

SEXUAL BEHAVIOR AND HIV RISK IN
KENYA: EMPOWERING YOUTH IN
HIV PREVENTION

CAROLYNE WANJA NJUE

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SEXUAL BEHAVIOUR AND HIV RISK IN KENYA: EMPOWERING YOUTH IN HIV PREVENTION

SEKSUEEL GEDRAG EN HET RISICO VAN HIV IN KENIA: JONGEREN LEREN HIV TE VOORKOMEN

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Chapter 1

Introduction

This thesis explores three topics concerning youth in Kenya: their knowledge and information needs regarding sexual and reproductive health including HIV/AIDS; their sexual risk behaviour; and HIV prevention efforts targeted at them. The data on which these studies are based were collected in Kenya during 1999-2004. The studies were conducted in collaboration with several institutions including the Population Council in Nairobi, Institute of Tropical Medicine in Antwerp, SOMA-Net in Nairobi, Erasmus MC in Rotterdam, and NUFFIC in The Hague.

The studies that are described in this thesis fill gaps in knowledge concerning risk factors that are crucial in the spread of STI/HIV, but have received little attention in the literature. Despite a growing interest in adolescent health, much remains unknown about the factors that enhance sexual risk among young people. For example, why are HIV rates in Kenya so high among young people and especially young women? Few studies have focussed on the ways in which dominant norms and youth culture place young people's sexual health at risk. Understanding the way in which young people grow into adulthood, requires exploration of social situations and relations. Knowledge of these aspects can help to develop prevention strategies to control the spread of HIV/AIDS.

This thesis aims to provide insight and knowledge that is essential for all parties involved in policies and programs on sexual and reproductive health education in Kenya, and aims to assist in identifying effective strategies. This introductory chapter provides the demographic, socio-cultural and economic background. The chapter ends with the research questions and an outline of the thesis.

1.1 Youth and the HIV/AIDS epidemic

Sub-Saharan Africa has been more devastated by the HIV/AIDS epidemic than any other region in the world. The epidemic is taking an enormous toll on the region's youth [1]. Especially young women are vulnerable [2-3]. The high risk of HIV transmission to very young women has various reasons. An important role is played by bio-physiological factors, such as still developing bodies with immature vaginal tissues [4,5], high transmission risk at first sex because of the presence of blood due to hymen breaking [6], and high susceptibility to STI infection [7, 8]. Individual and cultural factors, such as lack of condom use, young age at sexual debut, and early marriage, also plays a role [9]. Sexual network factors, such as number and concurrency of sexual partners [10], and marked age differences between young women and their male partners [11], are also important.

Studies show strong linkages between HIV infection and gender inequalities [12-14]. In several African countries, norms about masculinity may put men under pressure to have multiple sex partners [15], and may prevent them from seeking information because they are supposed 'to know it all', whereas their female sex partners cannot ask questions because they are 'not supposed to know' [16]. Deeply rooted gender norms are also a factor contributing to possible sexual coercion in childhood and adolescence. Data are becoming available that document the important role of sexual abuse of young people in the transmission of HIV [17]. Girls are vulnerable to being coerced into sex (vaginal or anal) or raped, often by someone older who has had greater exposure to the virus [18-19].

AIDS is often called a disease of poverty [20-21]. People who are poor often lack the necessary sex education; therefore they are more likely to indulge in risky behaviour [22-24]. Poverty leads to poor nutrition and a weakened immune system, putting poor people at high risk for tuberculosis and STI. People who are poor may lack the finances to seek treatment for STI, making them more vulnerable to HIV infection [2,25]. Poverty and gender inequality are intertwined; gender norms may deny young women education and work opportunities, pushing them into dependence and destitution. Economically deprived women are likely to trade sexual favours for money or material goods [11,23,26-29]. Conversely, HIV infection may increase poverty. On an individual level, AIDS may lead to loss of work (and thus income), medical and funeral costs, and spending on orphans taken up by family members who themselves are poor. These orphans receive less schooling, nutrition and care than other children, making them vulnerable to HIV infection [30]. On a national level, AIDS may lead to deterioration of the health care

system, weakening of the educational system, and slowing down of economic growth [1,21,23].

Another factor behind the epidemic is young people's lack of access to adequate sexual health information and services. Despite the increasingly sexualised mass media, many Africans feel unable to discuss sexuality because of perceived barriers [39]. For example, frankness about sexuality is not considered appropriate for females in many African societies. It would indicate a lack of sexual innocence, and a divergence from the 'passive' role that is expected from women [16]. Sexuality is often shrouded in silence and secrecy, and it often elicits feelings of shame and embarrassment rather than joy [15,16]. It is difficult for youth to access reproductive health services such as sexual health advice, condoms and other forms of contraception, or voluntary counselling and testing services for HIV and other STIs [2,31]. In particular, unmarried adolescents have great difficulty to get sexual health services. Factors cited in this respect include inaccessibility, shyness, judgemental attitudes of staff, lack of privacy, and costs as primary reasons for not seeking services [30-31].

Only by focusing on prevention of HIV transmission among young people, present day HIV control programs will be able to curb the HIV/AIDS epidemic [2]. In a majority of the sub-Saharan countries, life-skills based HIV prevention programs for both in and out-of-school youth are now in place [2]. Leaders of many African nations, once unable to acknowledge the presence of HIV/AIDS, now publicly address HIV prevention and appoint task forces to mobilize and coordinate efforts. In addition, business coalitions and non-governmental organizations (NGOs) are encouraging youth to get involved in programs to stop the spread of HIV. Many youth programs are utilizing peer education, advocacy, youth-friendly service delivery, and social marketing to battle HIV infection in sub-Saharan African nations [32].

Studies show that these interventions are fruitful. UNAIDS has recently indicated that in 12 of the most affected countries, HIV levels have decreased significantly among 15-24 year olds [33]. In Kenya, prevalence among the 15-24 year fell by about two thirds between 2000 and 2005. In urban areas of Malawi and Côte d'Ivoire, the prevalence in the same group fell by over half, while in Burundi and Haiti prevalence dropped by nearly half. Reductions of more than a third took place in Namibia, Zimbabwe, Botswana, Cote d'Ivoire, Rwanda and Lesotho [33]. In spite of these favourable trends, the problem remains enormous, and more efforts are needed to understand the high HIV prevalence among young people in sub-Sahara Africa, and to prevent them from getting infected.

1.2 HIV prevalence among youth in Kenya

Sub-Saharan Africa accommodates just over 10% of the world's population, but accounts for two-thirds of all HIV infected people [1]. Overall, rates of new HIV infections in sub-Saharan Africa appear to have peaked in the late 1990s, and recent figures from UNAIDS show that the prevalence seems to have declined slightly, partially due to improved awareness and use of antiretroviral medicines [1].

The HIV prevalence across this region ranges from less than 1% in Madagascar to over 20% in Swaziland; HIV prevalence in Zambia and Zimbabwe is 10-15%, in South Africa around 18% and in exceeds 20% in Lesotho and Botswana [34]. Adult HIV prevalence in East Africa exceeds 5%, Kenya has a prevalence of 7%, compared to 5% in neighbouring countries Tanzania and Uganda [34], and over 10% in countries in southern Africa. West and Central Africa experience a much lower prevalence: adult HIV prevalence is below 1% in Cape Verde, Niger and Senegal, 2% in Ghana and 4% in Côte d'Ivoire [34].

Estimates suggest that up till 2011 more than 1.5 million people have died of HIV/AIDS-related causes in Kenya. Up to 2 million people in Kenya are HIV infected. Of these, 300,000 are receiving antiretroviral medication, 28,000 of whom are children [3]. The HIV epidemic peaked in the late 1990s, with an overall prevalence of over 14% in adults [35]. Adult HIV prevalence has now stabilized around 7.3 percent [36-37]. Prevalence in the urban population is 8.4%, somewhat higher than the 6.7% in the rural population. The epidemic is geographically diverse, with a particularly high prevalence in Nyanza Province (15%), and a higher than national average prevalence in Nairobi (9%) and Coast Province (8%).

Although the overall rate of new infections with HIV and deaths from AIDS has been falling, young people are still at high risk of contracting the virus [3,35-36]. Young women aged 15-24 years are four times more likely to become infected with HIV than men of the same age [35], see Table 1.

Table 1: HIV prevalence among 15-24 year olds in Kenya, 2007

	Male	Female
Low estimate	0.8	4.6
High estimate	2.5	8.4

Source: UNAIDS. Report on the Global HIV/AIDS Epidemic. Geneva: UNAIDS, 2008

1.3 Theoretical considerations

Early in the AIDS epidemic, limiting the epidemic was seen as an issue of changing the behaviour of individuals in high-risk groups. Risk behaviour was measured in knowledge, attitudes and practices (KAP) surveys [37]. Epidemiological models in the 1990s identified routes of transmission. “High-risk groups” were identified and interventions were targeted at these groups, which often included sex workers, truck drivers or injecting drug users [37-38]. Such a categorization may have led people to assume that they were not at risk when they did not belong to a high risk group. With the generalization of the epidemic, the focus shifted from risk group to risk behaviour [39-40]: anyone who engages in behaviour that exposes him or her to HIV is at risk for infection.

The initial approach of health promoters to address young people’s sexual risk behaviour was too simplistic [39]. Psychological theories such as the Health Belief Model [40-41] and the Theory of Reasoned Action [42-43] were applied in an effort to improve the educational campaigns [44]. These approaches posit that people will change their behaviour on the basis of rational thinking. For example, the Health Belief model postulates that people will change their behaviour if they perceive a disease to be severe, if they feel they themselves are susceptible, and if they perceive high benefits and low barriers in adopting their behaviour. However, such models and theories have been criticised for their rationality, and for being individual-centred, thereby neglecting the social contexts in which actions become meaningful [45-46]. Applying these models and theories, which were developed in North America and Europe, to an African context poses difficulties.

Social scientists therefore began to consider behaviour as guided by cultural contexts [20,47-50]. For example, notions of what it means to be a ‘real man’ in a particular social context can powerfully influence sexual risk behaviour. Furthermore, what may seem to an outsider to constitute sexual risk taking, may be viewed as quite normal by the people involved, showing for example that one is respecting or trusting one’s partner [46]. Thus, one must understand the context of behaviour [39].

This cultural/contextual approach stresses the need to investigate young women’s and men’s perceptions of sexuality and gender relations, which can contribute to their risk of HIV infection [12-14,51-54]. In many cultures men control sexual decision-making, and coercive sex and sexual violence are not unusual [12,40]. Poor young women tend to engage in risky sexual activities to gain some wealth [11,21-25]. This is reinforced by a culture of consumerism, which is rising as a result of the emergence of global mass media and the increasing availability of goods. In this context, the distinction between

prostitution/sex work and intimate relationships in which money is exchanged often becomes vague [11,22-26,55].

1.4 Research questions and structure of the thesis

In this thesis, I will focus on young people in Kenya and their sexual and reproductive health, including HIV/AIDS. In particular, I will study their knowledge gaps, their sexual risk behaviour, and interventions that can protect them from HIV/AIDS. The cultural/contextual approach will be my guiding principle. The specific research questions of the thesis are the following:

1. What are the information needs and gaps in knowledge of adolescents in Kenya regarding sexuality, HIV/AIDS and reproductive health?
2. What is the sexual risk behaviour of youth in Kenya, and what are cultural, social and economic factors that create risk situations, especially for girls?
3. What are the constraints of HIV/AIDS education in Kenyan public schools, and how can community- and school-based interventions be effective in changing knowledge, attitudes and sexual risk behaviour of young people in Kenya?

To answer the research questions, we made use of both qualitative methods (in-depth interviews, focus group discussions, key-informant interviews, and “Question and Answer” exercises) and quantitative methods (structured survey interviews). Fieldwork was carried out in several parts of Kenya [see Figure 1].

