt Thanh to examine them. It would not be my turn even if I waited until noon. Thus, I told myself to have the examination the next time. But it was still too crowded the next time so I did not have the examination. Moreover, I saw there was only male staff and I did not get inside as I felt shy. I just wanted to see aunt Thanh or sister Hong. I felt healthy so I guessed I might not have any problem and did not go there any more."* (New mother, age 19).

It was also brought up that especially health care service in urban area, to which some were referred to due to complications, differentiated between people with more and less money. Staff were said to receive 'envelope money' after having assisted a woman during delivery. The family's ability to pay was said to impact the quality of care they received.

Observations at abortion clinics (study III)

The observations revealed that all three settings had qualified staff, both medical doctors and midwives. Abortion procedures of eleven women were observed. The women ranged in age from 19 to 40 with a mean age of 30. Thus, most of the clients observed were not

adolescents but the clinics also received many adolescent clients. The mean gestational age was five weeks of pregnancy. The number of abortions per woman ranged from none to nine. Half of them had used contraception prior to pregnancy, mainly condoms. None of the three facilities provided privacy to abortion clients during registration, examination, abortion procedures or post-abortion care. Doors were wide open, health care providers as well as other clients were walking in and out of the room during the examination and abortion procedure. Lack of privacy and time seemed to inhibit patients from conveying their concerns to health care providers. Interaction between the health care provider and client was minimal and dominated by one-way communication. There was a friendly but impersonal atmosphere between client and provider during each session observed.

Most of the clients expressed pain and distress during the procedure but were not supported by anyone during or after the abortion. Pain relief was given in different forms, most commonly tablets of Paracetamol prior to the procedure together with a local anesthetic, given close to procedure. Half of the women received information about precautions related to the abortion procedure but only one was given individual contraceptive information prior to discharge. Three of the clients had post-abortion check-ups by midwives; the others were discharged without any observation from a health care provider.

Adolescent sexuality and abortion care: perspectives from midwives, doctors and midwifery students (studies III and IV)

The aim of studies III and IV was to explore health care providers' and midwifery students' views and perceptions about adolescent reproductive health with a focus on sexuality, abortion and counselling.

In the FGDs (III) conducted at the three abortion clinics the participants discussed qualities and characteristics of abortion services and contraceptive methods, and what was needed to improve services. The major barriers identified for quality abortion care were of technical and managerial nature. Components mentioned as needed for the provision of high quality abortion care were, in order of importance: (a) technically skilled providers who could conduct safe abortion procedures, (b) availability of standard equipment to perform a safe abortion, and (c) the adequate provision of pain relief. Some of the participants stated that they often had to use old equipment and techniques and stressed this as a risk factor for unsafe abortion. Counselling of abortion clients was described by the participants as inadequate and difficult to find time for and the providers were said to lack counselling skills. Counselling was even described as something apart from the abortion providers' 'professional tasks' as described by a group of midwives:

> *"Youth clubs, activity groups, schools or community are responsible for helping adolescents to prevent unwanted pregnancies. We are responsible for helping them have abortions, not counselling."*

All providers in the FGDs had had experience with young, unmarried abortion clients, many of whom were described as adolescents. The different groups' description of the "typical abortion girl" were consistent, she was either a student living far from family, out of parents' control, or a bar waitress. Introducing this topic we started by probing into how participants saw the youth of today as compared to when they were themselves that age. Most of the participants were concerned about the loss of traditional family values; parents' lack of control over their children seemed to be another dominant concern. Providers described that parents used to have greater influence over their children, when it came to morality and life's values, than they have today. This social control was described as keeping adolescents focused on studies and what they called healthy lifestyles. They discussed how *Doi Moi* had opened up greater opportunities for young people on the one hand, but also how it had led to an increase in pre-marital sexual relationships, which were strongly disapproved of in all FGDs. 'Healthy lifestyles' was an expression often used by the participants meaning, among other things, sexual abstinence before marriage, while the opposite, 'unhealthy lifestyles', was closely related to sexual activity. One group of hospital midwives was particularly condemning and suggested that the best thing would be to forbid premarital sexual relations altogether. The only slightly diverging views came from a group of doctors who said that as sexuality is 'a normal part of development', open communication about it would be beneficial. But even in that group, the moral stance was clearly that it is preferable to avoid sexual relations before marriage.

Discussing counselling of unmarried clients in connection with abortion, there was a strong emphasis on the need to warn against the risks and dangers of pre-marital sex and subsequent induced abortion. A group of midwives stated:

> *"Pre-marital sex may result in unwanted pregnancy and abortion and have negative effects on their health. They should focus on studying, their future is ahead and they should devote their strength to society."*

> *"Good abortions service should be safe and combined with information about the dangers and consequences of having abortion. Then counseling about contraceptive methods to avoid unwanted pregnancy should occur."*
> (Group of doctors).

However, the participants also expressed a pragmatic and caring attitude towards the unmarried girls and couples coming for abortion. Confidentiality and privacy were suggested to encourage the adolescents to use public rather than private services, which were thought to provide less safe services. Discussing suitable contraception for unmarried youth, many providers advocated that pre-marital sex should be discouraged – "no sex before marriage is the best contraceptive". But if necessary, at least the method should not encourage 'more sex' as IUD insertion or the provision of contraceptive pills were thought to do. Contraceptive pills were also perceived as having a negative effect on young women's future fertility and health (it was thought by some to cause cancer). The condom was seen as suitable contraception for adolescents as it prevents not only unplanned pregnancies but also STI/HIV.

Thus, while the FGD participants were mostly hesitant to contraceptive use among the unmarried, they were also aware of the needs and of their own insufficient knowledge. They suggested in-service training for abortion providers to improve counselling overall, but specifically to meet the needs of adolescent clients:

> *"How can we advise our clients when we don't have sufficient knowledge of modern contraceptive methods ourselves?"* (Group of doctors).

Findings from the questionnaire survey among 235 midwifery students and the in-depth interviews with 18 students revealed general disapproval of pre-marital sexual relations. (study IV). All of the midwifery students were female with a mean age of 21 years (range 19–30). On the Likert scale most of them (89 %) replied that they considered pre-marital sex as morally wrong and over two-thirds stated that female virginity is very important. Students who were interviewed individually about pre-marital sex and related issues expressed general disapproval while they also found that pre-marital sex, referred to as "to have dinner before it is served" (*an com truoc keng*), was becoming more accepted in society. Virginity was described as 'being decent', 'keeping one's dignity' and having a 'healthy lifestyle'. But there was a perceived difference between how female and male virginity are valued and by whom:

> *"Women are not strict about the importance of men's virginity while men compare and comment whether a girl is still virgin or not."*
> *(*Hanoi student, age 21*).*

> *"This question should be given to a man. For me it depends very much on what my boyfriend thinks of the importance of virginity at marriage."*
> (Quang Ninh student, age 20).

When gender differences in relation to pre-marital sex were further explored, a picture emerged of how young woman often submit to the partners' wish for pre-marital sex, going against her own wishes to keep her virginity until marriage. This was seen as putting the young woman in a very difficult situation as society at-large, including young people themselves, were described to condone premarital sexual activity among men while condemning it among unmarried women.

