BETWEEN OPPORTUNITIES AND RISKS
Adolescent sexual and reproductive health in Zambia

Elisabeth Dahlbäck
“The children now love luxury: they have bad manners, contempt for authority: they allow disrespect for elders and love chatter in place of exercise. Children now are tyrants, not the servants of their households. They no longer rise when elders enter the room. They contradict their parents, chatter before company, gobble up dainties at the table, cross their legs, and tyrannize their teachers”

SOKRATES
469–399 B.C.

To the adolescents in Zambia
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ABSTRACT

Background Adolescence is a dynamic period in life with both opportunities and risks related to the culturally constructed gender norms. Many adolescents in sub-Saharan countries, Zambia included, lack control over their own sexual and reproductive lives, due to factors such as gender inequality, poverty, and sociocultural and religious norms.

Aim The aim of this thesis was to explore, from a gender perspective, how sexuality and reproduction are conceptualised and communicated among Zambian adolescents as a basis for future interventions and for development of effective strategies to reduce adolescent reproductive health problems.

Specific objectives These objectives were to explore adolescent boys’ perceptions about their transition into manhood (I) and their perceptions about premarital sexual relationships (II); to describe characteristics of adolescent girls admitted to hospital for incomplete abortions, partner relationships, views on contraception, and whether abortion was spontaneous or induced (III); to elucidate the situation of adolescent girls who had had an unsafe abortion, and gather data on abortion providers and methods used (IV).

Methods The studies were conducted from 2000 to 2005 in Lusaka and Kitwe, Zambia. Both quantitative and qualitative methods were used. Seven focus group discussions were held with adolescent boys (n=53) (I, II), and 12 adolescent boys participated in letter writing (I). A hospital-based interview study was done with 87 adolescent girls admitted to hospital for incomplete abortions (III, IV). Descriptive quantitative analysis was used and the qualitative data was analysed by applying qualitative content analysis technique.

Results. Growing up in Zambia entails exposure to contradictory messages, influenced by traditional and new norms on purported appropriate social and sexual behaviour. Many boys received the messages that they were the privileged sex and the decision makers in sexual relationships. Peers were important in the identity building process (I). Premarital sexual relationships are common and considered a prerequisite for boys to achieve adult male autonomy and status, gender roles which influence Zambian boys’ male identity. However, they see in the gender imbalance a potential to adjust their behaviour in premarital relationships, but lack adult guidance (II). Of the adolescent girls admitted for incomplete abortions, 39% alleged having had an unsafe abortion. They were more often single, in school, and had reached higher grades. More of the girls with spontaneous abortions were traditionally married and cohabitating with their partners. At first sexual intercourse 39% of the girls had been forced to have sex, and 41% perceived they had little or no risk of contracting HIV. Most of the girls were not aware of their partner’s previous sexual history (III). The primary reasons given for performing an unsafe abortion were fear of facing personal shame, social stigma and the wish to continue education. Several of the girls had heard about or knew classmates who had been severely ill or had died from complications after unsafe abortions. The majority of the pregnancies were terminated before the end of 12th gestational week. Oral and vaginal abortifacients were used, including both traditional and modern medicine and foreign bodies inserted into the cervix. Traditional healers and older women performed almost half of the methods cited (IV).

Conclusion: Lack of sexual education and limited access to contraception and safe abortion care, expose both adolescent girls and boys to adverse transitions into adulthood. Girls in subordinate positions, carry consequences like premarital unintended pregnancies often followed by unsafe abortions. The educational programmes should pay due attention to adolescents’ needs, and particularly address male adolescents’ responsibilities for sexually related behaviour to reduce sexual coercion and unwanted pregnancies.

Keywords: Adolescents, premarital pregnancies, contraception, abortion, gender, Zambia.
LIST OF PUBLICATIONS


The papers will be referred to by the Roman numerals I-IV.

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### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>ASRH</td>
<td>Adolescent Sexual and Reproductive Health</td>
</tr>
<tr>
<td>CIV</td>
<td>Center for Health-Care Sciences, Karolinska Institutet</td>
</tr>
<tr>
<td>CSO</td>
<td>Central Statistical Office [Zambia]</td>
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<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>IA</td>
<td>Induced Abortions</td>
</tr>
<tr>
<td>ICPD</td>
<td>International Conference on Population and Development</td>
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<tr>
<td>IPPF</td>
<td>International Planned Parenthood Federation</td>
</tr>
<tr>
<td>LMP</td>
<td>Last Menstrual Period</td>
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<tr>
<td>LW</td>
<td>Letter Writer</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MVA</td>
<td>Manual Vacuum Aspiration</td>
</tr>
<tr>
<td>PAC</td>
<td>Post Abortion Care</td>
</tr>
<tr>
<td>PRB</td>
<td>Population Reference Bureau</td>
</tr>
<tr>
<td>SA</td>
<td>Spontaneous Abortions</td>
</tr>
<tr>
<td>Sida/SAREC</td>
<td>Swedish International Development Cooperation Agency Department for Research Cooperation</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infections</td>
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<tr>
<td>UNICEF</td>
<td>The United Nations Children’s Fund</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Family Planning Association</td>
</tr>
<tr>
<td>UTH</td>
<td>University Teaching Hospital</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>YFC</td>
<td>Youth Friendly Clinics</td>
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PREFACE

The origin of this thesis can be traced back to the 1980s when I became a midwife with the purpose to work with women’s and children’s health in low income countries. My professional background is in nursing, midwifery and education. I have had the privilege to work as a midwife with reproductive health in different African settings in Zimbabwe, Cap Verde and Guinea Bissau. I have also had the privilege to work with Professor Gunilla Lindmark and her team for six years, in courses focusing on Sexual and Reproductive Health and Rights (SRHR), for midwives and obstetricians from many Asian and African countries, supported by Sida and arranged by Uppsala University. As part of the course, the participants planned specific projects within SRHR to be carried out at their home institutions. Each course ended with a follow up seminar in respective region, Africa or Asia. These experiences led me further into more studies in pedagogic and research methodology and later to my research questions as: “Where are the men and the boys in reproductive health and research?” and “What role do they play in the reproductive health situation of adolescent girls and women?”

Through my work, and later as a nurse lecturer at the Department of Nursing, Karolinska Institutet, we started to build institutional collaboration with School of Nursing/School of Medicine, University of Zambia with support of the Linnaeus Palme exchange programme. The Zambian institutions had for many years been our counterparts through IHCAR, Karolinska Institutet, in many aspects of health care, including research work and it is therefore only natural that the studies presented in this thesis are built on the collaboration with Zambia and based on research questions that were relevant for all of us. Based on my findings, my hope is that more attention will be paid to adolescents’ sexual and reproductive health in Zambia as well as in other countries.
GENERAL BACKGROUND

Adolescents as a public health concern
There are more adolescents in the world than ever (Population Reference Bureau (PRB), 2000). WHO defines adolescence as the period between 10 and 19 years of age. Adolescence is a modern term and is seen as a time of transition that begins with the onset of puberty and ends at the culturally determined point of adulthood. Adulthood is often marked by reproductive and socioeconomic maturity, although it is understood in different ways in different cultural contexts (Mmari & Magnani, 2003). Adolescents constitute a heterogenous group. The nature of adolescence varies remarkably in terms of age, gender, class, education, marital status, and sociocultural context and also in terms of ability and beliefs (Senanayake et al., 2001). Another trend to consider is economic and cultural globalisation, which has a significant influence on adolescents’ values and lifestyles worldwide (Blum & Nelson-Mmari, 2004).

Adolescence is a dynamic period in life with both great opportunities and great risks. Adolescents gradually get more autonomy and make more of the decisions that affect their lives (Friedman, 1999; Dehne & Riedner, 2001). Several changes take place through exposure to new challenges, roles, behaviours, responsibilities, and relationships. Some of the risks during this time come from increased exposure to the world, peer pressure, and sexual experimentation. Unprotected sex can lead to unintended pregnancies, unsafe abortions, sexual transmitted infections (STIs) and human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS).

In 1994, the International Conference on Population and Development (ICPD) identified adolescents, boys as well as girls, as a particularly vulnerable group, and governments agreed to commit themselves to a universal agenda on rights and improvements of adolescent reproductive health services. In many countries today, there is recognition in public health that prevention of adolescents’ health-related problems from a gender-specific perspective is urgent (Arulkumaran, 2001).

Adolescent pregnancy and abortion from a global perspective
Worldwide, about 15 million girls aged 15-19 give birth every year (Senanayake & Faulkner, 2003), but global data give a picture that pregnancies do not always end in births, as shown in Figure 1. More than one-third of all pregnancies result in either spontaneous or induced abortions (WHO, 2004).
From a public health perspective, the important information is that more than 2.5 million, or almost 14%, of all unsafe abortions in developing countries are among young women under 20. Although the age pattern of unsafe abortions differs markedly between regions, the proportion of girls aged 15-19 in Africa who have had unsafe abortions is higher than in any other region (Olukoya et al., 2001; WHO, 2004; Shah & Åhman, 2004). WHO (2004) defines an unsafe abortion as “a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both.”

Access to induced abortions depends on the prevailing legislation of the country. About two-thirds of the world’s population lives in countries where abortion is available on demand and psychosocial factors are accepted as valid indications. The remaining one-third lives in countries where abortion is illegal. In countries where abortion is restricted by law or is permitted but not easily accessible like in Zambia, girls/women most likely have to resort to an illegal and unsafely performed termination of an unwanted or untimely pregnancy (Figure 2). According to the law, abortions can thus either be safe and legal, or unsafe and illegal, as in many African countries. As induced abortion may be stigmatising, women are often reluctant to admit to an induced abortion, and therefore illegal abortions are largely underreported (WHO, 2004).

<table>
<thead>
<tr>
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<th>Legal abortion</th>
<th>Illegal abortion</th>
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<td>Safe abortion</td>
<td>Safe, legal abortion</td>
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<td>Unsafe abortion</td>
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<td>Unsafe, illegal abortion</td>
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Figure 2. Status of abortion. Source: Rasch, 2003.
A legal, safe abortion is an induced abortion performed in a country where abortion is legalised and where the procedure is performed by approved authorities. A legal, unsafe abortion is an abortion performed in a setting legally permitting abortion, but with substandard care.

An illegal, safe abortion is an abortion performed in a country with a restrictive abortion law, but by a skilled physician who performs the abortion using safe techniques in a hygienic setting. Finally, an illegal, unsafe abortion is an abortion performed in a country with a restrictive abortion law and performed by an unskilled person (Rasch, 2003).