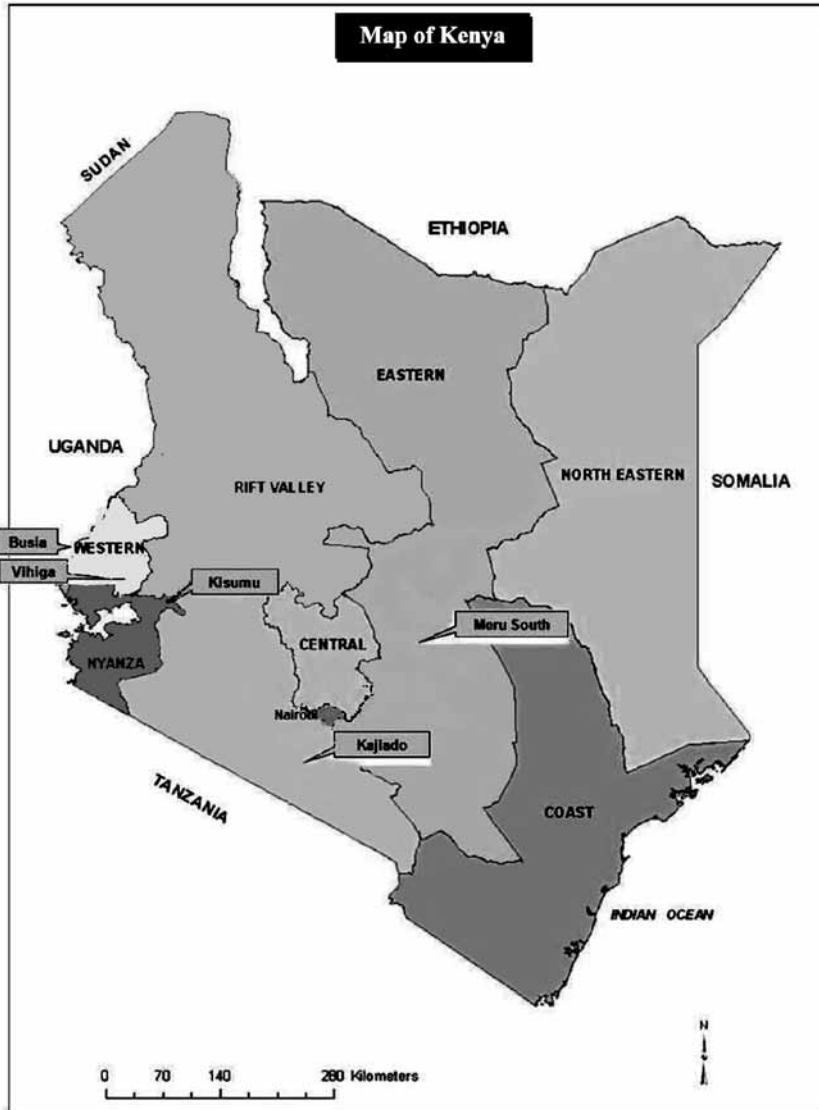


Figure 1: Map of Kenya showing the provinces and the sites where the studies described in this thesis were carried out.

Chapter 2 addresses the first research question, which focuses on knowledge-gaps amongst adolescents in Kenya regarding sexuality, HIV/AIDS and reproductive health. A qualitative study was carried out in schools in two districts in Kenya, Meru South in Eastern Province and Kajiado in the Rift Valley Province. We asked school youth to write down questions on adolescence/growing up, sexuality, or HIV/AIDS, that they felt they could not ask their parents, teachers or other adults. They could also write down any

question on reproductive health that they would like to be clarified. We conducted thematic analysis of the questions posed by the adolescents.

Chapters 3 to 5 address the second research question on sexual risk behaviour. **Chapter 3** focuses on disco-funerals as a risk situation for HIV/STI infection among youth in Kisumu, Kenya. This cultural phenomenon, where community members including adolescents congregate at the home of the deceased for several days accompanied by music and dancing, has not been described in literature. We conducted 44 in-depth interviews with male and female adolescents aged 15 to 20, and made observations during 6 disco-funerals.

In **chapter 4** we explore other risk situations for HIV/STI infection among youth in Kisumu, Kenya. It was a qualitative follow-up of the multicentre study on factors determining the differential spread of HIV in African cities. We conducted 150 in-depth interviews with adolescents' aged 15 to 20, held 4 focus group discussions, and made observations at 48 places where youth spend their free time. Our aim was to deepen our understanding of the dynamics of sexual interactions of adolescents, in order to explain the high HIV prevalence among Kisumu youth in general and specifically among Kisumu girls.

Chapter 5 is based on a chapter in *Sex without Consent: Young People in Developing Countries*. Editors: Jejeebhoy, S, I. Shah & S. Thapa, Zed Books, New York 2005. The chapter examines non-consensual sexual experiences of young people in two districts (Vihiga and Busia) in Western Province, Kenya. Face-to-face survey interviews were conducted with 3,522 adolescents aged 10-19 years. These quantitative data were supplemented by qualitative information gathered through focus group discussions undertaken prior to the survey among groups of school-going and out-of-school adolescent boys, adolescent girls and parents in the study area. Adolescents were asked whether they were sweet-talked, persuaded, or forced/threatened into sex during their first sexual experience, during the last time sex, and on any other times. A distinction was made between the types of partner the adolescent had sex with (boy/girlfriend, friend/acquaintance, or another person). Correlates of non-consensual sex among boys were examined, for boys who were perpetrators as well as for boys who were victims of non-consensual sex. We developed the chapter further for this thesis to avoid much overlap and to examine the accuracy of dimensions that reached significance in the logistic regression analysis.

Chapters 6 and 7 address the third research question and explore intervention strategies and their challenges. **Chapter 6** describes the challenges and constraints to implement HIV/AIDS education in Kenyan public schools. Using qualitative data, the chapter explores experiences of teachers and learners regarding AIDS education in Kenyan public schools.

We conducted 60 interviews with teachers and 60 focus group discussions with students in 21 primary and nine secondary schools in Meru South and Kajiado. We make a distinction between system/school-level constraints, teacher constraints and student constraints, which we illustrate by quotes from both teachers and students.

In **Chapter 7**, we describe a community-randomized controlled trial of an adolescent reproductive health and HIV intervention that was implemented in 2 districts (Vihiga and Busia) of Western Province, Kenya. The chapter compares two interventions - a community-based intervention and a community plus school-based intervention - and evaluates the impact of the interventions with regard to adolescents' knowledge, attitudes and sexual risk behaviour. To this end, 2 cross-sectional surveys were carried out in 6 communities of the study districts: a baseline survey (n=3,522) and an endline survey (n=3,758) 3 years later.

Finally, in the General discussion (**chapter 8**), the three research questions of this thesis are answered and commented upon. The implications for sexual and reproductive health policies and STI/HIV prevention in Kenya are discussed. Here, we formulate conclusions and recommendations for control measures regarding adolescents' sexual health and for future intervention research.

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Chapter 2

‘Youth in a void’: Sexuality, HIV/AIDS and communication in Kenyan public schools

Njue C., Ahlberg BM, Voeten HACM. ‘Youth in a void’: Sexuality, HIV/AIDS and communication among school youth in Kenya.’ *Sex Education* 2011; 11(4):459-470

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Abstract

The disappearance of traditional sex education during rites of passage in African societies has left many youth uncertain of where to look for information. Against this backdrop, the objectives of this study were to identify knowledge gaps amongst adolescents in Kenya regarding sexuality, HIV/AIDS and reproductive health. A thematic analysis was conducted of questions posed by 735 school youth aged 12-18 years from Meru and Kajiado Districts. Results show that many questions showed curiosity and anxiousness. Knowledge appeared to be fragmented and sometimes revealed misconceptions, which may put youth at risk. The raised themes differed by gender and age. Questions on saying no to sex, sexual violence and female circumcision were a great concern for girls. Boys were more concerned with managing boy–girl relationships, preventing STI/HIV infection, and condoms. Concern about transition to adulthood, sexuality, STI and HIV/AIDS, myths and misconceptions, and intergenerational communication cut across both genders. Older teens were more concerned with questions on boy–girl relationships, norms and values regarding sexuality, and STI. Younger teens (<15 years) wanted to know about reproduction, saying no to sex, HIV/AIDS, condoms, sexual violence and female circumcision. Compounding these challenges was the lack of intergenerational communication. The study identified important knowledge and communication gaps in sexual and reproductive health among in-school adolescents in Kenya. There is a need for sex education interventions for different age groups and genders. These interventions should work with parents, teachers and health professionals

Background

The HIV pandemic is creating untold suffering to young people in sub-Saharan Africa. In Kenya, youth aged 10-24 years, who account for 36% of the total population, have the highest percentage of new HIV cases (Central Bureau of Statistics, Ministry of Health, and ORC Macro 2004). In 2005, 75% of new HIV infections occurred among youth aged 15-24 years (Government of Kenya 2005). This is an increase from the findings of the Kenya Demographic Health Survey in 2003, which reported that 50% of the new HIV infections occurred in youth (Central Bureau of Statistics et al. 2004). Although 8% of youth in Kenya are aware of HIV/AIDS issues, 80% have at one time engaged in unprotected sexual intercourse and 60-70% are at risk of being infected (Central Bureau of Statistics et al. 2004; Johnston 2000). Studies have shown that the increase in sexually transmitted infection (STI) and HIV/AIDS among young people corresponds to earlier initiation of sexuality. The situation of the youth is further exacerbated by their sheer numbers, position in society and lack of proper information (Nzioka 2001; Ajayi et al. 1991; Kiragu and Zabin 1993). Examples have featured in the local press: 'Girls between the ages of 11 and 13, most in standard five and six . . . are naïve and are easy to prey on', as quoted by a teacher trying to explain the high prevalence of pregnancies in Kenyan primary schools (East African Standard 2004).

In African societies, sex education was traditionally given during the pubertal rites of passage. It is during these formative years that patterns of behaviour were developed that either protected young people or placed them at risk later in adult life (Ahlberg 1994). However, these rituals are being rapidly abandoned without being replaced with an alternative (Kirstan 1997). The disappearance of traditional fora for sex education has left many young people uncertain of where to look for information and what kind of information they need to handle sexuality issues. Because sex education was traditionally given by grandparents or aunts and uncles, many parents are in a dilemma about what to say, how to say it, and also what not to say (SIECUS 2003). Several studies have documented issues relating to parent and adolescent competence, dilemmas and challenges to communicate about sexuality (SIECUS 2003; Dilorio, Pluhar, and Belcher 2003; Rosenthal and Feldman 1999; Kiragu 1995; Kirkman, Rosenthal, and Feldman 2002). In some communities, sexuality is even labelled a taboo subject in public domain discussions. In many institutions and fora the subject of sexuality is treated with caution as it is considered 'sensitive', while some adults believe that giving youth information about sex will make them even more sexually active (Boler et al. 2003). Adolescents' ignorance in sexual matters is often viewed as a sign of innocence, while having much knowledge about sex, especially for girls, is seen as a sign of being immoral (Gupta, Weiss, and Mane 1996). Consequently, many young people are growing up without the right

knowledge and skills to enable them to protect themselves and each other from STI/HIV, unwanted pregnancies and other problems.

Much of the research in youth and sexual risk behaviour has adopted the context of adult activities and concerns (Boler et al. 2003; Gupta, Weiss, and Mane 1996). Furthermore, in current AIDS-prevention efforts, including sex education and life-skills training in schools, adults have mostly decided on the way the youth should be educated. Young people are usually not proactively involved in the planning and development of these sex education interventions (Aggleton and Warwick 1997). The risk of this is that youths' own points of view regarding sexuality are rarely addressed. The information that is given in these interventions is therefore often not understood, or it is too far from the experience and interest of the youth. There is a shortage of data on how and to what extent young people themselves talk about their sexuality, gender issues and bodily functions.

In this paper we want to illustrate the problems in information and education amongst youth regarding adolescence, sex and sexuality, and reproductive health, including STI and HIV/AIDS, by providing insights into what adolescents themselves would bring out as an issue when they are probed. We examine the following research question: Which questions do young people feel too uncomfortable or embarrassed about to discuss with their parents, teachers or other adults? To answer this question, we have asked school youth to write down sensitive questions that they struggle with and that are left unanswered. Not much research has been done, as far as we are able to identify, on the 'latent' or 'taboo' questions that young people would like answered. We believe that this information is relevant for policy-makers and other stakeholders in the field of HIV prevention, in order to tune their interventions, curricula and education to the information needs of young people.