Abortion was considered morally wrong by two-thirds of the students responding to the questionnaire. But there was a significant difference between the students with longer training and those with shorter training. Almost eighty percent of the students with longer training (30 months) agreed that abortion among unmarried adolescents was acceptable if the pregnancy was unplanned. Among those with shorter training (18 months) about 60 % found abortion acceptable under such conditions. Almost all students (98 %) stated that to reduce abortion among unmarried adolescents, sexual abstinence before marriage was the best solution. However, they also stated that as this was not always the case, that young women have to bear the heavy burden of unwanted pregnancies. Counselling was seen as a necessary part of abortion services and

midwives were seen as the most suitable provider to counsel clients on contraception in connection with abortion. Respondents expressed concern about unmarried youths' limited access to contraceptive information and knowledge about reproductive health issues.

Most of the students close to graduation stated in the questionnaire survey that they felt prepared to advise adolescent's clients on reproductive health issues including contraceptive methods and were willing to do so in the future. Discussing this issue more in-depth in the interviews a more diverse picture emerged. Many interviewed felt unprepared for such a task and they worried about lacking competence to work clinically. The students saw their future tasks as mainly related to childbearing and less to other reproductive health issues, such as abortion and the prevention of STIs and HIV.

DISCUSSION

Validity and trustworthiness

The different methods used to collect data vary in their ability to adequately address the research questions. Different criteria are applied to assess data quality, depending on whether data collection procedures are quantitative or qualitative (Polit &Hungler, 1999).

Quantitative measurements

The quantitative research tradition describes four types of validity: internal, external, construct and statistical conclusions validity (Kazdin, 1998). *Internal* validity is concerned with whether the instrument used actually measure what it purports to measure. *External* validity refers to what extent the result derived can be generalized to other settings and groups. *Construct validity* concerns the degree to which an instrument measures the construct under investigation. *Conclusions validity* refer to what extent a relation is shown and how well effects can be detected (Kazdin, 1998).

The quality of self-reported information such as that collected in study I should always be scrutinized. A well-functioning surveillance site such as FilaBavi, using trained and frequently updated surveyors and regularly checking for data quality, can be expected to enhance internal validity (Kazdin, 1998). However, one weaknesses with data derived from FilaBavi could be that frequent (quarterly) visits by the data collectors over a period of years might cause a certain 'fatigue' among women in reporting about their pregnancies. On the other hand, the familiarity between the interviewees and the interviewers could be expected to create a relationship of trust and thus enhance data quality. This is supported by findings from a study on the quality of mortality reporting in FilaBavi. This study indicated that the data from the field laboratory provided more reliable estimates of mortality than the regular commune reporting systems (Huy et al., 2003). Other threats to internal validity may be recall bias, but earlier studies indicate that pregnancy related events are, from the women's perspective, major events and generate both reproducible and accurate data (Tomeo et al., 1999; Sou et al., 2006)**.** A three-month recall period was used in study I, which is considered adequate to minimize recall bias (Tomeo et al., 1999). The reliability of age reporting may be a problem as marriage before 18 is against the law in Vietnam; hence, there is concern that reporting errors may inflate the women's age at marriage and first birth. However, we consider the risk for this potential bias to be relatively small in FilBavi for the same reasons as mentioned above: the interviewers have become familiar with the families over the years and have seen the young women grow up. Well-known constraints with survey data is that of external validity. FilaBavi was selected as typical for northern rural Vietnam; hence our study population can be taken as representative for rural adolescents in the north of the country.

In study IV, we paid much attention to enhancing the internal validity of the attitude scale, as described in Methods section. The statements included in the scale contained both negatively and positively worded statements to avoid bias produced by response tendency (Spector, 1992). By excluding a neutral stance, which is difficult to interpret, we left the

respondent with no other opportunity than to take a clear stand in relation to each statement (Oppenheim, 2003). We reduced the scale to a two-point agree/disagree since, during analyses, the four-point scale did not achieve a higher degree of precision compared with the two-point scale.

Adolescents' sexual and reproductive health issues are sensitive in Vietnam. Students may feel intimidated to share their own personal views and thus be biased towards social desirability. In the survey, the confidentiality of the situation makes any such bias unlikely however, and in the interviews our impression was that students talked very freely and with confidence. The findings are specific to the research setting in which the study was undertaken, i.e the midwifery schools in the north of the country.

Qualitative measurements

The main concept used to evaluate data collected by the use of qualitative methods is *trustworthiness*. Components of the criteria are; *Credibility* (internal validity), *transferability* (external validity), *dependability* which refers to the stability of data over time and *conformability of the findings,* which ensures that conclusions are grounded in data and, therefore, based on the reality of the population studied (Dahlgren et al., 2004).

There are a number of methodological considerations to be taken into account when interpreting and transferring the results derived through the use of qualitative methods. In qualitative interviews, the influence of the researcher during the interview as well as during the process of analysis, needs to be taken in consideration (Seidman, 1998). When using a third person as an interviewer, because of language barriers, the role of the interviewer also needs to be made visible (Wallin & Ahlstrom, 2006). *Reflexivity* refers to the researchers preconceptions based on previous personal and professional experiences and on her/his values and beliefs in relation to the topic studied (Malterud, 2001). The process of reflexive knowledge means insights into how data and experiences from the field are interpreted and how knowledge came to be. The researcher's ability to reflect and awareness of being part of the social world investigated is one way to enhance *credibility* (Berg, 2001).

My own position as a young Swedish woman, framed by my professional and cultural background certainly had an impact on the interaction between myself and the research subjects, and thus on the knowledge produced. Being part of a research team which was both multi-disciplinary as well as multi-cultural, where our different perspectives were constantly discussed between us, helped me to reflect on my position in the process and on my own subjectivity. However, to be aware of one's position in the research process does not do away with the subjectivity of observations but it makes them more transparent (Sen, 1995).

The individual interviews (studies II and IV) were conducted in the form of a conversation, and the interviewer certainly had an impact on the conversation. However, the interviewer's professional and cultural background made sure that the individual interviews were held in a cultural and gender sensitive manner. In study II, the

interviewer took part in all stages of the research process. In study IV, the interviewer's knowledge of the culture was used in analyses. The use of multiple methods (IV) and a multidisciplinary team in analyses (II and IV) is thought to enhance trustworthiness. It can be argued that our previous understanding influenced the directions of the interview guide but it was developed in close collaboration between Vietnamese and Swedish researchers. This reduces subjectivity also in the process of analysis and enhances trustworthiness.

With the hierarchal structure within the Vietnamese health care system we avoided using focus group facilitator who were superior in relation to the participants, and the groups were composed to avoid hierarchical relations (doctors and midwives separately) (Barbour & Kitzinger, 1999). Group interaction is the core of the FGD and it is the moderator's task to encourage all participants to take part in the discussions. The FGDs in study III were, on the whole, very lively and carried out in a friendly atmosphere by well-organized and prepared moderators with prior knowledge of the context, language and cultural meanings related to the topic studied. The older participants tended to take the lead in the discussions possibly bending these towards more 'traditional' views. Two male participants were included in the FGD, both young, unmarried doctors and they seemed quite inhibited to raise their voices. We are aware that the discussions were bent towards mainly the older participant's views and reflect almost only female perspectives.