Adolescents in Zambia
Sub-Saharan Africa, Zambia included, has one of the world’s youngest populations, with about 60% under 19 years of age (PRB, 2001; CSO, 2003). The panorama and life situation of adolescents in Zambia has altered radically, due to dramatic social, political, and economic shifts in the country and further worsened through the HIV/AIDS pandemic (Feldman et al., 1997; Blum & Nelson-Mmari, 2004).

Education
Education is a crucial factor that determines a young person’s future, and it is an important personal asset that allows increased opportunities regarding work, earnings, and contributions to society. The formal educational system in Zambia is based on a three-tiered system: primary education is grade 1-7, junior secondary school is two more years, and upper secondary school is three further years.

The literacy levels in Zambia are now higher than for previous generations, although gender disparity in literacy is still prominent. Literacy is higher for men than for women in all age groups. This is reflected in the enrolment in secondary schools, which is 34% for boys and 21% for girls. More boys than girls complete secondary school. School dropouts are more likely to be girls both at primary and secondary levels, mainly due to poverty and rising cost of education, pregnancy, or an obligation to take care of the family. During primary school the dropout rate is highest in grade 7, it affects girls disproportionately, and it is also higher for rural girls than for urban girls (CSO, 2003).

Sexual education is not compulsory in schools, but children learn about sex during biology lessons and in anti-AIDS clubs. Since 2002, the government has declared free education for all in grade 1-7 to improve the literacy rate in Zambia (CSO, 2003).

Sex and gender
Sexuality has always been regulated in all societies, but changes over time have come from a myriad of influences, such as political, socioeconomical, religious, and cultural
There is a growing concern, in Zambia as in neighbouring countries, about the gender-related socialisation and the unequal power relations that lead to risky sexual behaviour, jeopardising young people’s sexual and reproductive health (Feldman et al., 1997; Magnani et al., 2002; Varga, 2003). The social and familiar expectations on boys and girls are different. These expectations are based on shared traditional gender-based beliefs, which mean restriction for girls and freedom for boys when they reach puberty and sexual maturity (UNICEF, 2004). Unless the main features of sexual cultures are understood, attempts to intervene in behaviour changes among adolescents are likely to fail.

In the discourse of adolescent sexuality and gender in this thesis, a social constructionist perspective (Berger & Luckmann, 1966) and the scripting theory (Simon & Gagnon, 1986) will be referred to. One way in which social norms regarding sexual behaviour are constructed, maintained, and expressed is through culturally shared “sexual scripts,” which have their roots within the symbolic interactionist and social constructionist perspectives in sociology (Simon & Gagnon, 1986). The authors identify three levels of sexual scripts. Cultural scenarios provide general guidelines about appropriate choices and feelings with regard to sexual behaviour in a social or cultural setting. Interpersonal scripts are the individual’s desires and interpretation or understanding of cultural scenarios, and may therefore be different from other members of the same culture. Intrapsychic scripts are the internalised shared scripts and scenarios that actually shape individual attitudes and societal norms. According to Dixon-Mueller (1993), sexuality and sexual scripts refer to the process by which sexual thoughts, fantasies, beliefs, and behaviours are collectively and individually interpreted and practiced, what is appropriate or inappropriate to do or to talk about according to age, and linked to the cultural concept of masculinity and femininity. Sexual activities are thus understood and constructed from interplay between cultural messages about sexuality, personal identification of a situation interpreted as sexual, and interpersonal negotiations (Maticka-Tyndale, 2005).

Gender identity, or how we see ourselves and how we behave as boys/men and girls/women, is not naturally constructed but socially constructed. Whereas ‘sex’
defines the biological distinction between men and women, ‘gender’ is a social construct that ascribes as well as differentiates the power, roles, responsibilities, and obligations of men and women in society (WHO, 2003). Connell (1995) further states that gender identities are constructed by dialectical relationships in an ongoing dynamic process. Reality is reproduced through people’s actions depending how they interpret their reality, and by that create, institutionalise and make into their traditions (Berger & Luckmann, 1966). Gender biases begin at birth, and young people are greatly affected by attitudes, ideas, and expectations that they perceive, interpret, and respond to from their immediate and wider social contexts (Senanayake et al., 2001). Gender identities are negotiated identities; they are not only passively learnt by boys and girls, and therefore differ from one community and culture to another, but also differ over time (Burr, 1995). However, if sexuality and gender are socially constructed, it means that sexuality changes, and that it can be changed.

**Adolescent premarital sexuality**

Adolescence forms the entry point into sexual relationships for many young people often apart from marriage. Pressures on adolescents to believe that sex is a male ‘necessity’ and that ‘good’ girls are expected to be ignorant about sex are truly culturally defined traps. However, such challenges as curiosity, emerging sexual feelings and desires, peer pressure, and poverty can partly explain the move into sexual relationships. Premarital sexual relationships are common worldwide and are reported to be on the rise, and many adolescents are under strong social and peer group pressure to engage in sex (PRB, 2000; Häggström-Nordin et al., 2005).

The construction of gender and sexual norms and expectations are different for boys and girls, and they often reflect the inequalities in relationships (Weiss et al., 2000). Studies from sub-Saharan countries have shown that adolescent boys are under societal pressure to have premarital sexual relationships to prove their masculinity, or else risk social rejection, while girls must appear ignorant and passive regarding sexual matters (Rivers & Aggleton, 2004; WHO 2003). Zambian adolescents live in a society where premarital sexual relationships are most likely frowned upon, especially for girls but paradoxically it is regarded as common, and rather seems to be an ‘official secrecy’ (Feldman et al., 1997).

Poverty, sexuality, and money are strongly intertwined in premarital sexual relationships, as shown in Silberschmidt & Rasch (2001) and Luke (2003). Men and adolescent boys are most likely to initiate and control sexual interactions and are also the primary decision makers. Girls who offer sex in exchange for money or gifts are more likely to have difficulties in controlling and negotiating safe sex, which increases the girls’ vulnerability to STI/HIV infections, unintended pregnancies, unsafe abortions, and sexual violence (Weiss et al., 2000).
Adolescent pregnancy and abortion in Zambia

Evidence from the Demographic and Health Surveys in Zambia and other sub-Saharan African countries indicates that the age of menarche has declined, marriage age is rising, premarital pregnancies are increasing, and slightly fewer teens are giving birth, although the level of early birth remains high (Kaufman et al., 2001; CSO, 2003). Indicators for gender imbalance among adolescents are mirrored in the teenage fertility in Zambia. Exposure to unprotected sex has contributed to high average rates of pregnancies and births among adolescent girls (145/1000 live births). The median age for first sexual intercourse is just below 17 years for girls and about 18 years for boys, and almost 20% of both sexes report that they had sexual intercourse before the age of 15 (CSO, 2003). Adolescent childbearing has potentially negative medical and social consequences. Pregnant teenagers, especially those under the age of 18, are much more likely to suffer from pregnancy and delivery complications than pregnant women aged 20-25 years, resulting in higher morbidity and mortality for both the girls and their children. In addition early childbearing limits the girls’ educational and employment opportunities (CSO, 2003; de Bruyn & Packer, 2004).

There are no official statistics available about adolescent abortions in Zambia, but it is well known that a considerable number of unsafe abortions are induced to terminate unintended premarital pregnancies (Webb, 2000). Legal abortion, under the Termination of Pregnancy Act, has been available in Zambia since 1972, and it allows safe abortions on broad medical and social grounds. However, the act specifies that the procedure should be performed in approved hospitals and requires prior consent of three registered physicians. That restriction, as well as the scarcity of physicians outside the larger cities, has kept safe abortion beyond the reach of many adolescent girls and poor women. Despite the country’s abortion legislation, many Zambian teenage girls still resort to unsafe induced abortions outside approved facilities, relying on unskilled providers when faced with unwanted pregnancies (Likwa & Whittaker, 1996; Koster-Oyekan, 1998).

Country profile – Zambia

Zambia is located in the southern region of the African continent and shares boundaries with eight other countries (Figure 3).

With a population of 10.3 million people, Zambia is one of the most urbanised countries in sub-Saharan Africa, estimated at 40%. Like most sub-Saharan countries, the population is extremely young, with nearly 50% of the population under the age of 15 and 3% over the age of 65. There are more than 70 different ethnic groups, each with its own language of which seven are recognised as official vernaculars. English is the language of the government (World Fact Book (WFB), 2006). For detailed demographics, see Table 1.
Figure 3. Map of Zambia.

Table 1. Selected demographic, socioeconomic and health indicators, Zambia.

<table>
<thead>
<tr>
<th>Indicators</th>
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<tbody>
<tr>
<td>Area</td>
<td>752,614 sq km</td>
</tr>
<tr>
<td>Total population (%)</td>
<td>10.3 million</td>
</tr>
<tr>
<td>Urban population (%)</td>
<td>47</td>
</tr>
<tr>
<td>Annual population growth rate (%)</td>
<td>2.9</td>
</tr>
<tr>
<td>Health expenditure % of GDP</td>
<td>3.0</td>
</tr>
<tr>
<td>Education expenditure % of GDP</td>
<td>2.5</td>
</tr>
<tr>
<td>GNP per capita, (US$)</td>
<td>332</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>50</td>
</tr>
<tr>
<td>Adult literacy levels F/M (%)</td>
<td>79 / 91</td>
</tr>
<tr>
<td>Life expectancy at birth (years) F/M</td>
<td>40 / 39</td>
</tr>
<tr>
<td>Maternal Mortality Rate (MMR/100,000 life births)</td>
<td>729</td>
</tr>
<tr>
<td>Infant Mortality Rate (IMR/1000)</td>
<td>95</td>
</tr>
<tr>
<td>Total Fertility Rate (TFR)</td>
<td>5.9</td>
</tr>
<tr>
<td>HIV/AIDS prevalence, ages 15-49 (%)</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Adolescents

| Population, age 10-19 (%)                           | 25       |
| Literacy levels, age 15-19 F/M (%)                  | 59 / 71  |
| Secondary school enrolment, F/M (%)                 | 21 / 27  |
| Modern contraceptive use, single women, age 15-19 (%)| 13       |
| Marriage and cohabitation, age 15-19 F/M (%)        | 24 / 1   |
| HIV/AIDS prevalence, age 15-19 F/M (%)              | 7 / 2    |
| Births among women 15-19 (per 1,000 live births)    | 145      |
| First childbirth, age 15-19 (%)                     | 57       |

Zambia’s colonial history began in the 1890s, when British colonial troops entered the country north of the Zambezi River. It was a British colony from 1924 to 1964, when Zambia gained political independence as The Republic of Zambia with Kenneth Kaunda as President. In 1991, a new constitution was created, which allowed a multiparty system (WFB, 2006).

During the precolonial period, when the traditional multi-generational extended family system prevailed social roles, responsibilities, and sexual norms were clearly defined within the family. Colonialism played a large part in changing the traditional family structures and sexual norms by encouraging male migration to mining areas. The men had to leave their families at home and families were split for long periods of time, and extramarital sex and sex work increased (Feldman et al., 1997).