Methodology

For this study, a question and answer (Q&A) method was used with pupils and students. The research was carried out in schools in two districts in Kenya: Meru South in Eastern Province, and Kajiado in the Rift Valley Province. The two areas are inhabited largely by the Meru and the Masai people, respectively. The two sites differed regarding HIV prevalence rates: in 2001, prevalence was 38% in Meru South and 7% in Kajiado (National AIDS and STDs Control Programme 2001). Using the National Master Sample frame from the Central Bureau of Statistics, one division was sampled randomly within each district: Mwimbi Division in Meru South, and Isinya Division in Kajiado. Mwimbi had a total of 59 public primary schools and seven secondary schools, while Isinya had 21 primary schools

and two secondary schools. The study aimed to include one-third of the total of 89 public schools; that is, 30 schools. All nine secondary schools, three for boys and six for girls, were included in the study. The 80 primary schools were divided by district, school type (day vs. boarding schools), gender coverage (boys vs. girls vs. mixed schools) and by location (semi-urban vs. rural areas), and 21 schools were randomly sampled from these categories including at least one school per category.

Write-in Q&A exercises were conducted in the 30 selected schools to gain insights into respondents' sexual and reproductive health information needs. The lottery method was used to select 25 youth per school. Every fifth pupil/student was sampled. The research team aimed at a sample of 375 respondents per district to make a total of 750 respondents. The primary school participants ('pupils aged 12-14 years') were drawn from upper primary school (Classes 6, 7 and 8), while the secondary school participants ('students aged 14-18 years') were drawn from Forms 1, 2 and 3. Form 4 students were excluded from the study due to time constraints related to their final-year examinations. In mixed schools, the sample of respondents was drawn with an emphasis on even representation of both sexes; for example, in a school with mostly boys, the girls were over-sampled.

Because of the importance of ensuring that participants are protected when collecting sensitive information, the Ministry of Education, Science and Technology reviewed the study design and data collection procedures and granted approval of the ethics for the study (Schenk and Williamson 2005). Active informed consent to conduct the study was further obtained from the District Education Office, school principals and parents. Adolescents younger than 18 years old are considered legal minors in Kenya and therefore, during the recruitment process, the parents or guardians of pupils/students younger than 18 were asked to provide written permission; if they approved, the pupil/student was then asked for their informed assent to participate on the day of the study. No parent/guardian refused to give permission for a child to participate in the Q&A exercise and 98% of those selected to participate gave their assent.

In respect to this, provisions were made to train fieldworkers to ensure that guidance on ethical conduct was clearly understood and implemented. The training included the meaning and process of informed consent and the importance of protecting the privacy of subjects and the confidentiality of the information obtained from them. On the study day, the purpose of the study and the steps taken to maintain confidentiality and anonymity were revisited and the method explained. The Q&A method is an interactive exercise whereby questions can be raised on a specific issue and answers are provided within that specific perspective. The context can be used to educate, clarify issues or resolve ambiguities. Blank papers and pens were given to the pupils/students and they

were requested to write their age and sex, but not their names, on the answer sheet. To increase confidentiality, fieldworkers conducted the exercise and the teachers were requested to leave the classroom during the exercise.

For the Q&A exercise, the following question was posed in English, Kiswahili (official languages in Kenyan schools) and the local languages (Kimeru in Meru and Maa in Kajiado): 'Write down a personal question on adolescence/growing up, sexuality, HIV/AIDS that you feel you cannot ask your parents, teachers or other adults. You can also write down any question on reproductive health that you would like clarified'.

The pupils/students were encouraged to use the language they felt most comfortable with. On average, the exercise took approximately 40 minutes. At the end of the exercise, all the sheets were collected by fieldworkers and stored safely for compilation and analysis. The questions have been taken as a basis for an intervention implemented at community level to address adolescents' sexual and reproductive health needs.

The team of trained fieldworkers was also responsible for the data management. To ensure accuracy, the questions written down in the local languages were translated into English by another team of Kimeru-speaking or Maa-speaking fieldworkers, originally from the areas where the research was being conducted and therefore familiar with local dialects. The questions were typed and imported into QSR NU*DIST. This software for managing qualitative data was utilised for coding the data (Gahan and Hannibal 1998). Through the process of open coding, an attempt was made to identify the main theme of the question, also for questions that addressed several themes. Nine main themes emerged from the questions and are discussed below: transition to adulthood, sexuality, STI and HIV/AIDS, myths and misconceptions, pregnancy, condoms, sexual violence, female circumcision, and intergenerational communication.

Results

A total of 735 school youth participated in the Q&A exercise; that is, 360 and 375 respondents in Meru South and Kajiado districts, respectively. Primary school pupils accounted for 70% (n = 514) while secondary school students accounted for the remaining 30% (n = 221). The sample comprised 43% male (n = 315) and 57% (n = 422) female respondents. On average each student asked two questions. In total, 1846 questions were asked; 82% of these were covered by the nine main themes described below. The results are categorised by older teens (secondary school students) and younger teens

(primary school pupils), and by gender. The ages of the respondents ranged between 12 and 18 years, with the mean age being 15 years.

Table 1 presents (sub-)themes of questions, by gender and age group. Both boys and girls had questions on physical changes that happen in adolescence, such as 'why do boys' voices break?' or 'why do girls bleed and boys do not?'. There were also questions on the biological aspects of reproduction: 'does growth of breasts show that girls are ready to have babies?' or 'what do our parents do to get babies?' Students in the primary schools had more questions on biological aspects of reproduction than secondary school students, reflecting the acquisition of knowledge as one grows older.

Many questions on sexuality concerned sexual intercourse, boy-girl relationships and saying no to sex. The respondents appeared to ask some of these questions guided by curiosity and probably experience: 'what does someone do when having sex?' or 'why does someone feel pain when their virginity is being broken?' Mostly boys posed questions on managing boy-girl relationships: 'does having a girlfriend mean playing sex?' Particularly fraught with anxiety were questions regarding 'saying no to sex', especially among the younger girls. For example, 'how do I say no to a boy who wants to play sex with me or to touch and fondle me?' or 'how can a boy prevent other boys from having sex with him?'

Table 1: Summary of questions regarding sexuality and reproductive health, raised by youth in Kajiado and Meru South, Kenya

Theme	Sub-theme	Illustrative questions raised by youth	Gender and Age-group ^a
Transition to adulthood	Physical changes	'why do boys' voices break' 'why do girls' voices not break' 'why do girls bleed and boys do not' 'what causes periods to stop and start again' 'is it normal for a 14 year old not to have started having her monthly period' 'are the lumps I feel in my breasts normal for a maturing girl'	Both genders Both age groups
	Biological aspects of reproduction	'does growth of breasts show that girls are ready to have babies' 'what happens if someone has not started having monthly periods and she plays sex and the sperm enters her' 'what do our parents do to get babies' 'is it true babies come from rivers' 'what causes periods to stop and start again'	Both genders Mostly younger teens

Theme	Sub-theme	Illustrative questions raised by youth	Gender and Age-group ^a
Sexuality	Sexual intercourse	'what does someone do when having sex' 'how does someone feel during sex' 'why does someone feel pain when their virginity is being broken' 'why does the penis enlarge before getting into the vagina'	Both genders Both age groups
	Boy-girl relationships	'does having a girlfriend mean playing sex' 'is it true that accepting to play sex shows love' 'do girls enjoy playing sex as much as boys' 'is it a must you have sex' 'how can we stay without sex yet God gave us sex organs' 'why do I get bored with boyfriends so fast' 'what qualities should someone look for in a boy or girl before she starts a relationship with him' 'what should you do if your boyfriend who is having sex with you, is also having sex with other girls and you feel you cannot leave him'	Mostly older boys
	Saying no to sex	'how do I say no to a boy who wants to play sex with me or to touch and fondle me' 'how can someone relate with a boy without (getting involved in playing) sex' 'how can a boy prevent other boys from having sex with him'	Mostly younger girls
	Questions reflecting norms and values	'is it bad to have a girlfriend if someone is not playing sex with her' 'is it bad for someone to have sex with one's own girlfriend before marriage if one is using a condom' 'why is it good to avoid sex till marriage' 'is it all right to have sex if someone is using protection' 'is it okay to have sex with a house girl if she asks'	Both genders Mostly older teens
	Saying no to sex	'how do I say no to a boy who wants to play sex with me or to touch and fondle me' 'how can someone relate with a boy without (getting involved in playing) sex' 'how can a boy prevent other boys from having sex with him'	Mostly younger girls
	Questions reflecting norms and values	'is it bad to have a girlfriend if someone is not playing sex with her' 'is it bad for someone to have sex with one's own girlfriend before marriage if one is using a condom' 'why is it good to avoid sex till marriage' 'is it all right to have sex if someone is using protection' 'is it okay to have sex with a house girl if she asks'	Both genders Mostly older teens

Theme	Sub-theme	Illustrative questions raised by youth	Gender and Age-group ^a
STI and HIV/AIDS	STI	'what could be the cause of painful wounds around the pubic area' 'whenever I urinate my vagina itches or pains, is that a symptom of STD' 'is it true that one must get HIV if the person has an STD' 'if your sex organ is itchy or paining, do you have an STD and will you get AIDS'	Both genders Mostly older teens
	HIV/AIDS	'are wounds on the penis or vagina signs of HIV/AIDS' 'can someone get infected with HIV after sharing a razor' 'can I get AIDS from kissing and [oral sex]' 'if you tie the foreskin [with a string] before having sex will one get AIDS' 'how do I tell my friends that I have HIV' 'should you reject friends who have AIDS' 'what if you want to go for blood test and you are scared to ask your parents what do you do' 'what precautions should someone take when caring for a person living with AIDS' 'what can one do to remain healthy once he realizes that he is positive' 'my friend is 15 years old. She involves sex with different men. Last year she visited a VCT and she was told she is positive. But she does not want to stop engaging in sex. How can I advice her so that she doesn't spread the disease to others'	Both genders Mostly younger teens
Myths and misconceptions	About sex	'if someone has not had sex by the time she is 20, is it true she will not be able to deliver since her vagina will have become blocked' 'is it true eating toothpaste causes someone to lose sperm' 'I have small breasts is it true that if I let a boy touch them they will grow bigger' 'if someone sts without playing sex for long, his sperms will accumulate and cause him health problems' 'is it true that if someone plays sex a lot she will get a big bottom and big breasts' 'can a man die if he is erect and he does not get sex?' 'is it true that to get rid of period pains one should play sex' 'is it true that if someone stays without playing sex for long, his sperms will accumulate and cause him health problems' 'is it true that if a woman has sex and urinates immediately she cannot get pregnant'	Both genders Mostly younger teens



Theme	Sub-theme	Illustrative questions raised by youth	Gender and Age-group ^a
Myths and misconceptions	About HIV/AIDS	'is it true that if someone sits on lemon juice after having sex with a HIV positive person, they cannot get AIDS'	Both genders Both age groups
		'if a man with AIDS has sex with a virgin will he be cured'	
		'is it true that you cannot get AIDS if you don't achieve an orgasm during sex'	
		'you cannot get AIDS by having anal sex with another boy'	
		'is it true that AIDS is only poison (witchcraft)'	
Pregnancy		'can a girl get pregnant if she plays sex before she starts having her monthly periods'	Mostly girls Both age groups
		'am I pregnant if I have skipped a period'	
		'can one get pregnant if she plays sex for only a few minutes'	
		'when can a boy make a girl pregnant'	
Condoms		'for how long should someone wear a condom when playing sex'	Mostly younger boys
		'is a condom 100% effective against HIV, pregnancy and STIs'	
		'is it bad to use a condom two times'	
		'is condom a medicine for HIV/AIDS?'	
		'when using a condom, is it okay if I use three in case one breaks'	
		'is someone who uses 2-3 condoms during sex more protected than the one using only one'	
		'my friend says that condoms have small bumps is it true?'	
		'does using condoms mean that someone does not trust his partner'	
	'can one use balloons instead of condoms'		
	'if you don't have a condom can you use a 'juala' (a nylon/polythene bag)'		

Theme	Sub-theme	Illustrative questions raised by youth	Gender and Age-group ^a
Sexual violence	Rape	'why do men rape small/young girls' 'why do men touch girls' private parts and breasts' 'if you are at home and someone closes your mouth and does sex with you every time he visits, what should you do' 'what should someone do if she is raped and becomes pregnant and she had not told her parents about the rape when it happened' 'where should I report rape' 'what can I do to prevent infection if I am raped' 'can someone be physically and emotionally healed after she has been raped'	Mostly younger girls
	Incest	'is it all right to have sex with one's own dad' 'can you do sex with your aunt' 'what can I do if a cousin is in love with me and wants us to play sex' 'why do older brothers force one to have sex with them' 'what can someone do when her father forces her to have sex with him'	Mostly younger girls
Female circumcision		'why are girls still circumcised' 'does circumcision affect a girl's period and will it cause problems when giving birth' 'my parents want me to be circumcised but I do not want to be, what should I do' 'what should someone do if her parents insist on traditional circumcision'	Mostly younger girls
Intergenerational communication		'how do I tell my parents that I have started getting my monthly periods' 'how are we supposed to introduce sex issues with our parents since they always avoid them and are not open with us' 'how can I tell my parents I have a boyfriend if I am scared' 'why do parents always think that a boy-girl relationship always involves sex' 'why are my parents against me having boyfriends or me keeping the company of boys even if they are relatives'	Both genders Both age groups

Note: ^a'Younger teens' are primary school pupils aged 12–14 years, and 'older teens' are secondary school students aged 15–18.