"Between Morality and Reality"
Adolescent Sexual and Reproductive Health and Rights in a Changing Society

This chapter is introduced by a description of the pattern of adolescent pregnancy and birth giving in Bavi district, typical of the rural north of Vietnam (I). The subordination and vulnerability of pregnant and newly delivered adolescents in partner relations, in the family context and in encounters with health care services is highlighted. Something of adolescent women's skills in adjusting to and negotiating within the limits set by a patriarchal society is discussed (II). Barriers within sexual and reproductive health services, from the perspectives of adolescent clients, health care providers and midwifery students, are also explored and described (II, III and IV).

Early marriage and childbearing; social context and consequences

Population policies and modernisation in Vietnam have had significant impact on the total fertility rate through changes towards later marriage and postponed childbearing (Johansson, 1998; VDHS, 2002). In study I, we found that the majority of young women between 15 and 19 had not started childbearing and among those who had, most were 18 or 19. The proportion adolescent women in Vietnam who get married and start childbearing is fairly low by international comparison (Treffers, 2004). However, as in many other Asian countries (Choe et al., 2005; Lofstedt et al., 2005) early marriage (before the woman is 18 years of age) closely followed by childbearing prevails in parts of rural Vietnam (Khuat, 2003; ARROW, 2005). In Bavi district, typical of the rural north of Vietnam, early marriage and childbearing were most common among ethnic minorities and among women with low levels of education (I).

Traditional societies have been associated with positive views of early pregnancy and childbearing, low contraceptive use, as well as higher pregnancy, birth and marriage rates among adolescents (Kaiser, 2002). In study II married adolescents felt pressure from families and society to marry early and begin childbearing even though they themselves would have preferred to postpone motherhood. *'One foot wet and one foot dry'* pointedly expressed their experience of hardly having entered one life stage before getting into another (II). They experienced the transition from single to married status and that into motherhood with ambivalence. Although they felt proud and happy to be able to conceive and deliver a child, they also felt unprepared for their new role as wives, daughters-in-law and mothers. They worried much about their pregnancies and abilities as mothers and received scanty or no information at all during antenatal care visits. Other studies in the region confirm adolescent women's experience of feeling too young when marriage occurs early and parents' heavy influence on the timing of both marriage and childbearing (Haberland et al., 2003; Choe et al., 2005; Wahn et al., 2005). Facing motherhood during adolescence is described to contribute to both physiological and psychological hardship as the responsibility linked to motherhood occurs during a turbulent developmental period of life (Wahn et al., 2005).

The young pregnant women in study II were almost all married when giving birth. The majority were farmers and although most had completed primary school (up to level 6), they discontinued school before they entered married life. Our findings correspond well with the literature for Vietnam stating that girls' expected domestic roles and responsibilities make them available for marriage and childbearing (Rydström, 1998) and thus reduce girls' educational opportunities (Mensch et al., 1998; Khuat, 2003).

The transition from childhood to adulthood for rural girls in poor families sometimes includes a period of work in the cities. It has been described how rural girls come to Hanoi where they work as domestic servants, send their earnings to their families and return back home at 18 to get married. Coming to Hanoi and facing urban life is abrupt and demanding and thus hurries adolescent girls' transition from childhood into adulthood. Lack of opportunity, due to poverty, and the norm of little formal education in the community are the reasons for low educational attainment (Rubenson et al., 2004).

In many countries early marriage and childbearing is associated with lower educational attainment, limiting young women's opportunities for work experience (Haberland et al., 2003). The relationship between women's education and occupation and age at first marriage and childbirth are complex and closely associated with women's autonomy and social status. To postpone both women's age at first marriage and first births are important components of the fertility transition as well as important goals to improve women's social status (Choe et al., 2005; Lofstedt et al., 2005; Clark et al., 2006). It has been suggested that female age at marriage is directly linked to female autonomy, as early marriage is often a strategy used by the parental generation to control the sexuality of unmarried women (Mason, 1995; Caldwell et al., 1998).

In a separate study linked to study II we got the perspective of the husbands of the pregnant and newly delivered adolescent women (Binh et al, unpublished). Eight

husbands were interviewed individually and some aspects of the gender dynamics of marriage and childbearing were explored. Many of the young husbands of the childbearing adolescent women described ambivalence in facing parenthood, but also that marriage and parenthood for them was a sort of entry into adulthood. It gave them a sense of becoming mature, to become a 'responsible person' and avoid the 'social evils' of drinking and spending money at karaoke bars. On the whole, they expressed a caring attitude towards their childbearing wives but also a sense of insecurity in regard to the needs of their wives.

Premarital sexual relations; a threat to national values and future health

Contradictions between prevailing cultural norms in Vietnam, condemning premarital sexual relations, and the sexual practices among a growing number of adolescents, are demonstrated in the two articles exploring providers' and midwifery students' opinions on these issues (III and IV). Premarital sex was viewed by health care providers to have a negative impact on young peoples' future health and happiness and they saw it as their duty to warn their young abortion clients of these dangers (III). This 'warning against danger' syndrome is found in many other studies dealing with how adolescents are received by health services. It has been interpreted as a concern on the part of the older generation about the dangers of disintegration of traditional moral values and cultural identity (Hassan et al., 2000; Stanback & Twum-Baah, 2002; Jaruseviciene et al., 2006). Societal controversy related to the sexual behaviour of youth is common in many countries where parents' influence over the younger generation is strong (De Santis, 1999; Friedman, 1999). An emerging youth culture, emphasising autonomy rather than interdependency, is felt as a threat against basic cultural values (Friedman, 1999). This was an opinion also expressed by one of the midwifery students (IV): 'premarital sex destroys our moral and cultural values'. The importance attached to young women's 'purity' for national values and identity has also been described in another study referred to earlier (Gammeltoft, 2002). Other studies from Vietnam confirm how premarital sexual relations are seen as damaging for the young women's reputation and affect their future chances of marriage (Go et al., 2002). Midwifery students (IV) knew from first-hand experience how deeply female virginity before marriage is valued in Vietnamese society and how the loss of it may mean the loss of chances of a good marriage. They were very concerned about unmarried young women's situation, trapped between society's condemnation of girls' loss of their virginity and boys' pressure for sex, fuelled by peer pressure and media influences.

Providers' concerns about premarital sexual relations (III) were also an expression of the immediate and long-term health risks they could see. Increased sexual activity among youth makes them vulnerable and does create health risks if their needs are not acknowledged. Rising numbers of adolescent abortions and reported increase in incidence of STI/HIV (Hien et al., 2004) represent real threats to future fertility (through unsafe abortion) and health. Despite their moral objections, providers demonstrated a pragmatic and human approach toward their young clients and midwifery students also expressed a preparedness and willingness to support them. This ethical dilemma among health care providers meeting unmarried clients in reproductive

health services is reported from other setting (Warenius et al., 2006) and will be reflected upon in the discussion on sexual and reproductive health care service and midwifery education in Vietnam to follow.