Much of the country’s development has been along the “railway line,” which runs from the resource-rich Copperbelt through Lusaka to Victoria Falls, forming the major focus of Zambia’s economic activity (Eriksson et al., 2002). The economy is largely dependent on copper and cobalt production. Over the last few years, economic growth has been slow due to a sharp decline in copper prices, a sharp increase in oil prices, recurrent drought, and little progress of the large mining companies. Poverty in Zambia is deep and widespread. More than 70% of the population is classified as poor, which implies inadequate access to health care, education, nutritious food, clean water, clothing, and housing (CSO, 2003).

Poverty, education, and health are closely interlinked. Generally, health indicators have worsened in Zambia in recent times partly due to the HIV/AIDS pandemic. Zambia is one of the countries hardest hit by HIV/AIDS, and it is currently estimated that there are 1.65 million AIDS orphans (one or both parents deceased) (Eriksson et al., 2002). Table 1 shows the key national health indicators.

Administratively, the country is divided into 9 provinces and 72 districts. Public health services are organised in three levels of hospitals, which comprises district, general, and central hospitals; the next level comprises rural and urban health centres; and the most peripheral level is made up of health posts (Eriksson et al., 2002). In recent years Zambia has suffered from serious scarcities of almost all health professionals due to economic and fiscal difficulties. Despite this, in the National Health Strategic Plan for 2001-2005 some of the goals to be achieved were to improve health care access in underserved areas and to vulnerable groups; to improve the understanding of the link between gender equity and health; and to give public health priorities to ‘Integrated Reproductive Health,’ including family planning, safe motherhood, adolescent health, abortion and postabortion care, infertility, and sexual violence against women (MOH, 2000). The indigenous traditional health care system plays an important role in the overall health system with over 20,000 registered healers. Drugs can also be found on open markets, in bars, and from peddlers (Eriksson et al., 2002).
Conceptual framework

A conceptual framework, inspired by an ecological model developed by Heise (1998) will be used in this thesis, to integrate findings from various levels and perspectives that relate to adolescent sexuality and reproduction in contemporary Zambia. Three levels are applied in the conceptual framework and relate to: 1) microsystem which represents the individual’s personal history and developmental experiences in immediate family context, 2) exosystem which encompasses other close relationships as the person directly engage in or interact with as well as existing social structures which influence, delimit or determine behaviours, 3) macrosystem which refers to the broader set of laws and polices, cultural values and beliefs that permeates and inform the other social levels (Figure 4).
AIMS AND OBJECTIVES

GENERAL AIM

To explore and analyze from a gender perspective how sexuality and reproduction are conceptualized and communicated among Zambian adolescents, as a basis for future interventions and for development of effective strategies to reduce reproductive health problems among the adolescents.

SPECIFIC OBJECTIVES

I To explore adolescent boys’ views and perceptions about their transition into manhood from a gender perspective.

II To explore perceptions and expectations of adolescent boys regarding premarital sexual relationships.

III To describe characteristics of adolescent girls admitted to the hospital for incomplete abortions; exploring their partner relationships, their views on contraception, and whether their abortions were spontaneous or induced.

IV To elucidate the situation of adolescent girls admitted to hospital after having resorted to unsafe induced abortions, and gather data on abortion providers and methods used.
SUBJECTS AND METHODS

Methodological framework
In the four papers included in this thesis, qualitative research methods have been used to explore and analyze phenomena among Zambian adolescents’ perceptions and experiences related to identity, sexuality, and reproduction. Qualitative research methods have been used in social science research (Patton, 1990) and are now also widely used in health care research (Pope & Mays, 2000). Methods used in qualitative research include a variety of techniques, such as focus group discussions, interviews, observation, and analysis of documents (Dahlgren et al., 2004). Purposeful sampling is commonly practiced in qualitative research to select information-rich respondents who will elucidate the question under study. The size of sample is not determined beforehand but sampling will end when saturation is reached, i.e. when the researcher judges that no more information will be gained by adding to the sample (Lincoln & Guba, 1985; Patton, 1990). Qualitative research investigates the meaning of social phenomena as experienced by the people themselves (Malterud, 2001), and an open mind is crucial to meet the unexpected multiple socially constructed realities presented. Qualitative data seeks to explore and answer questions such as what, how, and why; to identify nuanced variables and concepts; and to recognize patterns, communalities, and diversities that explain the personal or social phenomena of those being studied (Kvale, 1996). Qualitative research therefore aims at finding out what people located in a given social context know, think, do, and feel with regard to a specific problem or set of problems.

In this study we chose a qualitative approach using focus group discussions, letter writing, and individual interviews were chosen for the following reasons.

- Little is known about the study area and hence an explorative design is needed (Polit & Hungler, 1999).
- The interactive process between researcher and respondent takes the perspective of the respondents who define, explain, interpret, and construct their reality (Malterud, 2001).
- Qualitative research makes use of the natural setting and context, since respondents take their meanings from the context into their own knowledge, understanding, and lived experiences (Lincoln & Guba 1985; Dahlgren et al., 2004).
- Qualitative methods allow culturally sensitive interpretation of data (Patton, 1990).
- Qualitative research fills a gap in public health sciences by finding out how economic, political, social, and cultural factors influence health (Baum, 1995).

In qualitative methods, the researcher is also partly the instrument. As knowledge is created, perceived, and interpreted in the interaction between researchers and
respondents, the researcher must constantly distinguish between the others’ world and his/her own (self reflection).

**Study settings**

The studies included in this thesis were conducted in two predominantly urban areas. One was in Lusaka in the Lusaka province, and the other was in Kitwe in the Copperbelt province, 350 kilometres from Lusaka.

Sites for Study I and II were chosen after consultation with local counterparts and the Provincial Health Office in Lusaka. They recommended that Kitwe should also be involved in the study, because Lusaka and Kitwe have the highest prevalence of HIV/AIDS in the population including adolescents (CSO, 2003). Lusaka province has a population of approximately 1.5 million (2004) and is divided into four districts, of which the Lusaka district includes the capital city of Zambia. One of the areas chosen for our study was George Compound, which is located seven kilometres outside Lusaka City. George Compound has 42,000 inhabitants. Despite the size of the compound, the highest basic educational level is grade nine. The predominant language spoken in the Lusaka area is Nyanja.

The Copperbelt province is the largest province in the country, with a population of about 1.7 million. Kitwe is the industrial town of the Copperbelt. Kitwe has several governmental and private schools at secondary and upper secondary levels, both boarding and day high schools. Chimwemwe Compound, located three kilometres outside town, became the second study area and was chosen after consultation with Kitwe District Health Board. Chimwemwe has about 14,000 inhabitants, and the dominant local language is Bemba. At the time of the study, both compounds had Youth Friendly Clinics (YFC) with voluntary working peer educators connected to the Primary Health Centers. People living in these two selected compounds were mainly engaged in low-income-generating activities, and unemployment was high.

Study III and IV were conducted in Lusaka, at the University Teaching Hospital, in the gynaecological emergency admission ward. Lusaka has the only national referral hospital in the country, with 1,900 bed capacity. Besides being a tertiary hospital, it also functions as a secondary level health unit for people living in Lusaka. The Department of Obstetrics and Gynaecology provides 200 beds for gynaecological and reproductive health services. These services include the gynaecological emergency admission ward, which is open 24 hours a day, 7 days a week, and filters all gynaecological cases coming to the UTH. This ward provided postabortion care (PAC), which includes surgery facilities for manual vacuum aspiration (MVA), as well as contraceptive information and counselling services.

Clients diagnosed with incomplete abortions were frequently treated group in the gynaecological emergency ward, and many of the women suffered from severe
complications on admission. Of all the patients who underwent MVA and PAC at the ward in 2005, 10% were girls 19 years or younger (n=433). At the UTH in the same year, twenty deaths were registered due to abortion complications; of these twenty deaths, four were adolescent girls (UTH unpublished 2006).

Methodology
In this thesis, focus group discussions (FGDs) were carried out in the community to collect data for Study I and II. In addition to FGDs, letter writing (LW) was used for Study I. Study III and IV were based in the hospital, where interviews were conducted using a semi-structured questionnaire with open-ended and closed-ended questions. Using triangulation in effect, combining different methodologies for analyzing the same phenomena was one way to strengthen the study design (Patton, 1990). The combination of different types of data and methods also helps to confirm findings and to obtain both breadth and depth of the information (Krueger, 1994). Triangulation was applied in Study I, III and IV.

In addition to the qualitative information, relevant documents such as local health statistics and medical records were also included in the analysis.

Focus Group Discussions (FGDs)
Focus group discussions (FGDs) constitute in effect a group interview. An FGD is not a problem-solving session, and it does not aim at arriving at a consensus among the participants. Rather, it seeks to understand and determine the range of perspectives about how people perceive their own situation (Patton, 1990; Krueger, 1994). It is first and foremost a qualitative method that uses group interaction to explore people’s experiences and knowledge. The focus lies in how the views of participants on a specific topic are constructed and expressed in relation to a certain culture and context involving opinions, attitudes, and norm systems (Dahlgren et al., 2004). Further, a FGD is also a useful tool in the public health field because it does not discriminate against people who cannot read and write. Participation in FGDs has the added advantage of being able to also encourage people who are reluctant to be interviewed on their own to share their views (Kitzinger, 1995).

FGDs usually explore predefined topics in a relatively homogenous, purposely selected group of people (Tillgren & Wallin, 1999). The recommended size of the group varies, but the most common size is between 6 and 10 participants. Smaller groups may be suggested depending on the sensitivity or depth of the topic (Dahlgren et al., 2004). It is suggested that the interaction in the FGD yields more information than the same number of individual interviews, because of access to tacit, uncodified, and experimental knowledge (Murphy et al., 1992; Johnson, 1996). In order to capture a broad range of opinions from the participants, it is important to find a balance between free-flowing discussion and discussion around prepared and selected questions.
There are disadvantages of FGDs as well. “Self-appointed experts” in the group might overshadow shy or quiet members. The moderator’s preconceptions might disrupt the interaction by too much probing or trying to pick up on too many cues (Krueger 1994). Confidentiality is a concern of FGDs, as they might elicit information more personal than the members anticipated (Carey, 1994). Usually qualitative FGDs continue until saturation occurs, which means that little new data is expected to be found in the consecutive FGDs. Seven FGDs were done in this study.

In Study I and II, FGDs were used to explore adolescent boys’ perceptions about their transition into manhood and about motives behind starting premarital sexual relationships.