Most respondents asking these questions did not appear to have any guidelines for or confidence in saying no to sex. Some questions showed how adolescents reflect on morals, community norms and values in order to develop their own attitudes, such as: 'is it bad to have a girlfriend if someone is not playing sex with her?' or 'is it bad for someone to have sex with one's own girlfriend before marriage if one is using a condom?'. These questions were mostly asked by older youth.

Some questions on STI, posed mostly by older teenagers, were quite personal and indicated concern over risky behaviour: 'what could be the cause of painful wounds around the pubic area?' or 'whenever I urinate my vagina itches or pains, is that a symptom of STD?'. The younger age group (12-14 years old) was also keen to get information on HIV/AIDS. Questions concerned transmission ('can I get AIDS from kissing and oral sex?'), disclosure ('how do I tell my friends that I have HIV?'), stigma ('should you reject friends who have AIDS?'), and care for HIV patients ('what precautions should someone take when caring for a person living with AIDS?').

Mostly younger adolescents were seeking affirmation for myths and misconceptions about sex and HIV/AIDS. These misconceptions could place them at risk, especially girls. For example, girls asked, 'is it true that to get rid of period pains one should play sex?' or 'is it true that engaging in sex enlarges the breasts?' These girls could well be taken advantage of if they wish their period pains to disappear or breasts to grow big. The same could be true for boys: 'is it true that if someone stays without playing sex for long, his sperm will accumulate and cause him health problems?'. Youth also had misconceptions regarding HIV/AIDS: 'is it true that if someone sits on lemon juice after having sex with a HIV positive person, they cannot get AIDS' and 'if a man with AIDS has sex with a virgin will he be cured'? Such misconceptions could put youth at risk and may explain the persistence of risky sexual behaviour.

Pregnancy was also a cause for anxiety and worry for many girls: 'am I pregnant if I have skipped a period?', 'can one get pregnant if she plays sex for only a few minutes?' and 'when can a boy make a girl pregnant?'.

While most questions about condom use, primarily asked by younger boys, sought a definition of what a condom is, more complex questions about safety or effectiveness were also posed: 'for how long should someone wear a condom when playing sex?' or 'when using a condom, is it okay if I use three in case one breaks?'. The questions also suggest that youth may use condom substitutes in an effort to protect themselves: 'can one use balloons instead of condoms?' or 'if you don't have a condom can one use a juala [a nylon/polythene bag]?'.

Younger girls were more inclined to raise concerns over sexual violence than the older ones. Their questions showed that rape and exploitation is a reality for youth, such as 'if you are at home and someone closes your mouth and does sex with you every time he visits, what should you do?'. Incest was also manifested in the questions: 'why do older brothers force one to have sex with them?'. Their questions also seek knowledge on how to protect oneself: 'what can I do to prevent infection if I am raped?' or 'what can someone do when her father forces her to have sex with him?'.

Younger girls had great concerns over female circumcision. This traditional practice appeared to be a topic not fully discussed, as illustrated by the girls' (and boys') concerns. Questions dwelt mainly on how to stop this female rite of circumcision. One girl asked: 'my parents want me to be circumcised but I do not want to be, what should I do?'. Both older and younger age groups voiced the need to have greater dialogue with parents on sexuality, reproductive health and HIV/AIDS. Youths' questions suggested a communication and information barrier between themselves and their parents: 'how can I tell my parents I have a boyfriend if I am scared?' or 'how do I tell my parents that I have started getting my monthly periods?'. Such a barrier makes information-seeking very difficult for young people. Viewed from the perspective of socialisation, the thinking of some parents negatively influenced non-sexual friendships between genders: 'why do parents always think that a boy-girl relationship always involves sex?'.

Discussion

Our findings show that youth have many questions and concerns about sexuality. The questions raised differed by gender and age. Concern about transition to adulthood, sexuality, STI and HIV/AIDS, myths and misconceptions, pregnancy, condoms and intergenerational relationships cut across both genders. Older teens were more concerned with questions on boy-girl relationships, norms and values on sexuality, and STI. Younger teens (15 years) wanted to know about reproduction, saying no to sex, HIV/AIDS, condoms, sexual violence, and female circumcision. There are noteworthy differences between boys and girls. For many of the female respondents, saying no to sex, pregnancy, sexual violence and female circumcision are a great concern. Male respondents are more concerned with issues on managing boy-girl relationships, preventing oneself from STI/HIV infection, and condoms. Compounding this is the young people's concern on inability to communicate with their parents.

There are limitations to our study. The data described in this paper are not necessarily representative for youth in all public schools in Kenya. Because we chose our study areas

to be rural and semi-urban and with little non-governmental organisation activity, there may be urban districts with better-off schools that may have well-informed youth. We tried to identify gaps in knowledge, but we may have missed certain topics because it is difficult to indicate things one is ignorant about. This may have led to an underestimation of the problems/knowledge gaps, not an overestimation.

Our findings show that youth are not completely ignorant: they have heard about sexual and reproductive health issues such as STI, condoms, HIV testing, and sexual intercourse. However, they often lack an opportunity to confirm what they think or have heard. Many questions seem to be telling us what they think (their opinions) or what they have heard and try to confirm. Their questions also show how dangerous it can be when young people are left to construct their own truths. There are areas where the information they have appears to be fragmented, distorted and conflicting. This has left many of them doubtful and confused. While some of their questions show curiosity or anxiety, others are very explicit and sometimes indicative of risky behaviour. The lack of opportunity to ask sensitive questions because sex is considered a taboo topic can thus be blamed on the prevailing social norms. The social-cultural and gender norms that once determined appropriate sexual behaviour have been eroded (Ahlberg 1994; Kirstan 1997).

The young people show curiosity and a readiness to learn, which are the first steps in behaviour change. They express a need for clear and consistent messages to help them make important decisions about their sexuality. They want open and frank discussions on broader issues related to sex and sexuality, and to learn about the consequences of risky behaviour from their parents. They want support from their families to help them to feel safe and secure, and allow them to develop the resiliency needed to manage the challenges they face, especially as they grow into adulthood (Family Health International 2006). However, most parents are unprepared to talk with their children about sexuality and reproductive health issues because they themselves do not possess the information and skills to do so (Dilorio, Pluhar, and Belcher 2003; Kirkman, Rosenthal, and Feldman 2002; Boler et al. 2003). Studies from developing and developed countries have shown that the quantity, frequency and timing of parent–child communication are important factors in sexual outcomes, including knowledge about sexual and reproductive health, sexual attitudes, and sexual behaviours and intentions (Blake et al. 2001; Huebner and Howell 2003; Somers and Paulson 2000; Wilson et al. 1994). Research on the context of communication indicates that greater levels of perceived parental openness, responsiveness, comfort, and confidence in discussions about sex and related issues are associated with lower levels of adolescent sexual risk behaviour (Guilamo-Ramos et al. 2006; Halpern-Felsher et al. 2004), suggesting that adolescents' perceptions of the quality of communication may influence the effectiveness of parental messages about sex.

It is therefore critical to bridge the intergenerational communication gap by opening lines of communication with parents, teachers and health professionals. Parents should be encouraged to do what is naturally and culturally important: provide the leadership, guidance, and love that promotes healthy development of youth and reduces the risk of teenage pregnancy and STI. Practitioners should aim to strengthen parents' ability to talk about sex in four areas: the content of communication, the context of communication, the timing of parental discussions, and the frequency of parental discussions (Jaccard, Dodge, and Dittus 2002; Guilamo-Ramos and Bouris 2008). Teachers should engage pupils and students in active learning and encourage a more open-minded attitude so that students will feel comfortable to discuss matters with them (Njue et al. 2009). Teachers, health professionals and other related practitioners should therefore be well-trained to discuss sensitive issues openly, to know how to deal with potential barriers such as religiosity and acculturation, thus dispelling myths and other misinformation that can encourage risky sexual experimentation. Results from several studies have shown that programmes providing comprehensive sex and AIDS education and counselling can empower young people to delay sexual debut and reduce sexual risk behaviour (Kirby et al. 2004; O'Donnell, Steve, and San Doval 1999; Family Health International 2005).

In conclusion, our study has identified important knowledge and communication gaps in sexual and reproductive health including STI and HIV/AIDS among in-school adolescents in Meru and Kajiado districts in Kenya. The results emphasise the need for making sex education interventions for different age groups and genders. These interventions should work with parents, teachers and health professionals, to address the diverse needs of young people.

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Chapter 3

Disco funerals: a risk situation for HIV infection among youth in Kisumu, Kenya

Njue C., Voeten HACM, Remes P. Disco funerals: a risk situation for HIV infection among youth in Kisumu, Kenya. *AIDS* 2009; 23(4):505-509.

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Abstract

Objective: We investigated the so called 'disco funeral' phenomenon in Kisumu, Kenya, whereby community members including adolescents congregate at the home of the deceased for several days, accompanied by music and dancing. We explored whether disco funerals are a risk situation for HIV/STI infection among youth.

Design: Cross-sectional qualitative study.

Methods: We conducted 44 in-depth interviews with male and female adolescents aged 15 to 20 in Kisumu municipality in Nyanza Province, Kenya. We also made observations during 6 disco funerals.

Results: Disco funerals were an important place for young people to hang out; they increased the opportunities to meet and engage in (risky) sexual activities. Many adolescents reported having casual sex on these occasions, sometimes with multiple partners, and mostly without condoms. Some girls were forced into sex, and there were several accounts of gang rape. Sex in exchange for money was reported frequently. Drugs and alcohol seemed to facilitate unprotected, multiple-partner, coerced, and transactional sex.

Conclusions: In Kisumu, a town with a generalized HIV/AIDS epidemic, the high AIDS mortality leads to frequent disco funerals. Because many adolescents are having unprotected, transactional, or coerced sex at these occasions, disco funerals might contribute to the high HIV prevalence among youth, especially among adolescent girls. HIV interventions urgently need to include outreach actions to youth who hang out at disco funerals, and link up with parents and funeral organizers to reduce risk situations.

Introduction

The multicentre study on factors determining the differential spread of HIV in African towns showed that in Kisumu, male HIV prevalence was 19.8% and female 30.1%. The study highlighted the high HIV prevalence (23%) in young women aged 15-19, compared with in young men (3.5%) [1]. Such a contrasting HIV prevalence between boys and girls is a pattern observed in many parts of sub-Saharan Africa [2,3]. The multicentre study results suggest that the high HIV prevalence among girls is linked to their higher susceptibility to HIV infection. Girls had older sexual partners than boys and higher rates of herpes simplex type 2, which are both risk factors for HIV transmission [4,5], and reported very few sexual encounters, which may be due to underreporting but also may indicate that there is high transmission after loss of virginity [2].