Gender, sexuality and contraception

Gender differences with regard to sexuality were referred to in all three qualitative studies (II, III, and IV). The married pregnant women in Study II described how they lacked power to negotiate both contraception and sexual practices within marriage. The health care providers (III) explained how young women's intentions to use contraception failed due to their lack of power to negotiate safe sex with their partners. Gender-based differences in relation to premarital sexuality were also expressed among the midwifery students (IV). These findings illustrate how the practice of 'good morality', meaning above all keeping one's virginity for the husband, and strategies of women adjusting and accommodating themselves, are strongly associated with being female in Vietnam (Rydström, 1998). Other studies from Vietnam confirm gender inequalities in premarital sexuality with women having to bear the consequences in terms of society's moral judgment, the risk of premarital pregnancy and subsequent induced abortions (Belanger & Khuat, 1998). With its deep-rooted Confucian values and strong cultural disapproval of premarital sexual relations (Ghuman, 2005) Vietnamese society is little-prepared to cater for the needs of unmarried youth. Studies describe how limited knowledge of sexual and reproductive health issues among adolescents (Gammeltoft, 2001) and the lack of negotiating power among the young women and other constraints set barriers for adolescents to practice contraception, leading to unwanted pregnancies and abortion (Haub & Huong, 2003). Gender power dynamics in sexual relationships, founded during early gender socialization, puts young women, in particular, in a vulnerable position (Ampofo, 2001; Blanc, 2001).

The husbands of the childbearing women (Binh et al., unpublished) seemed to rely on peers for information on contraception and issues of sexuality and on their mothers for problems related to their pregnant wives and the new child, while health services seemed to play little role. They perceived of themselves as being the main decision makers in the family with regard to sexuality and contraception and gave the impression that the communication between the couple on these matters was limited. With young Vietnamese women's difficulties to negotiate safe sex, outside and inside of marriage, and limited access to information and services, their risk for contracting STIs and HIV is a very serious concern. The HIV prevalence is currently relatively low in Vietnam and is mostly associated with high risk behaviors, such as intravenous drug use and sex work (Hien et al., 2004). However, young men's risk-taking behavior, including unprotected sex, and lack of attention to women's rights are fuelling the HIV epidemic in Vietnam (UNAIDS, 2005). A serious concern is that the HIV epidemic will spread beyond risk groups to the broader population (Hien et al., 2000; Clark et al., 2006). Reproduction entails mutual responsibility among those involved, but still men's participation in reproductive health remains a neglected issue in Vietnam as in many other Asian countries (Wang, 2000).

Pregnancy outcome and Sexual and Reproductive Health Care Services and Midwifery Education

Several aspects with implications for the quality of care provided to adolescent clients in Vietnam have been highlighted in this thesis, identifying barriers within ASRH services. As referred to earlier, Donabedian's model with its three dimensions may be useful to reflect on the quality of care. Limitations were found particularly in relation to the process and the outcome of the care provided. The young pregnant women (II) expressed how their concerns with regard to their pregnancies were not acknowledged and how they felt ignored and patronized by health care providers. Overloaded facilities inhibited the young pregnant women to comply with the recommended number of ANC visits during pregnancy. Their perception of low-quality services included lack of trust in providers' competence and perceived poor staff attitudes, which motivated them to seek health care from both public and private facilities (II).

The stillborn incidence of 19/1000 births among the adolescent women in our study (I) is higher than the corresponding figure among all women in reproductive age (6/1000 births) (MoH, 2003c). The proportion of preterm deliveries in our study I, 20%, is higher than an earlier-reported hospital-based study among all women in reproductive age which found a preterm delivery proportion of 12% (Nguyen et al., 2004)**.** In light of the high incidence of stillborn infants of adolescent mothers and the relatively high rate of preterm deliveries (I), the perceived inadequacy of ANC is a serious concern (II). Without information about adolescent women's health care seeking during pregnancy (I) we have no evidence to show whether an adverse pregnancy outcome is associated with the number of ANC visits and the quality of care. Other studies report, however, that adolescent women are less likely to attend ANC as compared with adult women (VDHS, 2002). Antenatal attendance among childbearing adolescents in rural areas is estimated to be 80 %, for adult women 88 % (VDHS, 2002). Among ethnic minority adolescent women the ANC attendance rate is 60 % (Khe et al., 2005). Non-utilization of ANC associated with preterm delivery, LBW and stillbirth among adolescent, rather than biological factors such as low GA, have been reported from low-income settings (Feresu et al., 2004; Loto et al., 2004). It is reported that adolescents in such settings often receive insufficient ANC as they attend service less frequently and later during pregnancy as compared with adult pregnant women (Treffers, 2004).

The latest VDHS report an association between early childbearing, morbidity and mortality for both mother and children. Adolescents were further less likely to be assisted by a doctor or midwife/nurse when giving birth, compared to older women (VDHS, 2002). We found certain indications of inequities in delivery care, with less educated women living in mountainous areas being disfavoured (I). These findings correspond well with other research in Vietnam (Knudsen, 2006; Trinh et al., 2006) and if applied to the larger rural population of Vietnam, has bearing on reproductive health care policies and programmes as well as on broader equity issues.

Study II highlights the problems of contraceptive discontinuation and use among married adolescents, both due to individual factors but also to limitations in health care services. Staff shortages, little time for counselling and health care providers' own

assessments of their poor knowledge about contraceptive methods were described (III). Some of the providers did not in fact consider counselling to be part of their professional tasks, an indication of the low attention paid to this component in the Vietnamese health system. Our observations in abortion clinics (III) and in interviews with pregnant adolescents (II) further indicated low levels of interaction between client and provider. Similar weaknesses within reproductive health services have been described earlier in Vietnam (Hoang et al., 2002; Dang, 2003; Xinh et al., 2004; Knudsen, 2006) and internationally (Treffers et al., 2001; Erulkar et al., 2005; Glasier et al., 2006).
Unmarried adolescents, in particular, have been reported to have limited access to sexual and reproductive services and adequate contraceptive information in Vietnam (CARE International Vietnam, 1997; Belanger & Khuat, 1998). The focus of the National Family Planning Programme in Vietnam leaves unmarried couples with limited access to relevant information and reproductive health services (Knudsen, 2006).

The weaknesses described within sexual and reproductive health services (II, III) partly concern management and structure of the health system and improvements are dependent on external factors such as the political environment and financing (Koblinsky et al., 2006). However, aspects concerning providers' interpersonal assets, such as improved communication skills, are cost-effective interventions which are possible to accomplish within existing internal organizational structures (Kwast, 1998a). Exchanges of adequate information given by competent providers who are sensitive to the client's specific needs in pregnancy and about contraceptive methods can remarkably improve the quality of sexual and reproductive health care (Kwast, 1998b). One scaling-up component, internationally known to be cost-effective to achieve improvements in reproductive health care, is strengthening the competence of midlevel providers, including midwives (Ipas/IHCAR, 2002; Fathalla et al., 2006). Quality improvement needs to be implemented within both basic and in-service education for midwives (Braumbaugh et al., 2004) to give them the clinical competence required to meet changing population and practice needs**.**

Our studies describe the social context in which midwives work and where midwifery students are trained and will work. All students in the survey (IV) stated that they would like to have responsibility for counseling regarding contraceptive methods in the future. However, they also describe the limited education they have received on ASRH and their worries of lacking the competence needed for the task. Counselling as a theoretical subject was given 4 hours in their curricula (Dang & Nguyen, 2001) and most of the students have to gain experiences through clinical training guided by their older colleagues, possibly with a more negative attitude towards adolescent clients. Educational programmes need to acknowledge that students are young individuals and part of a changing environment, with value conflicts and controversies around the lifestyles and sexual behaviour of youth. Values can vary and change with experience but are also shaped and accepted within a context, such as a group of professionals (Chinn & Kramer, 2004). Social norms have been identified to significantly influence health care providers' behavior. Re-training given outside the working place is often

ineffective, as pressure from other staff undermines trained staff's ability to implement newly acquired knowledge and skills into practice (Shelton, 2001). In-service training, based on interactive workshops and case discussions, have been identified to induce change in health care providers behaviour (Koblinsky et al., 2006).