**Letter writing (LW)**
Writing, in comparison to talking, leads to due consideration and reflections, according to van Manen (1990). Writing abstracts reality, but at the same time, the person who writes is also able to concretize reality. When reading one’s text, the question arises, “was this really what I meant to say?” Writing enables people to disassociate themselves from their direct experience: “Writing separates the knower from the known, but it also allows us to reclaim this knowledge and make it our own in a new and more intimate manner” (p.127). This is what van Manen calls “reflective awareness.”

To get individual participants’ understanding on similar topics as raised in the FGDs, adolescent boys were invited to participate in Study I. They were given three broader themes about male identity, sexual encounters, and reproductive health needs and rights. They were asked to answer several support questions in a letter that was directed back to the research team. Writing a letter would give the participants more time for individual reflection and would give the researchers their “insider perspective” on the topics, expressed in their own words without the influence of a moderator or other group members.

**Interviews**
Communication is the most basic form of human interaction (Holsti, 1969). Interviews are one of the most common survey techniques used in social and health research (Sarantakos, 1998; Polit & Hungler, 1999). Interviews allow the researcher access to other peoples’ opinions, perspectives, and feelings communicated not only by words, but by tone of voice, expressions, and gestures in the flow of communication (Kvale, 1996).

Interviews are prepared differently, depending on the specific purpose and the research questions. An interview can employ qualitative or quantitative methods, and it can be structured or unstructured. The structured interview instrument has a set of fixed questions predetermined by the researcher; there is a low degree of freedom with regard
to content, order of asking questions, and options for responses. Structured interviews may vary in their degree of structure by using a combination of open-ended and closed-ended questions (Polit & Hungler, 1999). Disadvantages with interviews are that they are time consuming.

Semi-structured interviews are used to collect qualitative research data using an interview guide, which comprises a set of open-ended and closed questions prepared beforehand (Polit & Hungler, 1999; Patton, 1990). A semi-structured interview is like a conversation, and therefore it is important to build a rapport between the interviewer and the respondent for mutual understanding. The interview guide, or questionnaire, gives the interviewer a direction of themes or core questions to be explored. The order in which questions are asked will vary, as will the questions designed to probe for clarification of the respondents’ meanings (Dahlgren et al., 2004). Wording cannot be too standardized because the interviewer may use the respondent’s own vocabulary when phrasing supplementary questions (Britten, 1995). Increasingly, qualitative and quantitative methods have been combined to expand the scope and deepen the insights of research through questionnaire-based formats (Sandelowski 2001; Peddie & Teijlingen, 2005). In Study III and IV, semi-structured interviews were used to collect data on adolescent girls admitted to hospital for incomplete abortions.

**Design, study participants, data collection, and analysis**

These qualitative studies were done to gain a deeper understanding of factors and scenarios that challenge Zambian girls and boys in their daily lives, during their transition to adulthood. The nature and experiences of adolescence greatly vary by sex, class, region, and cultural context. We wanted to learn more about how adolescent boys perceived the cultural and social codes that guided them into manhood, particularly because boys have not been very visible in adolescent research. We therefore started the FGDs and added LW later on during the research process. These methods brought us into the cultural construction of conflicting images of gender dynamics between the sexes. We saw the role of girls in boys’ development of sexual identity, and we also saw both positive and negative consequences of these gender dynamics. The boys’ views about girls’ lives and controversy became the point of departure for the interview studies on adolescent girls. The mixing of data and methods relies on the principle of complementarily. This mixing also illuminates the context in which contemporary Zambian adolescents grow up and develop. An overview of the presented studies is given in Table 2.
Table 2. Study design, study participants, study sites, and methods in the four studies.

<table>
<thead>
<tr>
<th>Study</th>
<th>Study design</th>
<th>Study participants and sites</th>
<th>Methods</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Explorative, qualitative</td>
<td>FGDs, Adolescent boys George Compound, Lusaka (n=2) Chimwemwe Compound, Kitwe (n=5)</td>
<td>Seven FGDs (n=53) Letter writers (n=12)</td>
<td>2000-2001</td>
</tr>
<tr>
<td>II.</td>
<td>Explorative, qualitative</td>
<td>Adolescent boys George Compound, Lusaka Chimwemwe Compound, Kitwe</td>
<td>Seven FGDs (n=53) (as in Study I)</td>
<td>2000-2001</td>
</tr>
<tr>
<td>III.</td>
<td>Descriptive, qualitative</td>
<td>Adolescent girls University Teaching Hospital, Obst./emergency ward, Lusaka</td>
<td>Semi-structured individual interviews (n= 87)</td>
<td>2004-2005</td>
</tr>
<tr>
<td>IV.</td>
<td>Descriptive, qualitative</td>
<td>Adolescent girls University Teaching Hospital, Obst./emergency ward, Lusaka</td>
<td>Semi-structured individual interviews (n=34)</td>
<td>2004-2005</td>
</tr>
</tbody>
</table>

Study I  “I am happy that God made me a boy”: Zambian adolescent boys’ perceptions about growing into manhood.

Study II  Zambian male adolescents’ perceptions about premarital sexual Relationships.

Design, sampling, and study participants – Study I, II: An explorative study was carried out in the two compounds outside Lusaka and Kitwe, George and Chimwemwe respectively, between November 2000 and May 2001. Purposive sampling methods were used to obtain a deeper insight into adolescent boys’ beliefs and values derived from their own sociocultural context. The participants were chosen either by the research team or by gatekeepers, and by using the snowball technique. The inclusion criterion for the study was adolescent boys 19 years old or younger who were either in school or out of school. The recruitment occurred during ongoing community activities: in schoolyards, churches, anti-AIDS clubs, sport grounds, and marketplaces. The day before each FGD took place, potential participants were identified in different locations and recruited, and they were given both oral and written information about the study and venue of the meeting. Initially a pre-tested interview guide assisted the Zambian male moderators, and the guide was later adjusted because unforeseen topics of interest emerged.

Data collection – Study I, II: Data were drawn from seven FGDs. Two FGDs were held in George Compound, and five FGDs were held in Chimwemwe Compound. Five FGDs were held in English, and two were in either Nyanja or Bemba. Male Zambian research group members skilled in conducting FGDs moderated the discussions, and
local facilitators observed and took notes. The interview guide that the Zambian male moderators used during the discussion had broad themes (with probing questions attached, if needed). The guide was kept deliberately wide, because our aim was to capture as broad a range as possible of the boys’ perceptions, attitudes, and knowledge as experienced in their sociocultural context. The interview guide included adolescent boys’ views on male identity, gender perspectives, psychosocial and sexual development, sexuality, premarital relationships, contraception, and unwanted pregnancies and abortions. Each FGD lasted 90-120 minutes, and all FGDs were tape-recorded. For each FGD, the participants filled in consent sheets and basic fact sheets. The first author (ED) participated in all FGDs.

In Study I, data were also collected from twelve boys aged 16-19 years (the letter writers), who received a letter with questions to respond to and who had not participated in any of the FGDs. Midwives and peer educators at health centres and Youth Friendly Clinics in the two compounds in Lusaka and Kitwe recruited the participants. When a boy agreed to participate, he was given an envelope with instructions on the procedure, questions similar to those raised in the FGDs, a notebook, and a pen. Each participant was given two days to answer the letter and bring it back in a sealed envelope, to the address provided in his respective area. The purpose was to derive individual reflections on the same topics but without any influence from group members or moderators.

Data analysis – Study I: A total of 53 adolescent boys, aged 15-19 participated in FGDs and 12 adolescent boys were recruited for writing letters (LW). Each group consisted of 7-9 participants. All adolescent boys were unmarried except one, who also had a child. The tape-recorded FGDs were transcribed verbatim in English. The first author (ED) participated in all FGDs and transcribed verbatim all FGDs except one, in collaboration with the moderator of each FGD. In total 140 pages transcribed text from the FGDs and LWs constituted the basis for the analysis. No new FGDs were performed before the previous one had been discussed and coded, in order to detect new and unforeseen areas of interest, which were then added to the subsequent FGD. In Study I, a thematic qualitative analysis was applied, and the unit of analysis consisted of both FGDs and LW. Each transcript from FGDs and LW was read repeatedly and then analyzed in a two-step process. Words, concepts and themes were marked and coded in the transcribed text, followed by a “cut-and-paste” procedure. Interrelated concepts were identified, summarized, and further organized into categories and three themes, as illustrated in Table 3. Quotations were extracted and presented verbatim in the text.
Table 3. Summary of emerging concepts, categories and themes.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Concepts</th>
<th>Categories</th>
<th>Themes</th>
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</thead>
<tbody>
<tr>
<td>A. What makes a man into a real man?</td>
<td>– gender power relations,</td>
<td>1. The contradictory male role</td>
<td>I. Male identity and gender issues.</td>
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<tr>
<td></td>
<td>– self-reliant, respectful</td>
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<td>– head of the household</td>
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<td>– responsibilities</td>
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<td>– violence</td>
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<td></td>
<td>– heterosexuality</td>
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<td></td>
<td>– sexual needs</td>
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<td></td>
<td>– family structure</td>
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<td></td>
<td>– girls’ virginity</td>
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<tr>
<td>B. What are the signs of growing up as a boy?</td>
<td>– physical/psychological development</td>
<td>2. Sexuality and fertility</td>
<td>II. Acquiring manliness</td>
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<tr>
<td></td>
<td>– sources of identity-building</td>
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<td></td>
<td>– the body and self-image</td>
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<tr>
<td>C. What is positive about being a boy?</td>
<td>– gender inequality</td>
<td>3. Acquiring manliness</td>
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<td></td>
<td>– “the sharp-minded and the weak thinkers”</td>
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<td></td>
<td>– differences between the sexes</td>
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<td>– division of labour</td>
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<td>– choosing a wife</td>
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<td>– decision-making</td>
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<td>– challenges and self-control</td>
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<td></td>
<td>– curiosity and desires</td>
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<td></td>
<td>– gaining sexual experiences</td>
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<td></td>
<td>– “the game is twofold”</td>
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<td></td>
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<tr>
<td>D. What common problems do you face as adolescent boys today?</td>
<td>– poverty</td>
<td>1. The privileged sex</td>
<td>III. Possibilities and difficulties that</td>
</tr>
<tr>
<td></td>
<td>– conflicting norms/values</td>
<td></td>
<td>adolescent boys face today.</td>
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<td></td>
<td>– fear, threat and danger</td>
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<td></td>
<td>– HIV/AIDS</td>
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<td></td>
<td>– parental involvement</td>
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<td></td>
<td>– positives and negatives</td>
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<td></td>
<td>– peer pressure</td>
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<td></td>
<td>– morals and attitudes</td>
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<td></td>
<td>– misleading behaviour</td>
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<tr>
<td>E. What kind of future are you looking forward to</td>
<td>– ambiguity</td>
<td>2. Peer pressure</td>
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<td></td>
<td>– positive lifestyle</td>
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<td>– lessons learnt</td>
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<td></td>
<td>– education &amp; employment</td>
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<td>– loving, caring husband and father</td>
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<td></td>
<td>– adolescence – an innate positive life view</td>
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</table>

**Data analysis – Study II:** In this explorative study, the qualitative data were drawn from the same seven FGDs as in Study I, consisting of 53 adolescent boys from George and Chimwemwe Compounds aged 15-19 years. The mean age and mean years in school was lower in George Compound (16.5 years old and 8.2 years in school), than in Chimwemwe Compound (17.4 years old and 9.7 years in school). The content areas highlighted for analysis here were adolescent boys’ expectations and motives for starting premarital sexual relationships, decisions about sexual issues, and views on faithfulness in a relationship.
A qualitative content analysis approach (Graneheim & Lundman, 2004) was applied, and the unit of analysis consisted of all FGDs. Qualitative content analysis is the process of identifying, coding, and categorizing the primary patterns in the data. The data from the transcribed FGDs were read repeatedly before the coding procedure began. Thereafter, responding to the research questions, meaning units were identified, coded, and a "cut-and-paste" procedure was done to organize, sort, and group interrelated concepts into categories, which were merged into two themes.