We conducted a qualitative follow-up study in Kisumu to explore findings from the multicentre study regarding the sexual behaviour of young people. In this paper we describe a phenomenon known as '*disco matanga*' or disco funerals as the setting of risky sexual encounters among youth. Other findings of the qualitative study will be reported elsewhere. Disco is an abbreviation of discotheque; matanga means funeral in Swahili. '*Disco matanga*' involves dancing and partying at a funeral, mostly at night, at music played by a DJ or a band. Disco funerals are organised by family members of the deceased, to raise money for burial expenses, e.g. through bidding games. The current phenomenon of disco funerals has not been described in literature. Our study postulates that the high AIDS mortality in Kisumu has led to a high number of funerals, which contribute to high the HIV prevalence among girls through risky sex at disco funerals.

Methods

In-depth interviews and observations were used to explore the socio-cultural dynamics of sexuality of young people in Kisumu. This town is the capital of Nyanza Province in the west of Kenya, and is mainly inhabited by the Luo people. The Institute of Tropical Medicine in Antwerp, Belgium and the Ethical Review Board in Kisumu approved of this study.

For the in-depth interviews, 75 girls and 75 boys aged 15-20 years were interviewed at their households. Study sites within Kisumu municipality were sampled randomly, using the sampling framework of the multicentre study [1]. Quota sampling was used to ensure diversity in age, socio-economic and educational status. An interview guide was developed in English, translated into Swahili and Luo, then pre-tested in communities

neighbouring the study sites. The interviews were conducted in Luo, Swahili or English, and tape-recorded; they lasted about 45-60 minutes. Prior to the interviews, verbal informed consent/assent was obtained from all adolescents, in addition to parental consent for minors. When asked about relationships, 44 out of 150 participants (28 boys and 16 girls) spontaneously mentioned disco funerals. There was no explicit question about disco funerals. For the present paper, only these 44 interviews are used.

Observations were conducted at places where youth 'hang-out', such as nightclubs/bars, video halls, shopping malls, and funerals. We sought permission from the persons in charge and ensured confidentiality of all collected information. During the 2-to-3 hour observations, the field workers took short notes and compiled detailed notes afterwards, describing physical settings, activities taking place, socio-demographics of participants (estimated age, gender), and (non-)verbal behaviour. Six out of 48 observations took place at disco funerals.

The audio-taped interviews were transcribed verbatim and translated into English, where necessary [6]. Data analysis followed the principles of the grounded theory [7]. This inductive approach consists of carefully reading and rereading interview transcripts and observation notes, exploring and coding responses, and allowing analytical themes to emerge during the process. The first and third author coded the transcripts, using ATLAS.ti 5.2. This paper focuses on the analysis of those responses or notes mentioning disco funerals.

Results

During the study period, there were at least 3 disco funerals per week in various estates of Kisumu town, lasting several days to over a week. During these events community members, including adolescents and children congregated at the home of the deceased. Young people saw the disco funerals as a cheap form of entertainment and an opportunity to meet the other sex. *"You know death is rampant here. You will find that someone has died here, another one there and another one also there. It is in these funerals that boys and girls meet, in fact that is where they meet mostly... the funerals"* (19-year-old male). Disco funerals were not only seen as a great occasion to meet the other sex, but also to engage in sexual intercourse. Incidents of casual sex were cited: *"...during funerals there are those girls who have been left in no hands [no one responsible], you find that someone takes them [for sex] everyday, at times someone takes her at around 10 pm then returns her at midnight [...] somebody else also takes her at that very time...at times this person knows that so and so is going with her [having sex] but he also goes with her"*

(18-year-old male). Casual sex was often facilitated by the intense atmosphere at the funerals, reinforced by the music. Most songs had strong sexual messages, explicit lyrics, and were accompanied by suggestive dancing. Late at night, when most older people had left, there was little parental control.

At these disco funerals, youth reported that many boys did not take precaution during sex: *“A few, yes, do use protection, though there are many who are normally in a hurry and have no time to put on condoms, once the girl has accepted, then he follows her quickly ...”* (18-year-old male). Others report that many youth do not have any condoms or they may be uncomfortable using them. Others believed that very young boys and girls would not have STIs, so no form of protection is needed. One boy reported contracting an STD during a disco funeral when he had unprotected sex with a girl he barely knew: *“...it was last year that I went to a certain funeral towards Awasi [a village in rural Nyanza]...I had not known her, we went and we had sex... after two days when I was bathing I noticed that it was bruised [...] and when I saw it turn into a wound I went to the hospital.”* (16-year-old male).

Although some girls agree to sex, others are forced into sex at disco funerals. A 16-year-old female respondent said: *“You’ll find a lot of rape cases here especially during funerals... you may be walking and then you are raped [...] Yes, it happens a lot.”* Some boys reported that girls may be forced into sexual relations if they keep on rejecting a boy’s advances: *“... say you’ve been dancing with her and you’ve told her about that thing [sex] and she has refused, you just hold her and pull her by force till you go with her ... to the bush or darkness where people don’t go to ... people see but they don’t do a thing”*(17-year-old male). During one funeral, fieldworkers witnessed one rape attempt (which was thwarted by bystanders).

Gang rape was also reported to occur during and after disco funerals: 16 of 44 respondents had heard of or knew someone who had undergone gang rape, and one boy admitted to having participated in gang rape. This kind of violence happened when boys wanted to punish an arrogant girl: *“There is this new girl who has moved into the community, the boys kept on trying to win her but she was adamant... She was going to dance with her friends [at disco matanga] and the boys waylaid her on her way home. The boys seized her up and forced her to do sex with them... that happened here,”* (19-year-old female). Incidents of gang rape were also reported when girls accompanied partners whom they met at the funeral to their dwellings: *“... he may trick her to come to the house, after [he has had sex with the girl], he will wake other guys and tell them that you can also have sex with her [...]. Then they will “combine” [i.e., all boys will have sex with her]. After the girl has been ‘sexed’, she will be chased away”* (18-year-old male).

Disco funerals also featured transactional sex. Many young men believed that buying a young woman drinks or chips would result in sex later: *“Buying the girl a drink or giving her a little money during such an occasion is often considered down payment for sex later.”* (18-year-old boy). Some girls shared this view: *“Girls go there and are bought. Later he goes and sleeps with her ... a girl dances with a boy, he removes the money [from his pocket]... then later this boy tells her they go and he sleeps with her”* (18-year-old female). Observers also witnessed drinks being exchanged for a dance or time alone with a girl. Some DJ’s brought girls to participate in the fund-raising games. The highest bidder not only got to dance with the girl but could also have some time alone with her. A 17-year-old boy described such a scenario: *“...at the disco matanga, there is often the collection of money, so there is some amount a young man pays to buy a certain girl. Once he has bought the girl then he dances with her, so during the dance with her is when they talk and come to an understanding or they agree on where they are going to meet and they just finish their business [have sex] there and there.”*

Alcohol and drug use facilitated and reinforced sexual risk behaviours at funerals. A 17-year-old reported: *“...after taking alcohol at funerals, it starts to control oneself. So when boys meet a girl, sometimes they do not know her at all nor where she is from, but they will seize the girl by force; they will all have sex with her. This has happened several times here and occurs amongst boys who take bhang.”* Fieldworkers repeatedly observed that young girls and boys were taking locally-brewed alcohol and drugs such as khat, cannabis, and ‘kuber’ [tobacco/betel quid]. Several interviewed adolescents mentioned that girls were sometimes taken advantage of while under the influence of alcohol.

Discussion

Disco funerals in Kisumu provide opportunities for adolescents to engage in (risky) sex: they have casual sex on these occasions, sometimes with multiple partners, and mostly without condoms. Some girls are forced into sex, others have sex in exchange for money. Drugs and alcohol often facilitate unprotected, multiple-partner, coerced, and transactional sex.

Our study has a few limitations. We aimed to examine the context of youth’ sexuality and sexual networking patterns; disco funerals were only mentioned spontaneously by a subgroup of interviewees (44 of 150). This may have biased our results. Moreover, we interviewed a fairly small number of youth, all residing in urban Kisumu. Although disco funerals are common across Nyanza Province, caution is suggested when generalising

these findings. Despite these limitations, the study was able to generate new knowledge on a little-known phenomenon.

Our study gives clearly indicates that disco funerals create a context for potential HIV/STI transmission among youth in Kisumu [1-3]. Girls are especially at high-risk. They tend to have sex with boys/men older than themselves, who have a higher HIV prevalence than age mates [6]. Sexual coercion increases HIV risk for girls, due to damaged vaginal tissue. Early sex may also be extremely risky for young girls because of cervical ectopy and other biological features of the immature female genital tract [2,8-10]. Furthermore, adolescent girls tend to lack sexual negotiations skills, often leading to unsafe sex.

Our findings need to be seen against the background of Luo culture. Traditionally, sex plays a role in many parts of Luo life such as during harvesting, planting, and widow cleansing [11-13]. Luo are polygamous; multiple-relationships are generally condoned. Adolescents are sometimes allowed or even encouraged to have pre-marital sex. Parents may be aware that disco funerals provide opportunities for sex, and may see it as a culturally appropriate way for young people to begin their sexual careers. It may therefore be culturally inappropriate for parents to monitor their children at these occasions. This calls for improved communication between parents and children, to make sure that their children – in case they are having sex at these occasions – at least are having *safe* sex. Studies have shown that parental monitoring, parent-adolescent communication, and parenting styles are associated with adolescent sexual behaviours [14-17]. Most forced sex happened as a result of alcohol and drug abuse [18-19]. Peer pressure also played a role, with boys colluding in plotting the timing and circumstances of coercive sex. Deeply rooted gender norms in Luo society contribute to a perception that controlling women is a sign of masculinity. Several studies in sub-Saharan Africa illustrate how such norms influence sexual identities of young people and contribute to extremely high rates of rape [10,20-24].

Our findings also highlight the occurrence of transactional sex. AIDS reinforces poverty through medical/funeral costs, lack of income, school drop-out, and orphanhood. In such settings, female school drop-outs and orphans are more likely to engage in transactional sex to continue schooling or simply to survive [2,24-26]. Our interviews showed that young girls – especially out-of-school girls – tended to have sex with slightly older men who are working and therefore have cash, such as minibus touts and bicycle-taxi operators. Other studies in sub-Saharan Africa noted that once gifts are accepted, girls believe they have no right to refuse sex or demand condom use; hence transactional sex significantly reduces young women's bargaining power for safer sex [26-28].

Young people all over the world meet potential sexual partners at parties and disco's, where sometimes alcohol and drugs are used. However, disco funerals differ regarding the duration and circumstances. They can last from several days to a fortnight, and may bring together up to a hundred people, with some visitors needing local accommodation. Funerals are traditionally associated with sex in several ways, such as wife inheritance, or widow-cleansing whereby evil spirits are expelled through sexual intercourse. This association with sex may be the reason why some parents see disco funerals as a culturally appropriate way for young people to experiment sexually.

The phenomenon of disco funerals may be part of the multiple factors underlying and explaining the high HIV prevalence among youth, and especially girls, in Kisumu. Interventions are needed at disco funerals that reach youth, as well as parents and organizers of these events, to challenge the risks encountered by youth. One approach can be to integrate the promotion of safe sexual practices in these events, using the DJs as popular peer educators, and making condoms freely available. Interventions should also target parents, to stimulate positive parenting influence on adolescent health, e.g., by improving communication about sexual risk behaviour. Further research is needed to study the generalizability of our findings, and the ways in which disco funerals can be used to promote safe sex practices.

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Chapter 4

Porn video shows, local brew and transactional sex: HIV risk among youth in Kisumu, Kenya

Njue C., Voeten HACM, Remes P. "Porn video shows, local brew, and transactional sex: HIV risk among youth in Kisumu, Kenya." *BMC Public Health* 2011, 11:635

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Abstract

Background: Kisumu has shown a rising HIV prevalence over the past sentinel surveillance surveys, and most new infections are occurring among youth. We conducted a qualitative study to explore risk situations that can explain the high HIV prevalence among youth in Kisumu town, Kenya

Methods: We conducted in-depth interviews with 150 adolescents aged 15 to 20, held 4 focus group discussions, and made 48 observations at places where youth spend their free time.