Integrating ASRH into the scope of midwifery in Vietnam

Several policy initiatives have been formulated in Vietnam to protect the reproductive health and rights of adolescents including the need for improved counselling and contraceptive services (Bondurant et al., 2003). However, little attention has been paid as to how to adjust education programmes for health care providers to meet the changing needs of adolescent clients. The basic training curricula for midwifery students in Vietnam is almost entirely focused on medical and technical aspects, while there is little attention to the moral, social and gender dimensions of adolescent sexuality and reproductive health.

Midwives working in abortion services in Vietnam (III and IV) and many other low-income countries face difficulties and dilemmas when dealing with unmarried youth coming for reproductive health services as their culture disapproves of premarital sex activities. These ethical dilemmas need to be given more attention in education and training (Catley-Carlson, 1997). Condemning attitudes are the dominant messages reaching adolescents in many countries as far as their sexuality is concerned, whether in the family, at school or in contacts with the health services (Hassan et al., 2000). The importance of a non-judgmental and supportive environment when counseling adolescents on sexual and reproductive issues has been highlighted (Rivera et al., 2001; McIntyre, 2002). Nursing ethics literature in China, also deeply rooted in Confucianism, focuses on moral education highlighting desirable qualities among health professional and teaching morality in different clinical situations, which shapes health professionals' moral experiences (Pang et al., 2003). Different approaches, such as the ethics of justice and ethics of care, and of moral reasoning in clinical practice can enrich the understanding of the complexity of ethical issues (Botes, 2000). It has been suggested that an integrated application of the two perspectives would result in fair and equitable treatment of all people with a culturally sensitive and holistic care approach (Botes, 2000).

Referring to our own studies and international research, I have discussed how providers tend to restrict unmarried youth's access to reproductive health care and warn them against the dangers of premarital sex, arguing that this is done in order to protect their culture and preserve traditional values (Shelton, 2001; Stanback & Twum-Baah, 2002). Culture and identity are of importance for young people's development and clear rules and guidance from the older generation have been described to create stability, while the absence of strong intergenerational bonds creates a sense of disconnectedness and anxiety among the younger generation (Friedman, 1999). It is also important to highlight contextual factors protecting the health of adolescents in Vietnam. Existing norms and values in Vietnamese society, such as the importance of education and close connection to parents and family, are protective factors identified internationally (Blum,

2004). The older generation's intentions to protect young people from "social evils" are understandable and indicate how they perceive the emerging youth culture in Vietnam. The increased sexual activity among youth does, however, create health risks if their needs are not acknowledged. A balance between social norms and actual practice is essential, while taking into account the changing social context of the young people. The quality of reproductive health care and the well-being of all women, in particular adolescents, may be compromised if pre-marital sexuality remains unchallenged in Vietnam (Zhang, 2002).

The challenge is to develop a culturally sensitive model for sexual and reproductive health without the loss of national and ethnic identity (De Santis, 1999) and in recognition of the adolescents' growing needs for services and counselling. Failing this, the consequences of health providers' negative attitudes may expose adolescents to serious health hazards. It is well-known that adolescents are more prone than married women to delay abortion seeking, to go to unskilled providers, and/or to use dangerous methods for abortion, exposing them to higher risks of abortion-related morbidity and mortality (Olukoya et al., 2001). We have only anecdotal information on the abortion care-seeking of Vietnamese adolescents, but it is thought that private clinics may in fact cater for most adolescent abortion clients. Participants (III) suggested that private clinics are preferred by adolescents due to the simpler administrative procedures and greater confidentiality, but they feared the quality was inadequate.

According to the WHO (WHO, 2003) and the Vietnamese National Standards and Guidelines for Reproductive Health Care Services (MoH, 2003b) adolescents seeking sexual and reproductive health care services should be given supportive and non-judgmental health care in response to their needs. To be able to identify client's needs within their social and cultural context and to provide them with relevant information and services, a high level of communication skill is required (Bessinger, 2001). Several international studies show that training of health care providers regarding communication skills, including values clarification on adolescent sexuality and gender, can remarkably improve the quality of care and counseling given to adolescents clients (Htay et al., 2003; Miller et al., 2002) . We suggest that values clarification in counseling training would help students and health care providers reflect on their own attitudes and moral values in relation to adolescent sexuality and its consequences. This would give them a better platform as professionals to face the challenges of adolescent reproductive health and rights in the rapidly changing socio-cultural environment of Vietnam today. All these aspects are important and need to be considered when designing training for midwives working in reproductive health care services.

CONCLUSION

- Cultural norms and evolving generational and gender power structures put young Vietnamese women in a vulnerable position in sexual and reproductive health matters (II, III, and IV).

- A significant number of pregnant adolescents have adverse pregnancy outcomes (I). They face pregnancy and parenthood with ambivalence and uncertainty and require an supportive care environment (II).

- Weaknesses in the reproductive health services described - staff shortages, overcrowded clinics and negative attitudes from providers – are barriers for the young pregnant women seeking health care (II and III).

- Health care providers working in abortion services and midwifery students generally disapprove of premarital sex, which creates an ethical dilemma when meeting young clients coming for abortion. The main messages given to young clients were warnings about the consequences of abortion. (III and IV).

- Both providers and midwifery students (III, IV) expressed a need for training on ASRH and counseling skills.

IMPLICATIONS

A rights-based approach to sexual and reproductive health as defined by ICPD, rooted in the Western culture of individualism, is a challenge for Vietnamese society which is generally more collective and family-oriented. However, a context-sensitive approach to the promotion of women's and men's sexual and reproductive health, through the enlargement of their choices and freedoms, is needed. Constraints to gender equity and continued societal controversy regarding premarital sex continue to set barriers to rational decision making and resource allocation. Health care services focus on married, adult women and leave both males and unmarried youth with inadequate access to relevant SRH information and services. The need for improvement is especially urgent in remote areas where women's access to adequate health care from skilled personnel is limited. Staff working in these areas is rarely provided any continuous in-service training and they lack knowledge, especially regarding counseling on modern contraceptive methods.

Midwives can be trained and used as an agent for change in the Vietnamese context towards the improvement of both the access and quality of SRH care services for all women. To reach this goal, the scope of midwifery in Vietnam needs to be broadened. I suggest that it should include not only maternal health and family planning, but also integrate sexual health and gender-sensitive reproductive health services to meet the needs of young people. Counselling and provider-client interaction with a focus on young clients, married and unmarried should therefore be an essential part of the curricula in basic education programmes for midwives and in in-service trainings. Interactive workshops and case discussions that include values clarification could be one way to improve midwives' approach towards their adolescent clients. This would make them reflect upon their attitudes, moral values as private persons and professionals, and give them a better chance to see their roles and responsibilities as professionals.

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REFERENCES

Agadjanian V. Is "abortion culture" fading in the former Soviet Union? Views about abortion and contraception in Kazakhstan. Stud Fam Plann 2002;33:237-48.

Ampofo AA. "When men speak women listen": gender socialisation and young adolescents' attitudes to sexual and reproductive issues. Afr J Reprod Health 2001;5:196-212.