Content analysis can be considered at two levels at the coding stage when words or themes are identified (Holsti, 1969). The first level, called manifest content, considers the visible and obvious components of the text. The second level, called latent content, interprets the underlying meanings of the text. In Study II the analysis was kept at the level of manifest content, rather than at the level of latent content. Participants’ quotations that are given in the text show their way of thinking and interacting and their use of vocabulary.

Findings from the FGDs with adolescent boys (Study I and II) became the basis for the interview study about adolescent girls’ situations regarding adolescent premarital pregnancies and unsafe abortions which were well known among the boys.

**Study III** The prevalence of unsafe abortions among adolescent girls admitted to hospital for incomplete abortion in Lusaka.

**Study IV** Unsafe induced abortions among adolescent girls in Lusaka.

**Design, sampling and study participants – Study III, IV.** This study with a prospective and descriptive design was conducted at the University Teaching Hospital (UTH) in Lusaka from January to April, 2005. The people of Lusaka represent a wide range of ethnic groups living in the country. The participants were girls, 19 years old or younger, admitted for incomplete abortions to the gynaecological emergency ward at the UTH. To be included in the study they had to have undergone the manual vacuum aspiration (MVA), be hemodynamically stable, be informed about the study, and have consented to participate. For minors (below the age of 18) their parents or guardians had to give their informed consent or permission to have the MVA procedure done. If the girl came alone to hospital, she was regarded as mature enough to make the decision and give her consent to participate. On weekdays, the first one or two girls consecutively fulfilling the inclusion criteria were selected from the theatre register book in the ward to participate in the study. Girls who were severely ill and treated elsewhere were excluded from the study.
Data collection – Study III, IV: A Zambian female research assistant was specially trained to conduct the interviews applying a non-judgmental and empathetic interview approach in privacy. The interviews were carried out in the mornings while the girls were waiting for contraceptive counselling before being discharged. The interviews were conducted in privacy in a non-judgmental and empathetic manner, and the girls were promised strict confidentiality. The qualitative semi-structured interviews were performed, guided by a questionnaire format that included open-ended and closed-ended questions. The research assistant began the interview with neutral closed sociodemographic questions, followed by questions regarding contraceptive knowledge and use as well as her relationship with her partner responsible for the pregnancy, and then moved on to the more sensitive open-ended questions about her pregnancy loss. Each interview lasted 60-90 minutes and was performed in Nyanja, Bemba, or English. Answers were recorded in English in the questionnaire, and longer comments and narratives were recorded in a notebook. Due to time and cost restrictions, the study ceased after four months. The first author (ED) participated in one-third of all interviews.

Data analysis – Study III: In this descriptive study, 87 adolescent girls were interviewed. All interview data were entered into Epi-Info statistical software, version 6.4. Descriptive statistics were used to analyze quantitative data. Areas of priority for the analysis were to find out whether an empathetic interview made it possible to differentiate adolescent girls with spontaneous abortions (SA) from girls with induced unsafe abortions (IA), and further to get their views about premarital contraception and their relationships to their partners. Integration of the qualitative and quantitative data for each girl was summarized, which contributed to a comprehensive picture of each one, applying a case study approach. Content analysis was then used to trace further patterns and characteristics of the girls. Of the 87 adolescent girls, 53 were classified as having spontaneous abortions and 34 as having unsafe induced abortions according to information given during the interviews.

Data analysis – Study IV: In this descriptive study, only the 34 participants classified as induced abortions were selected from the 87 adolescent girls interviewed at UTH. All data were already entered into Epi-Info statistical software same as for Study III. Descriptive statistics were used to analyze quantitative data of the participants’ age, education, civil status, with whom they lived, reproductive characteristics, and relationship to partner. The qualitative data from the open questions in this study primarily focused on the girls’ reasons for inducing the abortion, what methods were used, and who assisted them in terminating their pregnancy. The nature of relationship to the male partner was also elucidated. Some of the closed questions were further probed during the interview. In the analysis of the 34 case studies, four predefined
“content areas” responding to the research questions were identified, categorized, and sorted, using content analysis.

**Validity/Trustworthiness**

Validity in qualitative research refers to a continuous critical evaluation (Kvale, 1996). For research to be trustworthy, every research study must be evaluated in relation to the procedures that have been used to generate the findings. To describe different aspects of trustworthiness in qualitative research, Lincoln and Guba (1985) used the concepts *credibility, dependability, transferability, and confirmability.*

**Credibility** (internal validity) refers to confidence in how well all the steps during the data collection and process of analysis address the intended focus of the study. In the FGDs (Study I, II) and in the interview study (III, IV), different local languages and English were used; consequently, translation and back-translation into English might have caused important information to be missed. However, information received is regarded as reliable for several reasons. Each FGD was transcribed; content and wording was discussed with the respective moderator. The interviews were written down in the questionnaire and were re-checked before the interviewee left the room if any clarification was needed.

**Triangulation** refers to obtaining diverse views on the same phenomena for the purpose of validating conclusions (Patton 1990; Dahlgren et al., 2004). Triangulation is another technique for enhancing credibility by comparing and cross-checking the consistency of obtained information. There are basically four kinds of triangulation: use of different sources, methods, investigators, and theories (Lincoln & Guba, 1985). In Study I, twelve participants wrote letters to validate issues that emerged in the FGDs. In Study III and IV, the questionnaire had a complementary design by mixing qualitative and quantitative methods. The investigators and researchers involved throughout the research come from a variety of backgrounds, experiences, and professions.

Another aspect of trustworthiness, **dependability** refers to the stability or consistency of data over time, that is, researchers do not “lose track” during data collection or analysis. During participation the first author in the interview study, each interview was discussed and reviewed, wording of sensitive questions was checked for understanding in different languages, and alternatives were created that carried equal meaning. Interviews were followed over time, complied, and compared so that no major deviations occurred from the intended purpose. Each interviewee was unique, as were her responses, although this does not imply inconsistency.

The third concept, **transferability** (external validity) is concern about the extent to which the findings can be transferred to other settings and groups (Lincoln & Guba, 1985). Many things are required to make transferability possible: an extensive background description of the study setting, selection of participants, data collection,
analysis, and vigorous presentation of findings and context. These are all needed so that others can evaluate the applicability of the data to similar settings (Polit & Hungler, 1999). Study III and IV could probably be replicated in countries with similar legal and health resource conditions.

**Confirmability** addresses neutrality of the qualitative data rather than of the researcher and should ensure that the conclusion is grounded in the data and represents the reality of those being studied (Dahlgren et al., 2004).

The research team was composed of both Zambian and Swedish researchers who represented different life conditions, genders, ages, languages, disciplines, and professions. Both “insider” and “outsider” perspectives were applied, from the construction of the FGD theme guides and the interview questionnaire format throughout the entire research process. Language barriers must be taken into consideration (Patton, 1990). The research process will inevitably have problems when foreign researchers are in a country with multiple local languages and with English as the official language. Wording of questions was discussed and reflected upon among the researchers and also between the interviewer and interviewees with regard to meanings, generational and professional differences in vocabulary, and connotation of languages and cultures.

In the FGDs, the first author observed and took notes. It was valuable to have had the possibility to listen to the discussions and experience the atmosphere and interactions among the respondents while they discussed the themes. Similarly, in Study III and IV, the first author was present during three periods and participated in one-third of the interviews, as passive participant observer and as supervisor. Meeting the girls and listening to their reactions gave a much deeper understanding than what might have resulted from only reading the questionnaires. This involvement may be both an advantage and a limitation; nevertheless, as Patton (1990) argues, cross-cultural research is challenging and rewarding.

**Ethical clearance**

Study I and II were approved by the ethics committees of the Karolinska Institutet, Stockholm, and at the School of Medicine, University of Zambia, Lusaka. Permission was also given by the Ministry of Health, Lusaka District Health Management Board, and from the Kitwe District Health Board, Copperbelt Province.

Study III and IV were ethically approved by the University of Zambia, Lusaka. Informed consent was obtained from the adolescent girls and from a parent or guardian for the girls under 18.
RESULTS

The findings from the studies on adolescent boys and girls described in the four papers are summarized under four main headings and reflects both opportunities and risks: a) contextual influences during adolescence, b) adolescents’ views on contraception, c) characteristics of girls admitted to hospitals for incomplete abortions, d) adolescents and abortion.

Contextual influences during adolescence
This part describes adolescents’ perceptions and integration of social norms and values, with particular regard to sexual behaviour, during their transition from puberty to adulthood. Context here includes culture, beliefs, gender roles, family structure, education, and socioeconomic factors.

The findings show that growing up in Zambia today entails exposure to traditional norms as well as the influences and pressures of a rapidly changing society. Both adolescent boys and girls find themselves exposed to contesting and contradictory discourses in terms of what is appropriate social and sexual behaviour. Furthermore, many adolescents and their families are exposed to new ideas emanating from “outside”; an instance of the impingement of globalization on local communities (Ferguson, 1999). Globalisation refers, of cause, not only to technology and availability of material goods, but also to values, attitudes, morals, and sexual behavior (I-IV).

Gender power dynamics in premarital relationships
Many boys received messages that they were the “privileged sex” from home, school, society, and the media (I, II). These privileges included prioritised access to education, less domestic demands and therefore more freedom. It would be valid to argue that the gender division of labour at home has put more demands on girls than boys, and girls are the ones who take more responsibilities. The boys were regarded as superior to girls and the decision makers in sexual matters in relationships, which are the dominant norms in the Zambian society.