Results: Porn video shows and local brew dens were identified as popular events where unprotected multipartner, concurrent, coerced and transactional sex occurs between adolescents. Video halls – rooms with a TV and VCR – often show pornography at night for a very small fee, and minors are allowed. Forced sex, gang rape and multiple concurrent relationships characterised the sexual encounters of youth, frequently facilitated by the abuse of alcohol, which is available for minors at low cost in local brew dens. For many sexually active girls, their vulnerability to STI/HIV infection is enhanced due to financial inequality, gender-related power difference and cultural norms. The desire for love and sexual pleasure also contributed to their multiple concurrent partnerships. A substantial number of girls and young women engaged in transactional sex, often with much older working partners. These partners had a stronger socio-economic position than young women, enabling them to use money/gifts as leverage for sex. Condom use was irregular during all types of sexual encounters.

Conclusions: In Kisumu, local brew dens and porn video halls facilitate risky sexual encounters between youth. These places should be regulated and monitored by the

government. Our study strongly points to female vulnerabilities and the role of men in perpetuating the local epidemic. Young men should be targeted in prevention activities, to change their attitudes related to power and control in relationships. Girls should be empowered how to negotiate safe sex, and their poverty should be addressed through income-generating activities.

Background

Globally, the HIV epidemic is increasing faster amongst young women than young men and nowhere is this trend more apparent than in sub-Saharan Africa [1]. Statistics in sub-Saharan Africa remain disturbingly high, with 75% of all young people living with HIV being female [2-4]. The main form of HIV transmission is heterosexual sex. Of the young women aged 15-24, HIV prevalence is three times higher than HIV among their male counterparts. The contrasting HIV prevalence between boys and girls is a pattern observed in many parts of sub-Saharan Africa [4,5].

Kisumu town is found by the shores of Lake Victoria, is the capital of Nyanza province and the third largest town in Kenya. It is one of the most HIV/AIDS affected areas in Nyanza with a prevalence of 18.5% [6]. Nyanza province, in general, is the most severely affected, with HIV rates as high as 15%, which is double the national average [6,7]. Studies conducted in Kisumu in the late nineties show that HIV prevalence among girls was very high compared to boys (age group 15-19 years 23% versus 4%; age group 20-24 years 40% versus 13%) [6]. HIV prevalence among female sex workers was also very high, at 75% [8]. Although more recent figures for Kisumu are slightly lower, the numbers are still alarmingly high, and higher than in other parts of the country [9, 6]. High HIV prevalence rates (30%) as well as very high rates of STIs have been noted among fishing communities along the shores of Lake Victoria [10-11]. These high rates of HIV/AIDS in Luo Nyanza have left 40% of children under 18 without one parent, and 11% without both parents [6,12]. Cultural norms such as wife inheritance and widow cleansing, polygamy, “jaboya” (in which female fishmongers develop sexual relationships with fishermen and middlemen in exchange for fish), and “chira” (a curse that comes from breaking certain taboos and traditions), continue to have a powerful hold on people in this lakeside province [10,13-14].

We conducted a qualitative study on the sexual behaviour of young people in Kisumu, to further explore results from an earlier population survey on factors determining the differential spread of HIV in four African cities: two with a relatively low and stable HIV prevalence (Cotonou and Yaoundé) and two where the spread of HIV has been explosive (Kisumu and Ndola) [15]. This study showed that girls in Kisumu had older sexual partners

than boys and higher rates of herpes simplex type 2, which are both risk factors for HIV transmission. But most girls reported very few sexual encounters, and HIV prevalence was very high even among girls reporting one lifetime partner and few episodes of sexual intercourse. This may be due to underreporting, but also may indicate high transmission during loss of virginity [5]. Our aim was to deepen our understanding of the dynamics of sexual interactions of adolescents, in order to explain the high HIV prevalence among Kisumu youth in general and specifically among girls. We triangulated data from in-depth interviews, focus group discussions (FGD), and observations, to generate a holistic description of the contexts and dynamics of sexual interactions among youth.

Methods

We conducted 150 in-depth interviews with adolescents aged 15-20 in Kisumu, held 4 FGDs, and performed 48 observations at places where youth spend their free time. The Institute of Tropical Medicine in Antwerp, Belgium, and the Ethical Review Board in Kisumu approved this study.

For the in-depth interviews, a convenience sample of 75 boys and 75 girls aged 15-20 years were interviewed at their households. Using the sampling framework of the multicentre study, quota sampling was used to ensure diversity in age, socio economic status (SES) of household, and education [9]. A qualitative interview guide was developed in English and translated into Swahili and Luo. Trained fieldworkers pre-tested the guide in communities neighboring the study sites. The interviews were held in Luo, Swahili or English by same-sex interviewers, and tape-recorded; they took about 45 minutes to one hour. Prior to the in-depth interviews, verbal informed consent/assent was obtained from all adolescents, in addition to parental consent for minors.

Four focus group discussions (FGDs) were held by same-sex interviewers in preparation for the in-depth interviews (i.e. with in-school males, in-school females, out-of-school males, out-of-school females). A topic guide was used, that was pre-tested for face and construct validity. The FGDs mainly focused on youth's attitudes, risk perception and socio-cultural norms regarding sexuality. Each FGD had 8 to 12 participants aged 15-20, and the discussions took about one and half hour.

We made 48 observations of young people's behaviour at places where youth spend their free time 'hanging around', such as nightclubs/bars, video halls, shopping malls, local brew dens, and funerals. We sought permission from the persons in charge and ensured confidentiality of all collected information. The field workers tried to get an inside view of

reality without the participants' knowledge that they were being observed. Short notes were taken during the 2-to-3 hour observations when possible, and detailed notes were compiled afterwards describing the physical setting, the activities taking place, socio-demographics of participants (estimated age, gender), and their verbal and non-verbal behaviour.

The audio-taped interviews and FGDs were transcribed verbatim and translated into English where necessary [16]. Data analysis of the in-depth interviews, FGDs and observations followed grounded theory principles, which allows analytical themes to emerge during the process of (re)reading transcripts and exploring and coding responses [17]. This approach is based on inductive analysis and consists of carefully reading/rereading interviews and observations, exploring and coding responses, and allowing new themes, issues and questions to emerge during the process. Using ATLAS.ti 4.1, a qualitative data analysis software program, the first and third author coded the transcripts, categorizing the data into themes, and identified the properties and dimensions of themes and subthemes. The following themes relating to risky sexual behaviour emerged from the interviews, FGDs and observations and are discussed below: young age at first sex, large age difference with male partners, multiple/concurrent partnerships, porn video shows, forced sex, low condom use, local brew /alcohol use and transactional sex. Where quotes are used in the Results section, they are from the in-depth interviews unless indicated otherwise.

Results

Of the 150 interviewed adolescents, 55% were attending school (18 primary and 64 secondary school) whereas 45% were out-of-school youth (51 were unemployed and 17 were working in small micro-enterprise businesses, in domestic service, or as bicycle taxi operators). Over 85% of adolescents were born in Kisumu or had lived there for 10 years or more. The average age of adolescents interviewed in the study was 17.5 among boys and 17.0 among girls.

Of the youth interviewed, 79% of boys and 49% of girls reported they ever had had sex. Of these, 37% of boys (22/59) and 59% of girls (22/37) had their first sexual intercourse at age 15 or younger. A 15-year-old girl from a low-SES area stated: *"In this area of ours, many girls...get pregnant while they are very young because of starting sexual relationships very early, maybe like my age, you will find one has a boyfriend and later on she is made pregnant and then she is left which is not good."*

Most girls reported a large age difference with first and current partners. Sixteen of the 28 girls who mentioned the age of their first partner reported that he was 25 years or older. All girls with a current partner had a partner who was over 20 years old (ranging from 2 to 17 years older). One girl stated: “...well if I am 20 I will go for a guy who is older than me by six years or something like three... because you cannot move [date] a guy who is the same age as you...” Older men were preferred, as they proved to be more mature, could provide for their needs, and offer advice to solve problems. During the observations, older men were often seen with girls as young as 15.

Of the sexually active adolescents, over half of the girls reported having had 2-3 partners; over half of the boys indicated having had 3-5 partners and about a third reported more than 10 girlfriends. A few boys found it difficult to count all sexual partners: “Some you can meet, you talk, have sex, then it just ends there so remembering them is difficult”. Some of the bicycle taxi transporters reportedly had sex daily, with different partners. Girls mostly reported serial monogamy and rarely stated outright that they had concurrent partners. In contrast, many sexually active boys casually reported having overlapping partnerships: “...the first is the one we talked about, ...the second is the one who was here, and the third is the one I connect with at the video hall.” Even among young men with a steady partner, it was common to have brief sexual encounters on the side, for example while at the video halls or attending a disco funeral. These ‘disco funerals’ are parties held by the relatives of a person recently deceased, in order to raise funds for the funeral. The disco funerals are characterised by loud music, singing, dancing, bidding games and risky sexual behaviour. Because we have described these events (in which Kisumu youth engage in risky sexual behaviour) in a separate paper, we do not elaborate on it here [18].

A third of the youth interviewed (49) report porn video shows either from personal attendance or as an influence on youth sexuality. Some also report watching porn at home or at the home of a friend: “Whenever I used to go to the neighbour’s to watch movies, she [a 14-year old domestic worker] could steal some tapes of ‘pono’, put them on, then try to convince me why don’t we try that one” (17 year-old boy). Video show halls are basically rooms with a television and VCR, they are popular leisure spots, where youth pay to watch movies. The fieldworkers did a dozen of random observations in video halls: 8 out of 12 were showing pornography at night. Most attendees were young men, but some girls also attended. The fee ranged from €0.05-0.15, and any youngster with a little money (even a 12-year old) was able to enter. The movies ranged from non-violent to violent pornography, and the scenes revolved around group sex, anal sex, and oral and vaginal intercourse. Youth said that the owner of a video hall most times disguises the announcement of a featured film and writes “on-por”: in such a way youth know that

“porno” will be shown. During one observation, several adolescents engaged in sex in the darkness of the hall.

Reports of forced sex were many: 15 of 37 sexually active interviewed girls reported some degree of force/persuasion during first sex. Some girls were lured into secluded places such as a boy’s cube [separate living quarter for boys], and were forced to have sex: *“This boy told me to visit him so when I went, he put the radio on... then later he just held me by force.”* A 17-year-old boy reported: *“Say you’ve been dancing with her and you’ve told her that thing [sex] and she has refused, you just hold her and pull her by force till you go with her... to the bush or darkness where people don’t go to...”* Another girl said that a boy grabbed and pinned her down and forced her to have sex at age 13. Some boys were said to waylay prostitutes and force them to have sex: *“Especially when it is night you meet a lot of girls hijacked by a group of men, being pulled to some place... they know these girls are prostitutes, they sell for money. But these groups of boys don’t have any cash, they just get them and hijack them yah,”* (FGD, out-of-school boys).

Few adolescents reported condom use at first sex (12 girls and 15 boys out of 96 sexually active adolescents). Condom use was neither common nor consistent: *“I have four girlfriends...I use a condom but not every time.”* Reasons cited by boys for non-use included trust, discomfort, reduction of pleasure, and not having any condoms. For most girls, non-use was related to their limited ability to request condom use, ideals of intimacy and pleasure, and mixed messages about safety: *“Well... some don’t use condoms because they tend to say that they will have side effects”.* Some young people also held the belief that very young boys and girls could not have STIs. Some adolescents only used condoms during the unsafe period in the menstrual cycle. Others reported they usually stop using condoms in a new relationship when they have become more used to each other or, as a few reported, after getting a negative HIV test.

Heavy alcohol intake and in particular illicit brews and drugs reinforced and mostly accompanied these sexual risk behaviours, as illustrated by this 15-year-old girl: *“So he asked me to have sex... but at first I didn’t accept it ...so one day when I went, he bought this local brew ‘kumi kumi’ [locally brewed gin] and he persuaded me to take [it], afterwards I couldn’t control myself and we found ourselves indulging in sex...”* Fieldworkers did random observations in local bars and brew dens and found that illicit brews such as chang’aa (cheap local spirit), kumi kumi and busaa (cheap local beer) and drugs such as khat, cannabis, and tobacco/betel quid were available especially in the low SES neighbourhoods. The illicit brew sold at a price of about €0.01 a cup. During interviews over a third (56) of youth interviewed (mostly boys) said they have gone to drink in these local brew dens. The brew was often made by widows who depend on the

trade for their livelihood. It was reported that in environments where a parent(s) made local brews, girls started having sex at an early age and some progress to trade sex for money: *"... may be the mother is not steady, she moves from one man to another or may be she drinks...so when the woman is not around and men come to drink at her place, men start messing with her daughters..."* (FGD, out-of-school girls). One girl said in an interview that she had her first sexual encounter at the age of fourteen, after her older sister described to her what the men were doing to her when she went to serve them (namely having sex for money). The younger girl got pregnant and gave birth at the age of fifteen. Another girl stated that she had sex several times with a client who promised to build her widowed mother a house.