ARROW, 2005. Women of the world: Laws and policies affecting their reproductive lives. C.f.R. Rights. New York, Asian-Pacific Resource and Research Centre for Women.

Arulkumaran S. Reproductive health care for adolescents. Int J Gynaecol Obstet 2001;75:109-10.

Barbour R, Kitzinger J. Developing Focus Group Research: Politics, theory and practice. SAGE publication, 1999.

Belanger D, Khuat TH. Young single women using abortion in Hanoi, Viet Nam. Asia Pac Popul J 1998;13:3-26.

Bender D, Ewbank D. The focus group as a tool for health research: issues in design and analysis. Health Transition Review 1994;1:63-76.

Berg B. Qualitative research methods for social sciences. Boston: Allyn and Bacon, 2001.

Bessinger R. Monitoring Quality of Care in Family Planning Programs, 2001.A comparison of Observations and Client Exit Interviews. Int Fam Plan Perspect 2001;27:63-70.

Binh NT, Klingberg-Allvin M, Berggren V, Johansson A. Males role and involvement in reproductive health issues in rural Vietnam. Stockholm: IHCAR, Karolinska Institutet, Unpublished.

Blanc AK. The effect of power in sexual relationships on sexual and reproductive health: an examination of the evidence. Stud Fam Plann 2001;32:189-213.

Blum R, Nelson-Mmari K. The health of young people in a global context. J Adolesc Health 2004;35:402-18.

Blum R. Risk and protective factors affecting adolescent reproductive health in developing countries: an analysis of adolescent sexual and reproductive health literature from around the world: summary. Geneva: WHO, 2004.

Bondurant A, Henderson S, Nguyen CQ. Addressing the Reproductive Health Needs and Rights of Young People since ICPD: The contribution of UNFPA and IPPF, Vietnam Country Evaluation Report, 2003.

Botes A. A comparison between the ethics of justice and the ethics of care J Adv Nurs 2000;32:1071-5.

Braumbaugh G, Cassata L, McElmurry B. Adolescent health and development in nursing and midwifery education. Geneva: WHO, 2004.

Caldwell J, Caldwell P, Caldwell BK, Pieris I. The construction of adolescence in a changing world: implications for sexuality, reproduction, and marriage. Stud Fam Plann 1998;29:137-53.

CARE International Vietnam, Vietnam Ministry of Health. An audience analysis of women, men (age 15-25) and providers' knowledge, attitudes and practices of contraceptive methods in rural Vietnam. Hanoi: Ethnical Culture Publishing House, 1997.

Catley-Carlson M. Implementing family planning programs in developing countries: lessons and reflections from four decades of Population Council experience. Int J Gynaecol Obstet 1997;58:101-6.

Chang AM, Janita PC, Chau M, Holroyd E. Translation of questionnaires and issues of equivalence. J Adv Nurs 1999;29:316-22.

Chinn PL, Kramer MK. Integrated knowledge development in nursing. Mosby Inc, USA, 2004.

Choe MK, Thapa S, Mishra V. Early marriage and early motherhood in Nepal. J Biosoc Sci 2005;37:143-62.

Chuc NT, Diwan V. FilaBavi, a demographic surveillance site, an epidemiological field laboratory in Vietnam. Scand J Public Health 2003;Suppl 62:3-7.

Clark S, Bruce J, Dude A. Protecting young women from HIV/AIDS: the case against child and adolescent marriage. Int Fam Plan Perspect 2006;32:79-88.

Clemmens D. Adolescent motherhood: a meta-synthesis of qualitative studies. MCN Am J Matern Child Nurs 2003;28:93-9.

Conde-Agudelo A, Belizan JM, Lammers C. Maternal-perinatal morbidity and mortality associated with adolescent pregnancy in Latin America: Cross-sectional study. Am J Obstet Gynecol 2005;192:342-9.

Cook RJ, Dickens BM, Fathalla MF. Reproductive health and human rights: integrating medicine, ethics and law. New York: Oxford University Press Inc, 2003.

Corcoran J. Consequences of adolescent pregnancy/parenting: a review of the literature. Soc Work Health Care 1998;27:49-67.

Dahlgren L, Emmelin M, Winkvist A. Qualitative methodology for international public health. Umeå University: Print & Media, 2004.

Dang N. Adolescents reproductive and sexual health in Vietnam: A literature survey on current situation. Emerging issues and challenges: 1995-2002. Hanoi: Vietnam, WHO, 2003.

Dang TN, Nguyen DK. Country Report: Vietnam Abortion situation. Hanoi, Vietnam: Ministry of Health, 2001.

de Bruyn MPS. Adolescents, unwanted pregnancy and abortion. Policies, counselling and clinical care. Chapel Hill, NC: Ipas, 2004.

De Santis L, Thomas JT, Sinnett K. Intergenerational concepts of adolescents sexuality: Implications for community based reproductive health care with Haitian immigrants. Public Health Nurs 1999;16:102-13.

Dehne KL, Riedner G. Adolescence a dynamic concept. Reprod Health Matters 2001;9:11-5.

Donabedian A. The quality of care. How can it be assessed? JAMA 1988;260:43-8.

Ehlers VJ. Adolescent mothers' utilization of contraceptive services in South Africa. Int Nurs Rev 2003;50:229-41.

Erulkar AS, Onoka CJ, Phiri A. What is youth-friendly? Adolescents' preferences for reproductive health services in Kenya and Zimbabwe. Afr J Reprod Health 2005;9:51-8.

Fathalla MF, Sinding SW, Rosenfield A, Fathalla MM. Sexual and reproductive health for all: a call for action. Lancet 2006;368(9552):2095-100.

FCI, 1999. Meeting the Cairo Challenge: Progress in Sexual and Reproductive Health. New York, Family Care International.

Feresu SA, Harlow SD, Welch K, Gillespie BW. Incidence of and socio-demographic risk factors for stillbirth, preterm birth and low birth weight among Zimbabwean women. Paediatr Perinat Epidemiol 2004;18:154-63.

Friedman HL. Culture and adolescent development. J Adolesc Health 1999;25:1-6.

Gammeltoft T. Between "science" and "superstition": moral perceptions of induced abortion among young adults in Vietnam. Cult Med Psychiatry 2001;26:313-38.

Gammeltoft T. Seeking trust and transcendence: sexual risk-taking among Vietnamese youth. Soc Sci Med 2002;55:483-96.

General Statistics Office , 2005. Population Change and Family Planning Survey. Hanoi, Vietnam, General Statistics Office.

Ghuman S. Attitudes about sex and marital sexual behavior in Hai Duong Province, Vietnam. Stud Fam Plann 2005;36:95-106.

Glasier A, Gulmezoglu AM, Schmid GP, Moreno CG,Van Look PF. Sexual and reproductive health: a matter of life and death. Lancet 2006;368(9547):1595-607.

Go VF, Quan VM, Chung A, Zenilman J, Hanh VT, Celentano D. Gender gaps, gender traps: sexual identity and vulnerability to sexually transmitted diseases among women in Vietnam. Soc Sci Med 2002;55:467-81.

Goodkind D. Abortion in Vietnam: measurements, puzzles, and concerns. Stud Fam Plann 1994;25
(6 Pt 1):342-52.