A common understanding among most of the boys was that sexual activity had to be practiced, and boys felt they had the right to experiment with sex during adolescence so that they would perform well when they once married. Sexuality and fertility was the core of manhood, while homosexuality was perceived as a threat to masculinity. It was understood that having a relationship with a girl was equivalent to having sexual intercourse; and if the girl refused, forced sex was mentioned as one option (Study I, II). Girls’ experiences of forced sex were verified in Study III and IV and are shown in Figure 5.
For boys, the main motivation for premarital relationships was often focused on their own sexual desire and abilities. These relationships allowed them to create, shape, and confirm their masculine identity and esteem, and to comply with constructed peer group norms so as not to be ridiculed in the group. Boys’ strong sexual feelings during adolescence were viewed as a purely biological drive, rather than something that was learned or socially constructed, and therefore very difficult to control (I). Boys in these premarital relationships focused more on their own performance and less on the girls; girls were not regarded as equal friends and partners in a mutual interaction. The male gender was made visible and derived its meaning through the contrasting of characteristics and purported attributes of girls to those of boys. Thus, girls’ were perceived as innocent, irresponsible, and dependent, as reported in a FGD:

... girls think different from boys ... girls are weaker in thinking. In the school when teachers ask questions they point at the boys as they know that girls don’t know anything ... girls have little time for studying ... they are so playful, they do not think about their future as we boys do, only on being married ... boys have to think about where to go years from now ...

Inequalities in age and social and economic status in a relationship do not necessarily benefit unmarried adolescent girls. Rather, these differences might contribute to the girls’ dependence and their lesser ability to control sexual interactions and decision making.

However, the boys also expressed some fears. Sexual networking carries with it the threat of the HIV/AIDS pandemic, which can contribute to poverty, a broken family, a truncated education, and a ruined future. The risk of impregnating a girl was always present, but it was often overlooked. When a pregnancy occurred, it was for some it was a catastrophe while for others it was proof of fertility (II, III). Despite subscribing to the general notion that women were subordinated to men, the insecurity of the boys’
became apparent and their masculinity threatened when faced with women who were educated, empowered, economically independent, and socially respected women who were capable of taking over the responsibility for their families.

Nevertheless, adolescence is an innate period of optimism. The boys also viewed adolescence as a period of maturity and hope for a brighter future; their ambitions included a good education, a good job, and a future role as an equal, loving, and caring husband and father (I).

The situation of adolescent girls’ situation was characterized by social and economic dependence on and control by their families (III, IV). The girls saw that adolescent boys had greater freedom and fewer social restrictions on sexual behaviour: boys had multiple sexual partnerships while girls were expected to say no. Premarital sexual experiences for girls were regarded as more complicated and less “glamorous” than for boys. Girls’ involvement in sexual activity was not acceptable; nonetheless it was somewhat (implicitly) expected and was, in fact common. However, girls’ premarital sexual activity was much more charged with shame and stigma than of boys’ activities. Furthermore, the girls had both limited power and less skill to negotiate safer sex and protection in premarital relationships (III, IV).

Boys and girls were differently affected with respect to sexual networking (I, II). The impact of girls’ subordination to boys was shown in various ways. Poverty, money, and sex were closely interrelated; poverty made girls easy prey for boys and men who could give them money or gifts in exchange for sex. However, the desire for material benefits or financial support led to “transactional sex” which was widespread and generally interpreted as a consequence of girls’ poverty. The girls in Study III and IV confirmed the existence of transactional sex during adolescence. Sexual partners had thus, both sexual and financial power over girls, exemplified by a case report from Study IV:

*The girl was 17 years old and in grade 11, and her boyfriend was 21 years old and employed. Due to poverty, the mother let the boyfriend pay for her daughter’s school fee, or as the girl expressed it, “she gave me to the boyfriend...” (This case ended in an unsafe induced abortion.)*

**Views on contraception among adolescents**

Among the respondents in Study III, 4 girls out of 10 were traditionally married or cohabiting with a partner, which could have influenced their contraceptive choice or their desire to become pregnant. However, knowledge about human reproduction and modern contraceptives was very low, as was the use of contraceptives itselfs. Emergency contraception was unknown to all of the girls. The major source of information about contraception was friends, and to a lesser extent the staff at hospitals and health clinics (III).
Contraception was assumed to be the girls’ responsibility. Even though acceptance of using contraception among unmarried sexually active girls was very high, only 1 in 10 had occasionally used any type of contraception, and only 6 of all 87 girls had ever discussed contraception with their partners. Despite the low contraceptive use, very few pregnancies were planned together with a partner. Reasons for not using modern contraceptive methods are discussed in Study III. The main barriers were misconceptions and lack of knowledge about contraception, fear of side effects, and beliefs that they were too young for using contraception or that they would not easily fall pregnant.

Condoms were hardly used, a topic that was investigated in Study III, but also discussed in all FGDs (I, II). It was clearly stated that boys disliked using condoms and mistrusted their effectiveness. Additionally, using a condom could be interpreted as distrust between the partners, signifying infidelity and/or a lack of love.

**Characteristics of girls admitted to hospitals for incomplete abortions**

The 87 adolescent girls admitted to the hospital had either had a spontaneous abortion (SA) or an unsafe induced abortion (IA). The girls admitted to the hospital were between 13 and 19 years old.

There was a difference in the marital status and the level of education between the SA and IA groups. The vast majority of girls with induced abortions were single girls who lived with their parents. More than half of these girls were still in school, and many of them had reached the higher grades in upper secondary school. Of the girls admitted for spontaneous abortions (miscarriages), more than the half were traditionally married or cohabiting with a partner, three-quarters were out of school and at home, and they had fewer years in upper secondary school than the IA group (III).

The reproductive history of the girls in the SA and IA groups was quite similar. Age at first sexual intercourse did not show any noteworthy diversity. The majority of the girls were nulliparous. Four girls in both groups had one live child each, and three girls in the SA group had had a previous abortion.

All girls knew the partner who was responsible for the pregnancy. The age of the partners varied from 16 to 38 years, with three-quarters being 25 years or younger. The nature of relationships with the partners was investigated in Study III and IV. The relationships varied considerably between the SA and IA groups with regard to length and duration as well as regularity and frequency of sexual intercourse. Faithfulness between partners in a relationship was regarded as important, but infidelity occurred and was a common reason for relational quarrels and violence in relationships (II, IV).
Adolescents and abortions

An adolescent unmarried girl who becomes pregnant would suffer from social shame and stigmatization, as shown in Study III and IV (also discussed in FGDs, Study I). Her risk of being chased away from home or being abandoned by her boyfriend was not uncommon when the pregnancy was revealed. Furthermore, it is socially and legally unacceptable to perform an unsafe induced abortion which is also associated with sin and fear for legal reprisals. In spite of this, unsafe induced abortion continues to occur.

Among all the interviewed in the study, more than one-third had resorted to unsafe induced abortions, while two-thirds said they had had spontaneous abortions. The great majority of IA was performed before the twelfth week of gestation, whereas most SA occurred after that week (Table 4).

Table 4.  Induced abortion (IA) and Spontaneous abortion (SA) versus gestational weeks, age, in- or out of school and years in school among adolescent girls admitted to hospital for incomplete abortion (N = 87). (Table 3 in Paper III).

<table>
<thead>
<tr>
<th>Incomplete abortions</th>
<th>Induced abortions *) (IA) n=34</th>
<th>Spontaneous abortions (SA) n=53</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gestational weeks &lt;12</td>
<td>Gestational weeks 13-18</td>
<td>Gestational weeks &gt;9</td>
</tr>
<tr>
<td>IA Gest weeks</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>20 (59)</td>
<td>9 (26)</td>
<td>5 (15)</td>
<td>34 (39)</td>
</tr>
<tr>
<td>SA Gest weeks</td>
<td>6 (18)</td>
<td>1 (3)</td>
<td>0 (-)</td>
</tr>
<tr>
<td>Age 13-16</td>
<td>14 (41)</td>
<td>8 (24)</td>
<td>5 (15)</td>
</tr>
<tr>
<td>17-19</td>
<td>7 (21)</td>
<td>3 (6)</td>
<td>4 (12)</td>
</tr>
<tr>
<td>School In school</td>
<td>1 (38)</td>
<td>6 (18)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Out of school</td>
<td>6 (18)</td>
<td>1 (3)</td>
<td>3 (9)</td>
</tr>
<tr>
<td>Years in school 3-6</td>
<td>8 (24)</td>
<td>6 (18)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>7-9</td>
<td>10 (29)</td>
<td>1 (3)</td>
<td>3 (9)</td>
</tr>
<tr>
<td>10-12</td>
<td>8 (24)</td>
<td>6 (18)</td>
<td>1 (3)</td>
</tr>
</tbody>
</table>

* Data from Dahlbäck et al., 2006 (submitted)

None of the respondents was aware of the possibility of having a legal abortion in Zambia, despite the fact that a Termination of Pregnancy Act has been in place in the country since 1972.

One of the main reasons for adolescent unmarried girls to resort to unsafe induced abortions was their desire for secrecy of both the pregnancy and the abortion, which the girls thought they would not get at the hospital. Other strong motives for having
clandestine abortions included the desire to continue school, fear of parental disapproval, fear of acquiring a bad reputation, and an unstable relationship.

Both abortion methods and providers varied. In half of the cases, traditional healers or “old women” provided the unsafe induced abortions. These healers gave the girls decoctions from herbs and roots to drink, or they inserted cassava sticks into the girls’ cervixes. Health staff also performed induced abortions, usually in non-authorized settings or by using the methods inaccurately. The methods they had used were oral and vaginal tablets, injections, or instrumental procedures. The number of self-administered termination of pregnancies was striking. The girls had bought modern drugs that were combined with traditional medicine, and they took overdoses to initiate abortions (IV). It appeared evident among the boys in the FGDs, that they were well informed about the reasons for unsafe induced abortions, the methods used for provoking abortions and who the providers were, as well as boys’ and girls’ reactions to the event.

For most of the girls in the IA group, the foetus was expelled at home where it was buried, flushed in the toilet, or dropped in the latrine. For the girls in the SA group, half of the miscarriages occurred after the girls arrived at the health clinic or hospital.

The partners in the SA and IA groups showed different reactions regarding the pregnancies and abortions ranging from sadness to relief depending on the nature of their relationships with their girlfriends. Many partners of the girls with SA were reported to be sad, as several of them had started to accept the idea of having a child and looked forward to becoming fathers.

Many partners within the IA group played a large role in the decision to terminate the pregnancy. When girls revealed that they were pregnant, several of the partners urged the girl to abort, and they even arranged and paid for the unsafe abortion procedure. A similar number denied paternity thus avoiding the financial and social obligations and left the girl with that message. Some parents/relatives both insisted and arranged for their daughters to have unsafe induced abortions.