Many interviewed youth reported to have had transactional sex. There were reports of young women going to local brew dens or disco funerals hoping the men would buy them drinks or give them money, in exchange of sexual favours. Often only a little money was required: buying a girl a soda was already seen as down payment for sex. Bicycle-taxi operators were reportedly popular, offering a few shillings, some food, or free transport to young women in exchange for sex: *"as long as you can buy her [something], maybe you buy her chips, you give her ten bob, you give her even a place to sleep, because she is not wanted at their place, you will just have sex with her"* (19-year old bicycle taxi-operator). Only occasionally did a boy receive gifts from his girlfriend(s). An 18-year-old girl from a low-SES area described how she decided to have sex with her 24-year old boyfriend: *"...after giving me gifts I just felt I should have sex with him."* Many of the young women interpreted receipt of money or gifts (like body lotion, soap, underpants and clothing) from their partners as loving gestures. Many young men acknowledged that their ability to provide for their girlfriends affected both the longevity and exclusivity of their relationships: *"...most girls go for men who can give everything, otherwise she'll get another person..."* (FGD, out-of-school boys). Eight of the 75 interviewed boys reported that they had had contacts with a prostitute. Not much money was involved in such encounters: a 17 year-old young man from a middle-SES area said he paid €0.50 for two hours of sex with a prostitute when he was 16.

Discussion

In this qualitative study on sexual behaviour of youth in Kisumu, Kenya, we found that the majority had sex at a young age, sometimes with multiple and concurrent partners, mostly without using a condom. Drugs and local alcohol often facilitated these encounters [19-22]. Some girls had transactional sex for material gain, not only for themselves but also for parents/guardians. Findings point strongly to the role of men in perpetuating the

HIV epidemic (forcing sex, gang rape, multiple concurrent relationships). Many young people were exposed to pornography in video halls, which seemed to increase their sexual risk behavior. Peer influence was a great motivator for these risk behaviors.

There are a number of limitations that should be considered when interpreting the results. Because we used purposive quota sampling, it cannot be concluded that our results are fully representative for the total Kisumu youth population. Age was difficult to estimate from observation. We relied on participants' self-reports and there is a possibility of social desirability bias particularly among girls who may have underreported sexual experiences [23]. Caution is also suggested when generalizing our findings to other settings and populations, because the urban environment may have influenced youth norms regarding sexuality. Despite these limitations, the study was able to generate rich, descriptive data obtained through method triangulation, including new knowledge on a previously unstudied aspect of HIV risk- pornographic video shows. The high number of interviews held and the use of quota sampling ensured that the views of diverse youth (both girls and boys, in and out-of-school, in different SES) were incorporated.

Our findings point to gender-related power differences that expose young girls to HIV risk. Power-related differences manifest themselves not only in relationships, but also in the belief and structure of society [24]. For example, pre-marital and multi-partner sex, while typically portrayed (in Kisumu and elsewhere) as a breach of social norms, is also said to be a fundamental dimension of gendered social organization [25]. Men in settings like Kenya generally are expected to conform to a range of behavioural norms that confirm the hegemonic masculinity [26]. People consider it as a right and necessity, and part of the tradition, that men have more than one partner [27]. Pressure to be sexually adventurous and aggressive to prove manhood is quite pervasive in Africa. These norms allow men to have more sexual partners than women, encourage older men to have sexual relations with younger women, and increase the acceptance and justification of violence against women. It is not surprising therefore that our findings show that male partners force sex, perform gang rape, and have multiple concurrent relationships. Such norms and societal power relations consistently tend to disadvantage young women, as evidenced by the high incidence of transactional and coerced sex in many sub-Saharan countries [28].

The subordinate position of women, including the lack of control over finances and resources, has motivated girls to engage in multiple concurrent partnerships primarily for economic reasons, but at times the desire for love and sexual pleasure contributes to these partnerships [29-30]. Girls look at these partnerships in light of future plans, hoping for a steady relationship or marriage with an affluent older man. But also young men have

a stronger socio-economic position than young women, enabling them to use money/gifts as leverage for sex. The material exchange accompanying sexual encounters may be interpreted as a loving gesture, but it may also express an unloving and calculating relationship.

The subordinate position of women may further force girls to endure abusive and violent relationships in order to secure economic gains. A high number of youth reported that either their mother or father had died, or sometimes both parents had passed away. These children are often left in the household with limited or no resources, where they often sink into poverty, forfeit their education, suffer from unattended psychological trauma, and become infected with HIV themselves [31-32]. A relationship with an older man (who is more likely to have a steady income than their age-mates) can provide them with the necessary livelihood support. There were reports of girls exchanging sex for money in order to feed their elderly parents and siblings, including access to material wealth such as expensive clothes and shoes.

These findings are consistent with recent studies in sub-Saharan Africa that show that factors such as cultural norms and gender roles place young women at risk of HIV infection [33-34]. They also show that men are expected to be dominant in a relationship, and many young girls may submit to men's sexual demands because they are expected to be subordinate, especially when they are (much) younger [33,34-35]. Moreover, such young girls are at a disadvantage in negotiating safe sex during such partnerships [36-38]. Young girls are coerced into sexual activities with older men for survival and to access material goods [34,39-42]. Sometimes the sexual exchange is to the benefit of the parent or guardian, and not the victim herself [43].

Our findings show how exposure to pornography in video halls encourages liberal sexual attitudes and behaviour among young people. The current phenomenon of porn video shows has not been described in literature. Studies on the effects of adults' exposure to pornography in developed countries show that repeated exposure to nonviolent pornography promotes more permissive sexual attitudes [44-46]. Findings also show that in the sprawling low SES neighbourhoods of urban Kisumu, alcohol use for young people is often synonymous with the locally brewed alcoholic beverages, due to their low price and wide availability. Alcohol is commonly used as a disinhibitor and a symbol of masculinity; it thus plays an important role in risky sexual behaviour [47]. Reports show the devastating effects of alcoholism: high rates of school dropouts, careless sexual behaviour, shattering of families, high rates of crime, and low productivity at work [47-49].

Conclusions

Our findings have important implications for youth interventions. First, intervention strategies should engage young men in HIV prevention. Men in settings like Kenya generally control the terms and conditions of sexual relationships. Thus, we need better strategies to engage men, and effective interventions to change their attitudes and behaviours related to power and control in relationships. Interventions should promote more positive and safe actions like having respect for women, having one sexual partner, using condoms, and knowing their HIV status. Second, young girls should be empowered in several ways. They should be taught how to negotiate safe sex as part of the transactions in transactional sex. Their poverty should be addressed, e.g. through income generating activities or programs that keep them in school. For example, there are indications that programs which give loans to young women or youth groups, such as the Youth Enterprise Development Fund by the Kenyan government, are reducing the number of young women who have to exchange sex for money or who become teenage mothers [50]. Third, the government should regulate and monitor video shows and local brew dens, to prevent the exposure of young adolescents to pornography, drugs and alcohol. Legal action should be enforced on video hall and local brew den owners who promote pornography and/or alcohol consumption to youth. Instead, risk-free leisure activities should be developed for youth, such as sports facilities. Further research is needed to study the generalizability of our findings. More insight is needed on the effects of youth's exposure to pornography and the ways in which leisure spots such as video halls and local-brew dens can be used to promote safe sex practices.

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Chapter 5

Non-consensual sexual experiences of young people in Kenya: boys as perpetrators and victims

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Abstract

Background: Several studies have shown that non-consensual sex among young people in Kenya is relatively common, especially for girls but also for boys. In particular, the first sexual experience is likely to be non-consensual, and so may influence a person's perceptions of appropriate sexual behaviour and future expression of his/her sexuality.

Objectives: To determine the frequency of non-consensual sex (being persuaded or forced) during first, last, and all-times sexual experiences of boys and girls; and to determine the correlates of boys reporting perpetrating or suffering coerced sex.

Method: Pre- and post-intervention survey. Over 3,500 adolescents aged 10-19 years were interviewed, including 951 boys and 2,571 girls, drawn randomly from all households with adolescents in this age range.

Results: Of sexually experienced girls, 38% reported non-consensual sex at first sex, 26% at last sex, and 45% at sex ever. For boys, these percentages were 10%, 8% and 17%, respectively. Forced first-time sex was reported by 16% of girls and 4% of boys, and occurred mostly with partners other than a (girl/boy)friend, such as a relative or (for boys) a house girl. The sexual experiences of boys were examined in more detail – 21% reported ever having persuaded or forced a girl to have sex and 17% reported ever having themselves been persuaded or forced, with 7% reporting both experiences. Multivariate logistic regression analysis showed that having your sexual initiation at an early age and finding it acceptable for a man to hit his partner are significant predictors for non-consensual sex among boys in western Kenya.

Conclusions: A large proportion of adolescent girls and boys report having experienced non-consensual sex, especially at first sex. Many girls are being forced into their first sexual experience, mostly by boys who are not their (boy)friend. Interventions are urgently needed that teach skills to exercise assertiveness to resist physical and psychological pressure to have unwanted sex, for both girls and boys. Efforts are needed to provide young people, their families and the wider community with opportunities to talk openly about issues related to adolescent sexuality. This could also help boys and girls develop egalitarian attitudes towards gender roles and communication skills in male–female relations.

Introduction

Results from the 2003 Kenya Demographic and Health Survey (KDHS 2003) indicate that physical and sexual abuse of women is a major problem in Kenya. Nationwide, 44% of married, separated or divorced women aged fifteen to forty nine years reported ever experiencing physical violence by their partner, and 29% reported such incidents in the twelve months preceding the survey. Moreover, 16% of women reported ever being sexually violated by their husbands or partners, with 12% reporting such experiences during the previous year. Reports of physical and sexual violence were highest among women living in the neighbouring Western and Nyanza provinces in western Kenya.

As with most of sub-Saharan Africa, Kenya has a large population of young people, with more than 60% of the 31 million population below the age of twenty-five, and 44% under the age of fifteen (KDHS 1999). Nearly eight out of ten young people initiate sexual activity before the age of twenty, with the median age at first intercourse being 16.7 years for girls and 16.8 years for boys (*ibid.*). Studies show that, despite awareness, many young people continue to practise high-risk behaviours and, as a result, cases of early pregnancy, abortion, STI infection and HIV are observed (Ferguson 1988; Johns Hopkins Centre for Communication Programs 1998; KDHS 1999; Nzioka 2001). Compounding their biological vulnerability is the fact that younger women are more likely than older women to be coerced into sex (vaginal or anal) or raped, often by someone older who has had exposure to the HIV virus (Buvé et al. 2001).

Given this context, non-consensual sex among young people in Kenya is relatively common. A study in Central Province, for example, found that 31% of boys and 27% of girls reported experiencing pressure to engage in sex, although it is usually the boys who exert this pressure on girls, either through peer pressure from other boys or by persuading or coercing girls (Erulkar 2004). A countrywide study shows that pressure starts at an early age, with 29% of girls and 20% of boys aged thirteen and below reporting one or more episodes of sexual harassment (Population Communication Africa and Pathfinder International 1999).

The World Health Organization has defined non-consensual sex as ‘any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed against a person’s sexuality using coercion, by any person regardless of their relationship to the victim’ (Krug et al. 2002:149). Other definitions include the act of forcing (or attempting to force) another individual through violence, threats, verbal insistence, deception, cultural expectations or economic circumstances to engage in sexual behaviour against her/his will (Ajuwon et al. 2001; Heise et al. 1995).