Gorbach PM, Hoa DT, Nhan VQ, Tsui A. Contraception and abortion in two Vietnamese communes. Am J Public Health 1998;88:660-3.

Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today 2004;24:105-12.

Guest P. Progress and prospects in reproductive health in the Asian and Pacific Region. Asia-Pacific Population Journal (Special Issue). 2006.

Guttmacher Institute, The Alan. Sharing Responsibilities: Women, Society, and Abortion Worldwide. New York and Washington: The Alan Guttmacher Institute, 1999.

Haberland N, Chong E, Bracken H. Married adolescents: An overview. Geneva: WHO, 2003.

Hassan EA, Creatsas GC. Adolescent sexuality: a developmental milestone or risk-taking behavior? The role of health care in the prevention of sexually transmitted diseases. J Pediatr Adolesc Gynecol 2000;13:119-24.

Haub C, Huong HTT. Adolescents and Youth in Vietnam. Hanoi and Washington, DC: Center for Population Studies and Information and the Population Reference Bureau, 2003

Henshaw SK, Singh S, Haas T. The incidence of abortion worldwide. Int Fam Plann Persp 1999;25(Suppl):S30-8.

Hessini L. Advancing reproductive health as a human right: progress toward safe abortion care in selected Asian countries since ICPD. Chapell Hill, NC: Ipas, 2004.

Hien NT, Giang LT, Binh PN, Wolffers I. The social context of HIV risk behavior by drug injectors in Ho Chi Minh City, Vietnam. AIDS Care 2000;12:483-95.

Hien NT, Nguyen TL, Trinh QH. HIV/AIDS epidemics in Vietnam: evolution and responses. AIDS Educ Prev 2004;16(3 Suppl A):137-54.

Hoang TA, Nguyen MD, Bui TM, Pham T, Vu SH, Quach TT, Schuler S, Santillan D. Impact of Cairo POA Gender, women´s empowerment and reproductive health in 4 Vietnamese communities. Hanoi: JSI Research & Training Institute, Inc., 2002

Hobcraft G, Baker T. Special needs of adolescent and young women in accessing reproductive health: promoting partnerships between young people and health care providers. Int J Gynaecol Obstet 2006;94:350-6.

Htay T, Sauvarin J, Khan S. Integration of post-abortion care: the role of township medical officers and midwives in Myanmar. Reprod Health Matters 2003;11:27-36.

Huy TQ, Long NH, Hoa DP, Byass P, Ericksson B. Validity and completeness of death reporting and registration in a rural district of Vietnam. Scand J Public Health 2003;Suppl 62:12-8.

ICM, 1996. Care for women post abortion: ICM resolution. Oslo, Norway: International Confederation of Midwives.

ICM, 2000. Provisional essential competencies for midwifery practice. Version 7.0. The Hague, Netherlands, International Confederation of Midwives.

Ipas/IHCAR, 2002. Deciding womens lives are worth saving: Expanding the role of midlevel providers in safe abortion care: Issues in abortion care 7, Ipas and IHCAR, Karolinska Institutet.

Jarrett SL, Hummel F, Whitney KL. Preparing for the 21st century: Graduate Nursing education in Vietnam. Nurs Educ Perspect 2005;26:172-5.

Jaruseviciene L, Levasseur G, Liljestrand J. Confidentiality for adolescents seeking reproductive health care in Lithuania: the perceptions of general practitioners. Reprod Health Matters 2006;14:129-37.

Johansson A. Dreams and dilemmas – men and family planning in rural Vietnam. Stockholm: Karolinska Institutet, 1998. Thesis.

Kaiser M. Transition into motherhood in adolescents: The development of the Adolescent Prenatal Questionnaire. Nebraska: Nebraska Medical Centre, University of Nebraska. 2002. Thesis.

Kazdin AE. Research design in clinical psychology. Needham Heights, MA 02194: Allyn and Bacon, 1998.

Khe NN, Thanh NN, Phong N, Dua T, Chung ND, Sheehan M, Chau LTM. Survey and Assessment of Vietnamese Youth (SAVY). G.S.O. Ministry of Health, Vietnam, World Health Organization and UNICEF. Hanoi, Vietnam: MoH, 2005.

Khuat T. Adolescents reproductive Health in Vietnam: Status, Policies, Programs and Issues. Washington, DC., The Futures Group International, 2003.

Knudsen L. Reproductive Rights in Global Context: Women in Seven Countries. 2006.

Koblinsky M, Matthews Z, Hussein J, Mavalankar D, Mridha MK, Anwar I, Achadi E, Adjei S, Padmanabhan P, Marchal B, De Brouwere V, van Lerberghe W. Going to scale with professional skilled care. Lancet 2006;368(9544):1377-86.

Kvale S. Interviews: An introduction to Qualitative Research Interviewing. Thousand Oaks, CA: Sage, 2000.

Kwast BE. Quality of care in reproductive health programmes: concepts, assessments, barriers and improvements – an overview. Midwifery 1998;14:66-73. a

Kwast BE. Quality of care in reproductive health programmes: monitoring and evaluation of quality improvement. Midwifery 1998;14:199-206. b

La CM. How virginity enhances masculinity: An exploratory study in Hanoi, Vietnam. San Francisco: San Francisco State University, 2005. Master Thesis.

Le LC, Magnani R, Rice J, Speizer I, Bertrand W. Reassessing the level of unintended pregnancy and its correlates in Vietnam. Stud Fam Plann 2004;35:15-26.

Le Thi Nham Tuyet (Ed). Reproductive Culture in Vietnam. Hanoi, Vietnam: The Gioi Publishers, 1999.

Lofstedt P, Ghilagaber G, Shusheng L, Johansson A. Changes in marriage age and first birth interval in Huaning County, Yunnan Province, PR China. Southeast Asian J Trop Med Public Health 2005;36:1329-38.

Loto OM, Ezechi OC, Kalu BK, Loto A, Ezechi L, Ogunniyi SO. Poor obstetric performance of teenagers: is it age- or quality of care-related? J Obstet Gynaecol 2004;24:395-8.

Malterud K. Qualitative research: standards, challenges, and guidelines. Lancet 2001;358(9280):483-8.

Mason K. Gender and demographic change. What do we know? Liège: International Union for the Scientific Study of Population, 1995.

Maynard-Tucker G. Conducting focus groups in developing countries: skill training for local bilingual facilitators. Qual Health Res 2000;10:396-410.

McIntyre P. Adolescent friendly health services: An agenda for change. Oxford, UK: WHO, 2002.

McIntyre P. Married adolescents: no place of safety. Oxford, UK: WHO, 2006.

Mensch B, Bruce J, Greene ME. The uncharted passage: Girls adolescence in the developing world. New York: Population Council, 1998.

Mensch B, Clark WH, Dang NA. Adolescents in Vietnam: Looking beyond reproductive health. Stud Fam Plann 2003;34:249-62.

Meuwissen LE, Gorter AC, Knottnerus AJ. Impact of accessible sexual and reproductive health care on poor and underserved adolescents in Managua, Nicaragua: a quasi-experimental intervention study. J Adolesc Health 2006;38:56.

Miller S, Billings DL, Clifford B. Midwives and post abortion care: experiences, opinions, and attitudes among participants at the 25th Triennial Congress of the International Confederation of Midwives. J Midwifery Womens Health 2002;47:247-55.

Minh NH. Age at first marriage in Vietnam: patterns and determinants. Asia-Pacific Popul J 1997;12:49-73.