The risks these girls faced because of first being unintentionally pregnant and second, subjecting themselves to unskilled abortion providers were obvious. In this group of 34 adolescent girls who had resorted to unsafe abortion, two arrived at the hospital in a suicidal condition, and four were admitted with septic abortion, pelvic inflammatory disease, and/or severe anaemia secondary to heavy bleeding.
DISCUSSION

The conceptual framework presented previously (Heise 1998), is an integrated ecological model developed to understand how the complexity of sexuality and reproduction is conceptualised among Zambian adolescents. This model comprises three levels and aspirer to grasp aspects from the microsystem referring to an adolescent’s individual and immediate family context, the exosystem referring to other close relationships and the immediate social context as the person directly engage in or interact with, and the macrosystem referring to the broad set of cultural values and beliefs, laws and policies, formal and informal social institutions that permeate and inform the other levels (Heise 1998) (Figure 6).

![Conceptual framework referring to different contextual levels related to adolescents’ sexuality and reproduction, Zambia.](image)

**Microsystem - Factors associated with the individual and family level**

**Socialisation and gender**

Socialisation and gender construction begins at home. However, it is important to note that any generalization needs to take into account as well as to be understood from local gender and sociocultural contexts. Some caution is further advisable when we attempt to generalise about gender differences, because boys and girls constitute heterogeneous population.

The results from this thesis provide several examples of how girls are in many ways disadvantaged in comparison to boys. From the perspective of the family, the underlying messages, expectations and responsibilities expected from adolescents affect boys and girls differently. Social constructions of the different gender roles, sexual scripts and
responsibilities have consequences for boys’ and girls’ abilities to communicate, seek information, and make decisions, patterns which may last throughout the life cycle (Weiss et al., 2000; WHO, 2000). Family influences with contextually defined gender roles, and expectations for boys and girls contribute to perceptions of themselves as gendered beings, and therefore their identities as well. The boys felt that they were the privileged sex. They had easier access to education; had more freedom, and more spare time with fewer restrictions than the girls, and more importantly, they had the rights to their bodies and their sexuality. Girls on the contrary were less self-assured, more dependent, and subjected to more control. They were fostered to be subservient both in the family, and they were expected to purport themselves as inferior to boys. They were further supposed to be ignorant about sexual matters. Ritual initiation of girls into culturally accepted behaviour has a long tradition and is still common in present day Zambia (Richards, 1956; Kapungwe, 2003).

Education
Many girls in this study had a great wish to continue school, which was also one of the main reasons for girls to terminate unintended pregnancies. To be a girl in Zambia entails fewer possibilities to education and girls in fact, spend fewer years both in primary and secondary school, which will limits their future development and potentials in life. Due to poverty, parents would rather see their sons continue education than their daughters. This is because sons, by tradition, will become heads of the households and shoulder the socioeconomic responsibilities for the family as adult men. For young girls, being in school could mean exposure to sexual harassment or the risk of becoming pregnant, which inevitably results in being forced to drop out of school (Fetters et al., 1997; Cornwall, 2006). In conditions of poverty, many girls had limited options. They had to work at home, as street vendors, sell goods at the market or to simply stay at home to take care of sick family members.

Communication
Boys in the FGDs showed concern about the parents who, they said, were unable to pass on appropriate knowledge to their children on sexual and reproductive health matters, either because they lacked such knowledge themselves, or felt it culturally inappropriate to talk to their children about such matters. Parental communication or lack of communication with their children has grave consequences for the younger generation. Some research has shown that poor parental communication about sex with their children, due to lack of confidence, skills, or a negative attitude is strongly associated with low use of condoms and contraception as well as poor sexual health among their adolescents (Aggleton & Campbell, 2000).
Violence
Data from the FGDs suggests that domestic and sexual violence against women and girls was common, and the reasons for such violence, according to the boys, was inability to communicate, and lack of negotiating skills about sexual matters. In the study with adolescent girls, the presence of sexual violence was confirmed and it was further regarded as relatively common in relationships. Social contact between the opposite sexes is likely to lead to sexual activities, which was often initiated by the male partner. However, it was pointed out that if a girl refused sex when a boy wanted to ‘play sex with her’, she might be beaten up or raped. Showing respect for the wishes of the girl was not considered a relevant issue. However, some of the boys viewed having to resort to violence with shame, regarding this as indication of masculine weakness. Deprived communication and its consequences for children have been observed in children who have witnessed parental violence at home. Fathers who respond to conflicts by resorting to physical violence instead of open verbal communication, and mothers who respond by being submissive, have been seen as having a long-term effect on the children, who would exhibit similar behaviour in conflict situations when they grow up (Heise, 1998, Naved & Persson, 2005).

Decision-making
Another relational pattern of concern was that of decision-making authority in the family. Decision making from different contexts was brought up in the FGDs. In the abortion study, it was obvious that the male partner of the pregnancy played a great part in the final decision for the girls to abort. Referring to the general views in the study, results show that decision-making in adolescent sexual relationships was primarily in the hands of the male partners, and very little was left to the adolescent girls, or as shown in this except from a FGD:

“... if she start deciding for you, you end up like a fool. Don’t let her rule you, discuss, give her a chance, but then... you [the boy] conclude nicely.

Decision-making is a personal ability. According to Beyth-Marom et al. (1997), decision-making is the process of choosing what to do, by considering different choices, and analysing the possible consequences of each choice, which in turn require specific cognitive abilities. Such decision-making processes mature with age and experiences. When adolescent boys are said to make the decision in sexual matters, which alternatives are they choosing from to find the best solution? And what consequences are they assessing before the decision is made? Many interventions with adolescents are designed to include changing their actions. Two examples are campaigns like “Say No” (to sexual activities), and “Abstain” (from sexual activities). Beyth-Marom et al. argue that such messages ignore the possibility of listen to alternative options and assessing the consequences of each option. She means that decision-making is dependent on people’s beliefs and knowledge, and therefore it is important to know what adolescents know in order to increase the chance of their making informed decisions. This reasoning
is further attached to the concept of “risk-taking behaviour”, for which adolescents often are blamed for. Jessar (1991) argues that a “risk-taking behaviour” entails conscious awareness of the risk or danger involved in deliberately seeking a thrill. Jessar suggests instead using the term “risk behaviour”. He claims that very few adolescents initiate sexual intercourse with the primary intention of risking to get STI/HIV infection or pregnancy, but rather there are other driving forces behind their behaviour.

Boys and girls who grow up witnessing patterns of unequal decision-making, with a dominant father and an acquiescent mother, or in homes where domestic violence is common, may themselves begin to deal with conflicts by applying their earlier experiences in their own lives as adults (Naved & Persson, 2005).

**Fear**

Accurate knowledge about reproduction and health risks is an important precondition for health-enhancing behaviour change for both boys and girls. Nevertheless, girls more than boys have to carry feelings of shame, and being stigmatised or blamed for their sexual behaviour, pregnancies and abortions (Weiss et al., 2000; Rahm et al., 2006). Adolescent girls’ lives appear to be filled with fear; fear of expulsion from school, fear of side effects from contraceptives, fear of pregnant, and fear of parental rejection if they become pregnant, fear of being chased away from home if they become pregnant, fear of legal reprisals if they have an illegal abortion, and finally fear of abandonment by a boyfriend if unintended pregnancy occurs.

Boys’ fears are different. Boys tend to view sex in terms of performance and achievement. They fear about not being able to prove their masculinity explicitly, which might lead to loss of their hegemonic position in the peer group (Connell1995; WHO, 2000). But practising sex also brings with it the fear of contracting HIV or as one of the boys expressed it:

... today, in my life, I only fear HIV/AIDS which kills people like grass and ants. Parents die and I get guardians who mistreat me or ... I might become a street child – confusion.

Another fear noted among the boys was that a man’s role as the primary income provider is eroding, and this change may be characterised as a “less need for men”, which is linked with reducing opportunities for boys and increasing opportunities for girls (WHO 2003).

**Exosystem - Factors associated with relational and social context**

**Adolescent sexual relationships**

The socialisation and gender construction, which starts at home continues and is fuelled by the norms and values prevailing in the close social environment. If the formal sector
is weak, the informal social structures will have a stronger effect. In this thesis, peer
groups played a major role in adolescents’ attitudes and behaviour and in encouraging
sexual aggression.

It is well known that adolescents exhibit an early onset of sexual activities in sub-
Saharan countries, thereby increasing their length of exposure in usually unprotected
sexuality activities before marriage (Weiss et al., 2000). In our study about girls
admitted to hospital for incomplete abortions, we noted some differences with regard to
education, civil status and partner relations were noted. The girls with induced abortions
(IA) were more often single, in school, and in the higher grade. Studies in neighbouring
countries have shown similar results (Rasch et al., 2000; Manzini, 2001).

The majority of the girls in the study said their relationships with boyfriends/ partners
were regular and stable, but very few knew their partners’ previous sexual history and
relationships. Some girls knew that their partners had girlfriends besides them, but they
reconciled that by saying “I don’t know my boyfriend’s movement”. Premarital
relationships may of course vary in length and regularity and comprise feelings of both
jealousy and suspicion. Multiple partners for men but not for women have been
documented as common in many countries and well entrenched by adolescents (Weiss
et al., 2000; Reid & Walker, 2005). Nevertheless, unfaithfulness and girls’ rejection of
sex were the most common reasons for partner violence. Research suggests that
adolescents’ relationship dynamics are characterised by unequal decision-making
between partners. Girls’ subordination, poor communication about sexual matters, lack
of preparation to initiate sexual activities, and gender-based differences are some of the
reasons to become sexually active. For the girls, a relationship was a more emotional
experience or was based on material gains, while the main motivation for boys are sex
desire, peer pressure or masculine esteem (Calves, 2002; Varga, 2003; Wight et al.,
2006).