MoH, 2003a. National Master Plan on safe motherhood 2003-2010. Hanoi, Vietnam: Ministry of Health.

MoH, 2003b. National Standards and Guidelines for Reproductive Health Services. MCH/FP, Ministry of Health.

MoH, 2003c. Reproductive Health Activities 2002-2003. Hanoi, Vietnam: Ministry of Health

Nguyen N, Savitz DA, Thorp JM. Risk factors for preterm birth in Vietnam. Int J Gynaecol Obstet 2004;86:70-8.

Nicole H, Chong E, Bracken H. Married adolescents: an overview. Paper prepared for the WHO/UNFPA/Population Council Technical Consultation on Married Adolescents. Geneva: WHO, 2003.

Olukoya AA, Kaya A, Ferguson BJ, AbouZahr C. Unsafe abortion in adolescents. Int J Gynaecol Obstet 2001;75:137-47.

Oppenheim AN. Questionnaire design, interviewing and attitude measurement. London: Biddles Ltd, 2003.

Pang SM, Sawada A, Konishi E, Olsen DP, Yu PL, Chan MF, Mayumi N. A comparative study of Chinese, American and Japanese Nurses perceptions of ethical role responsibilities. Nurs Ethics 2003;10:296-311.

Pham VB. The Vietnamese family in change: the case of the Red River Delta. Richmond, Surrey, England: Curzon Press, 1999.

Polit D, Hungler B. Nursing research: principles and methods. Philadelphia: Lippincott, Williams & Wilkins, 1999.

Pope C, Mays N. Qualitative Research in Health Care. London: BMJ Publishing Group, 2000.

Population Action International, 2001. A world of difference: sexual and reproductive health and risks.

Rivera R, Cabral de Mello M, Johnson S L, Chandra-Mouli V. Contraception for adolescents: social, clinical and service-delivery considerations. Int J Gynaecol Obstet 2001;75:149-63.

Rubenson B, Nguyen TVA, Höjer B, Johansson E. Child domestic servants. Who are they and how do they fare? The International Journal of Childrens Rights 2004;11:391-407.

Rydström H. Embodying morality: Growing up in rural northern Vietnam. Honolulu: University of Hawaii Press, 1998.

Sandfort TG, Ehrhardt AA. Sexual health: a useful public health paradigm or a moral imperative? Arch Sex Behav 2004;33:181-7.

Scholl TO, Hediger ML, Salmon RW, Belsky DH, Ances IG. Association between low gynecological age and preterm birth. Paediatr Perinat Epidemiol 1989;3:357-66.

Seidman I. Interviewing as qualitative research: a guide for researchers in education and the social sciences. New York: Teachers College Press, 1998.

Sen A. Objectivity and position: Assessment of health and well-being in : Health and social change in international perspective. Boston/New York: Harvard University Press, 1995.

Shelton JD. The provider perspective: Human after all. Int Fam Plan Perspect 2001;27:152-3.

Sou SC, Chen WJ, Hsieh WS, Jeng SF. Severe obstetric complications and birth characteristics in preterm or term delivery were accurately recalled by mothers. J Clin Epidemiol 2006;59:429-35.

Spector PE. Summated rating scale construction: An introduction. Newbury Park, USA: SAGE Publications Inc, 1992.

Stanback J, Twum-Baah KA. Why do family planning providers restrict access to services? An examination in Ghana. Int Fam Plan Perspect 2002;27:137-47.

Tomeo CA, Rich-Edwards JW, Michels KB, Berkey CS, Hunter DJ, Frazier AL, Willett WC, Buka SL. Reproducibility and validity of maternal recall of pregnancy-related events. Epidemiology 1999;10:774-7.

Treffers PE. Adolescents Pregnancy; Issues in Adolescents Health and Development. Geneva: World Health Organization, 2004.

Treffers PE, Olukoya AA, Ferguson BJ, Liljestrand J. Care for adolescent pregnancy and childbirth. Int J Gynaecol Obstet 2001;75:111-21.

Trinh LT, Michael John D, Byles J. Antenatal care adequacy in three provinces of Vietnam: Long An, Ben Tre, and Quang Ngai. Public Health Rep 2006;121:468-75.

Tschudin V. Approaches to Ethics Nursing Beyond Boundaries. Elsevier Science Limited, 2003.

UNAIDS, 2005. Aids epidemic update. December 2005.

UNFPA, 2003. Country profile for population and reproductive health: Policy developments and indicators 2003.

UNICEF, 2001. Early Marriage: Child spouses. Innocenti Digest 7. Florence, Innocenti Research Centre.

Wahn EH, Nissen E, Ahlberg BM. Becoming and being a teenage mother: how teenage girls in South Western Sweden view their situation. Health Care Women Int 2005;26:591-603.

Wang Y-F. Male reproductive health research needs and research agenda: Asian and Pacific perspective. Int J Androl 2000;23 Suppl 2:4-7.

Wallin AM, Ahlstrom G. Cross-cultural interview studies using interpreters: systematic literature review. J Adv Nurs 2006;55:723-35.

van Duong D, Binns CW, Lee AH, Hipgrave DB. Measuring client-perceived quality of maternity services in rural Vietnam. Int J Qual Health Care 2004;16:447-52.

Warenius LU, Faxelid EA, Chishimba PN, Musandu JO, Ong'any AA, Nissen EB. Nurse-midwives' attitudes towards adolescent sexual and reproductive health needs in Kenya and Zambia. Reprod Health Matters 2006;14:119-28.

Watson-Jones D, Weiss HA, Changalucha JM, Todd J, Gumodoka B, Bulmer J, Balira R, Ross D, Mugeye K, Hayes R, Mabey D. Adverse birth outcomes in United Republic of Tanzania--impact and prevention of maternal risk factors. Bull World Health Organ 2007;85:9-18.

Wellings K, Collumbien M, Slaymaker E, Singh S, Hodges Z, Patel D, Bajos N. Sexual behavior in context: a global perspective. Lancet 2006;368(9548):1706-28.

White DE, Fraser-Lee NJ, Tough S, Newburn-Cook CV. The content of prenatal care and its relationship to preterm birth in Alberta, Canada. Health Care Women Int 2006;27:777-92.

WHO, 1999a. Programming for adolescent health and development. Technical report series nr 886. Geneva: World Health Organization.

WHO, 1999b. Abortion In Vietnam: An assessment of policy, program and research issues. Geneva: World Health Organization.

WHO, 2003. Safe abortion: Technical and policy guidance for health systems. Geneva: World Health Organization.

World Bank, 2001. Vietnam growing healthy: review of Vietnams health sector review. Hanoi Vietnam, World Bank.

World fact book, 2007. Retrieved from: http//:www.cia.gov/cia/publications/factbook.

VDHS, 2002. Vietnam Demographic and Health Survey. Family and Children Population and Family project. Hanoi, National Committee for Population and Family Planning.

VNA, 2002. Challenges and opportunities, Vietnam Nurses Association Today.

Xinh TT, Binh PT, Phuong VH, Goto A. Counseling about contraception among repeated aborters in Ho Chi Minh City, Vietnam. Health Care Women Int 2004;25:20-39.

Zhang XLC. Contextualising reproductive rights challenges: The Vietnam situation. Womens Stud Int Forum 2002;25:443-53.