Large age and economic asymmetry between partners is not uncommon in the sub-
Saharan context, and often with money or gifts are often exchanged for sex
(Silberschmidt & Rasch, 2001; Luke, 2003). Among all the couples in the present study,
five of the male partners were twice as old as the girls, and three-fourths were 25 years
or younger. Exchanging sex for economic gains does not only exist where age and
economic differences are large. It was also practiced between the adolescents, as some
adolescent girls did not provide sex for free, but rather a resource they can exploit.
However, it was by any means comparable to prostitution. (Silberschmidt & Rasch,
2001; Blum & Nelson-Mmari, 2004; Wight, 2006). Very poor girls usually used the
money they received for essential things such as food, cloths, and schoolbooks, while
for more affluent girls it could be used to show off their gains from boyfriends to peers.
**Contraception**

Responsibility for contraception was the girls’ domain; however, it was rarely used, and rarely openly negotiated or discussed with their partners, according to the girls in the study, similar to that described by Varga (2003) in a study in South Africa. Girls’ subordination to men as decision makers on sexual matters has shown the difficulty for girls to suggest and negotiate condom use. Condom use does not appear to be well integrated in young men’s and women’s relational sexual scripts. Several studies have shown that while the percentages of young people who have multiple partners remain high, condom use has remained low (Meekers et al., 2003). It is argued that problems in using condoms are not simply products of embarrassment (Taylor, 1995). Condoms are usually introduced only to prevent the negative aspects of sexual relationships. It is recommended that if condoms are going to be used consistently they need to be perceived as part of boy’s and girls’ romantic relationships, something to be seen from a positive light, rather than being associated with casual sex, multiple partners, and STI/HIV (Hynie, 1998). On the contrary, a stable, romantic and loving relationship is seen as “protective” among young people, and therefore using a condom is a sign of distrust towards the partner. However, girls appear to condone their male partners’ unfaithfulness more easily than boys do. But if non-use of a condom is a sign of trust in a partner, as shown in other studies, then it is important in a country with high prevalence of HIV to recommend dual protection (Manzini, 2001; Reid & Walker, 2005). Moreover, Berer (2000) states that increased use of only condoms may result in higher abortion rates, if more effective contraceptive methods are not used, particularly for those who need dual protection from both STI/HIV and unwanted pregnancies.

**Adolescent pregnancies**

Sexuality and procreation have, to a certain extent, become two separate things, decoupled from marriage; at the same time, many young people are getting married later in later in life (Senanayake et al., 2001). “Informal relationships” and adolescent pregnancies are regarded common in Zambia (CSO, 2003). The girls in the study gave different reasons why an unmarried girl could become pregnant, but it was also explained in term of lack of knowledge about basic human reproduction, lack of access to contraception, or as inaccurate beliefs (e.g. that the girls was too young to conceive), traded sex for material gains or due to sexually assault. However, for other unmarried adolescets, motherhood might be seen as a way to achieve adult status, or as a strategy due to poverty, to get married and be provided for (de Bruyn & Packer, 2004).

**Spontaneous and induced abortions among adolescent girls**

The girls admitted to UTH for incomplete abortions presented both planned and unplanned pregnancies and had spontaneous abortions (SA) and induced abortions (IA). The magnitude of the problem with unsafe teenage abortions in Zambia is not known, but generally presumed to be quite common (Koster-Oyecan, 1998). Abortion is socially unacceptable and therefore many girls and women have unsafe and illegal
abortions secretly, by unskilled illegal providers who use unsafe and hazardous methods. This happens despite the fact that Zambia has a law that permits abortion, although with consent of three registered physicians.

Empathetic and non-judgmental interviews with the 87 adolescent girls were conducted to try to identify girls who had resorted to unsafe illegal abortion and due to complications of the procedure were admitted to hospital. In our study it was found that 39% of the interviewed girls (aged 13-19) had had an induced abortion. Similar studies and methodology in Tanzania (Rasch et al., 2000) and in Nigeria (Okonofua et al., 1999) indicate that 55% and 23% respectively were induced abortions among adolescents less than 19 years of age.

Studies from sub-Saharan countries show that women who have resorted to unsafe illegal abortion are unwilling or reluctant to reveal their experiences, due to lack of confidence in hospital staff, social stigma, or fear for legal reprisals (Munasinghe et al., 2005; Gebreselassie et al., 2005). The penalty for a woman who undergoes an unsafe illegal abortion in Zambia is seven years’ imprisonment. However, none of the girls in our study said they were aware of the possibility of having a safe abortion in accordance with the Termination of Pregnancy Act. As Morroni et al. (2006) point out, adolescent girls and women must know and also have the right to know that safe and legal abortion is available, which is also clearly stated by the ICPD. From a human rights perspective it would be considered beneath dignity to leave adolescent girls without adequate information about contraception services and safe assistance in cases of unwanted pregnancies.

Almost 60% of the girls with IAs were performed before the end of gestational week 12, while the majority of SAs occurred after gestational week 12. The girls with IAs were still in school and had reached the last grades, which was also seen in a study from Nigeria (Okonofua et al., 1999). Partner involvement was different between the girls in the SA and the IA. Six partners of the girls in the IA group urged the girls to have an abortion, and they also arranged and paid for the procedure; while seven other partners in the IA group denied any financial and social obligation for mother and child.

**Health education and services**

It is a concern that so many adolescents still did not practice any form of contraception, despite their knowing about HIV/AIDS, and understanding the efficacy of condom use, and/or did not wanting to become pregnant (Smith 2004). Young boys and girls cannot protect themselves appropriately if they have limited or nonexistent access to sexual and reproductive health education and services, as shown in several studies in Zambia (Webb, 2000; Magnani et al., 2002; Ndubani, 2002; Warenius et al., 2006).

Adolescents’ perceptions about sex and reproduction are profoundly ambivalent because of contradictory messages (Smith, 2004). According to Smith (2004), there are
prevailing double standards about adolescent sexuality. For boys it was acceptable, even expected and encouraged by their peers and men, to engage in sexual activities, but this was not acceptable for girls. That attitude was also reflected in sexual conduct within premarital sexual relationships, where dominant gender norms govern the male partners to be the decision-makers. Factors affecting desire and opportunity for premarital sexual activities have increased, and they can be found in the global access of mass media. The factors are linked to the gradual erosion of traditional family ties and mores, and also linked to increased migration, poverty, urbanisation, and materialism (PRB, 2000).

Sexuality was once a taboo topic. Triggered by the advent of the HIV/AIDS pandemic, sexuality has become a more legitimate discussion topic; however, several barriers still remain (Aggleton & Campbell, 2000). Even if adolescent boys and girls are not accepted as sexual beings, whether or not they are sexually active, they have their legal rights to obtain accurate health education. Betts et al. (2003) argue that it is important but not sufficient for boys and girls to receive medically correct information about human reproduction, STDs/HIV, and contraception. Information should include skills in relationship negotiation, handling pressure, refusal, decision making, and postponing sexual involvement. Sexual education has failed to address social meaning, and it tends to isolate adolescent sexuality from the context within which it is experienced and where sexual experiences take place (M’koma, 2003).

The key concept of health education is to make adolescent boys and girls aware that there are both opportunities and risks associated with many of the behaviours in which they engage. It is equally important to enable them to make positive and healthy choices. Many adolescent boys and girls may in fact underestimate the risks associated with sexual behaviour in which they are engaged, partly and as already mentioned, due to lack of knowledge and experiences (Jessor, 1991). Courtenay (2000) indicates that boys tend to reject healthy beliefs and behaviours as well as deny illnesses and vulnerability; these tendencies are explained by their fear of a reduced image of masculinity and also by the contradictory messages they receive. Nevertheless, adolescent boys’ health and health behaviours as well as their roles as decision makers are directly related to the health of adolescent girls.

ICPD in Cairo in 1994 embraced reproductive rights and health from a broad spectrum where adolescents were clearly included, and addressed ‘Reproductive rights’ were defined as rights for an individual who has reached reproductive age, thereby including adolescents (Sundby, 2006). With respect to adolescent girls it is suggested that greater awareness of the “limiting forms of femininity” available to women should be widened and known for them (Aggleton & Campbell, 2000).

**Macrosystem - The larger social context**

The macrosystem here refers to the broad set of cultural values that permeate, inform and define what are the parameters of acceptable praxis within the local contexts. As
implied in the term, it comprises forces that impinge on the formal and informal structures in a society, of which laws and policies, what ought to constitute human and reproductive rights, provisions of health and education, and similar issues, are primary examples. Nonetheless, it is usually the case that local contexts adapt and modify the messages that emanate from the macrocontext. The prevailing situation that exists in a given social context is, therefore, to be derived from the interrelation between the macro- micro- and the exosystem. Issues such as how, religion and gender power relations are perceived and acted upon at family level, for example, are partly shaped by forces from outside the system but also converting into local versions of general mores and praxis. Thus, research focusing on sexual and reproductive health situation of adolescents in Zambia must recognise the primacy of culturally constructed messages about what are the proper roles and behaviour for boys and girls (Heise, 1998).

Generally, the macro economic situation of the society in which we are born and in which we live is the principal determinant of our life condition, particularly our health status. Politicians and legislators play an important role in the shaping of their societies, as they control the allocation of resources, as well as enact legislations and define policies. Regarding adolescents girls’ and women’s health, laws and policies can either advance their rights and health or can obstruct girls’ and women’s autonomy and choice (Cook et al., 2003).

An important corollary of the focus of this thesis on adolescents is also the reflection on what sort of persons they are socialised into and how they can turn into to healthy and sound citizens (Berger & Luckmann, 1966 p.151). Approving of even being acquiescent to domestic and sexual violence, accepting and ideology that tolerates male dominance and superiority to women, male control of family and women, are certainly not a way to achieve and promote a health and sound society. The ultimate consequences of this situation in these times of HIV/AIDS are very grim indeed. Therefore a serious commitment, at all levels and sectors is imperative if the life-conditions of these young people, who are the future of the nation, are to be improved.
CONCLUSIONS

- Growing up in Zambia as adolescents entails exposure to contradictory messages influenced by traditional and new norms on appropriate social and sexual behaviour.
- Peers are important in identity building and adult guidance is missing.
- Premarital sexual relationships are common and considered a prerequisite for boys to achieve adult autonomy.
- Lack of sexual education and limit access to contraception and safe abortion care, expose both adolescent girls and boys to adverse transition into adulthood.
- By using an empathetic interview approach it was possible to classify the girls with alleged incomplete abortion as having either had unsafe abortion or spontaneous abortion.
- Premarital unintended pregnancies are often followed by unsafe abortion done by unskilled persons.

RECOMMENDATIONS

- Boys and men should be involved in a more systematic manner in the quest for gender equality and for responsible sexual praxis in their sexual relationships.
- Both girls and boys should have access to knowledge about the processes of procreation, about their emerging sexual feelings and desires and about maintaining their sexual health. They also have the right to the emotional and social skills that are a prerequisite to healthy, sound and gender equal relationships.
- Adults, parents, and health staff should recognise adolescents as sexual beings and promote adequate and correct information which is suitable for each one’s need.
- Future research is needed on the prevalence of initiation rites and their impact on adolescents’ sexual and reproductive health.
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REFERENCES


Britten N. Qualitative research: qualitative interviews in medicine research. BMJ 1995;311:251-3.


Carey MA. The group effect in focus groups: planning, implementing, and interpreting focus groups research. In: Morse JM. Control issues in qualitative research methods. London: Sage, 1994:228.


Peddie VL, Teijlingen EV. Qualitative research in fertility and reproduction: Does it have any value? Hum Fertil 2005;8:263-7.