Several studies in Kenya highlight the fact that non-consensual sex has several forms, such as sexual insults and teasing, unwanted touching in public minibuses or discotheque halls, verbal and physical harassment when going to the shops or passing through dark places, forcing girls, and sometimes drugging them or gagging them to prevent them from screaming (Mensch 1996; Remes et al. 2002). Other forms of abuse include older boys/men beating their partners when they refuse to have sex, girls being forced into prostitution by their partners or parents/guardians, girl prostitutes being gang-raped by their clients, and wife inheritance (where a dead man's relative forcibly inherits his wife) (Chege and Njue 1999). In schools, girls report being harassed or forced by male students and teachers to have sex (Ajayi et al. 1997; Njue and Vandenhoudt 2001).

Laumann et al. (1994) propose that the consequences of non-consensual sex are probably magnified at first sex because it comes at a turning point in a young person's life, making it a 'formative experience' for the adolescent. The object of this chapter is to examine non-consensual sex among youth, particularly the experiences of young men as victims and perpetrators, among the Luhya in Kenya. The article also discusses first sexual experiences among boys and girls.

Background

Gender relations among the Luhya are characterized by an unequal balance of power, with women having comparatively less access to influential positions and resources, which is reflected in definitions of masculinity and femininity. Motherhood and humility/submission are important aspects of femininity, whereas bravery/valour and sexual prowess are intrinsic elements of masculinity. So while boys are socialized into a role that recognizes and encourages their sexual freedom, girls are cautioned to avoid boys by their parents, teachers and other adults. Unmarried circumcised boys have a special hut within their parents' compound, while unmarried adolescent girls remain in their parents' house. Newly circumcised Luhya boys are told that, as men, they have the right to sexual intercourse with any unmarried woman: 'the door that is open [the unmarried woman] is yours, but that which is closed [the married woman] is not yours'. Girls, however, do not have a rite of passage into womanhood, but are socialized throughout adolescence into adopting a submissive role in public and in intimate relations with men. Experiences of non-consensual sex can be categorized as tolerated (when based on sociocultural and gender stratification systems and expectations/norms) or as transgressive (where condemned by society) (Heise 1998). In Luhya culture, sweet-talking and persuasion are normally tolerated socially as they are often used to justify culturally acceptable expectations of male and female behaviour, and the belief that male sexuality is inherently predatory and

female sexuality is essentially receptive and submissive. Forced contact, such as violence, rape and incest, however, is considered transgressive behaviour and is abhorred by the community.

Methods

The findings presented here are drawn from a survey conducted in two districts (Vihiga and Busia) in Western Province, Kenya, an area that is almost universally populated by the Luhya ethnic group. The survey was the baseline for an evaluation of a multi-sectoral intervention to address adolescents' reproductive health needs (Chege et al. 2001). Three locations (with an administrative area of approximately 15,000 people) in each district were selected through a multistage sampling procedure, and five enumeration areas (each with approximately 100-120 households) were randomly selected in every location. The sample sizes for the baseline survey were calculated to be able to detect changes in sexual experience over time due to the intervention rather than to estimate proportions within the population. As the estimated rates of sexual experience at the baseline were much lower among girls than boys, and among the younger than the older age groups, the sample sizes required to detect a significant change over time in each age group were significantly larger for girls than for boys, and for the younger age groups than for the older age groups.

A listing of all households and their members in each enumeration area was prepared and those households with adolescents aged ten to fourteen years and fifteen to nineteen were considered eligible. From households with more than one eligible adolescent, interviewers randomly selected one adolescent from each age and sex group. Face-to-face interviews were carried out individually and in privacy. The sample size, for those adolescents who clearly stated their age, was 3,522; of this total, boys aged 10-14 years were 554, while those aged 15-19 were 397. Girls aged 10-14 years were 1,408 and those aged 15-19 years, 1,163.

Weighted percentages are presented in this paper to ensure that the responses represented the responses of the study population, as controlled by location, age and sex. The quantitative data were supplemented by qualitative information gathered through focus group discussions undertaken in the study area prior to the survey, among groups of school-going and out-of-school adolescent boys and girls, husbands of adolescent girls, and parents. Despite study moderators' instructions to refrain from sharing personal experiences, participants in several focus group discussions shared their personal/

intimate experiences, and given the insightful nature of these, we have opted to include such statements here.

The nature of the experience of first sexual intercourse was determined through the following closed-ended, single-response question: 'the first time people have sex; it can be for different reasons. For you, the first time you had sexual intercourse, did you want to have sex, were you forced to have sex, were you tricked or were you sweet-talked, were you threatened, or were you convinced with money or gifts?'. The interviewer read out the following response categories in the local language and asked for a single response, which was then recorded on the questionnaire:

- I wanted to have sex
- I was sweet-talked into having sex
- I was convinced to have sex with money/gifts
- I was tricked into having sex
- I was threatened into having sex
- I was forced (physically) to have sex.
- No response

This question was asked also of the last time they had sex and including separate questions for any other times they had had sex.

Respondents were also asked whether they had perpetrated any of these behaviours. Both girls and boys were asked the following separate questions: 'For all the times you have had sex, have you ever sweet-talked a boy/man [girl/woman] into having sex?' 'Have you ever convinced a boy/man [girl/woman] to have sex with money/gifts? Have you ever tricked a boy/man [girl/woman] into having sex? Have you ever threatened a boy/man [girl/woman] into having sex? Have you ever (physically) forced a boy/man [girl/woman] to have sex?'

Three categories of non-consensual sex are defined in this chapter:

1. 'Sweet-talked': defined as to be told 'sweet things', to be 'lured'.
2. Persuaded: includes those reporting they had been convinced with money/gifts or tricked.
3. Forced: includes those reporting they had been threatened or forced.

In this chapter, 'sweet-talking' will not be categorized as non-consensual sex as it is difficult to define sweet-talking as definitely consensual or non-consensual from the data available. Non-consensual sex will include those reporting being persuaded or forced.

Statistical analyses were performed with SPSS. Cross tabulations were made of types of first partner by gender; consensuality at first, last and ever sex by gender; consensuality at first sex by type of partner by gender; and (for boys) ever perpetrating non-consensual sex by ever suffering non-consensual sex. Multivariate logistic regression analysis was performed, to assess correlates of boys ever perpetrating non-consensual sex, and of boys ever being victims of non-consensual sex.

Results

The survey found that 32% of all boys (N=283) and 17% of all girls (N=436) aged ten to nineteen years reported ever having had sexual intercourse (weighted percentages are presented throughout the paper).

Consensuality of sex and experience of first sex

As shown in Table1, the majority of boys and girls (82 and 78% respectively) reported having first sex with a boyfriend/girlfriend or a friend/acquaintance. While girls were more likely to have first sex with a casual acquaintance, however, boys more frequently reported first sex with a girlfriend or fiancée. Boys were also more likely than girls (15 versus 3% respectively) to have first sex with a relative (aunt, cousin, elder sister, sister-in-law) or a housegirl, which supports the qualitative findings, presented later, that some boys experiment by having first sex with someone close to the family.

Table 1: Experience of first sex by type of partner among sexually active boys and girls aged 10-19 in Western province, Kenya (weighted percentages)

	Boys (N=272) %	Girls (N=414) %	Total (N=686) %
Girlfriend/boyfriend/fiancé	61	28	41
Friend/acquaintance	21	50	38
Relative	7	3	5
Housegirl	8	0	3
Other	3	18	12

Note: Of the 283 boys and 436 girls who reported sexual experience, 11 and 22 respectively did not respond to this question

Further analysis shows that, as in most settings, the majority of boys (66%) had first sex with someone younger, whereas for three-quarters of the girls first sexual encounters were reported with an older person; only one quarter of girls and one third and boys had first sex with someone their own age (not shown in tabular form).

For a substantial proportion of girls, the first sexual experience was coerced, in that they were either persuaded or forced to have sex (38%); for the last episode, about one quarter reported that they were either persuaded or forced (see Table 2). Only a small proportion of boys reported being coerced at first or last sex occasions (10% and 8% respectively). When asked about all sexual experiences, 45% of girls and 17% of boys indicated that, on at least one occasion, they had experienced non-consensual sex.

Table 2: Consensuality of first, last and any other sexual experience among sexually active boys and girls aged 10-19 years in Western province, Kenya (weighted percentages)

	First sex		Last sex		All times*	
	Boys N=273 %	Girls N=410 %	Boys N=267 %	Girls N=403 %	Boys	Girls
Wanted to have sex	77	36	85	52	68 (n=265)	32 (n=400)
Was sweet-talked into having sex	13	26	7	22	–	–
Was persuaded to have sex	6	22	4	14	17 (n=182)**	45 (n=233)**
Was forced or threatened to have sex	4	16	4	12		

Notes: *These proportions represent the responses from girls and boys concerning first, last and any other sexual encounter. ** These percentages are for persuaded or forced (i.e. exclude sweet-talking). Of the 283 boys and 436 girls who reported a sexual experience, 10 and 26 respectively did not respond to the question on first sex, 16 and 33 respectively to the question on last sex, 18 and 36 respectively to the question on ever had consensual sex, and 101 and 203 respectively to the question on ever had non-consensual sex (i.e. being persuaded or forced).

The likelihood of girls and boys having non-consensual sex the first time varied depending on who the partner was (see Table 3). Almost one third of girls who first had sex within a romantic relationship reported that they had been persuaded or forced. Among boys, levels of non-consensual first sex were considerably higher with ‘other persons’ compared to experiences with romantic partners or acquaintances.

Forced first-time sex was reported most often with partners who were not a girl/boyfriend, fiancé, friend or acquaintance. Of the girls with such a first-time partner, 23% reported being forced, of the boys with such a partner (including mostly relatives and house girls), 9% reported being forced.

Unfortunately, when constructing the questionnaires, no allowance was made for the possibility of sexual experiences with persons of the same sex. As seen in the qualitative findings presented later, however, it is likely that some of these cases of persuasion and forced sex with ‘other persons’ including relatives reflect incidents with same-sex partners.

In the following section, we will discuss the different contexts in which sex occurs. We start with the somewhat ambiguous experience of sweet-talking.

Table 3: Consensuality of first sex by type of partner among sexually active girls and boys aged 10–19 years in Western province, Kenya (weighted percentages)

	Wanted %	Sweet-talked %	Persuaded %	Forced %	Total non-consensual %
Girls (N = 402)					
Boyfriend / fiancé (n=106)	34	35	19	12	31
Friend / acquaintance (n=200)	43	17	27	14	41
Another person (n=96)*	24	41	12	23	35
Boys (N = 268)					
Girlfriend / fiancée (n=164)	80	12	6	2	8
Friend / acquaintance (n=59)	79	14	4	4	8
Another person (n=45)**	69	13	11	9	20

Notes: *Includes 15 cases reporting 'relative' **Includes 8 cases reporting relatives and 6 reporting house girl. Of the 283 boys and 436 girls who reported a sexual experience, 15 and 34 respectively did not respond to this question.

'Sweet-talking'

As indicated in Table 2, a substantial proportion of girls (26% and 22% respectively) and boys (13% and 7% respectively) reported being sweet-talked into having sex at first or last sexual experience. As discussed earlier, sweet-talking is difficult to categorize as definitely consensual or non-consensual, given the strong socio-cultural expectations/norm that boys should take the lead in initiating sexual behaviour and that girls should wait for boys to seduce them. Thus, a girl reporting that she was 'sweet-talked' may be indicating that the boy had seduced her through 'sweet-talking', but that she participated consensually as she was following cultural norms in letting (and expecting) him go through the process of using words to convince her to have sex. Conversely, it may also reflect a situation in which a girl was 'sweet-talked' into having sex, but she did not really want it and regretted it after it had happened. As it is not possible to differentiate between these situations from the data available, 'sweet-talking' will not be categorized as non-consensual sex here.

Persuasion through gifts, money or trickery

As Table 2 shows, 22% of girls and 6% of boys were persuaded through gifts or money or tricked to have first sex, indicating that the experience may have been non-consensual. A qualitative study in neighbouring Nyanza Province also shows that transactions involving sex are common among schoolgirls, but are rarely undertaken on a 'willing-buyer, willing-

seller' basis (i.e. commercial sex). In most cases, older men (often called sugar daddies) or boys give girls financial or other material incentives (such as a plate of chips or a soda) to persuade them to have sex (Chege and Njue 1999). As indicated in Table 2, compared to girls reporting persuasion at first sex, somewhat fewer girls reported persuasion at last sex (14%), suggesting that sexually active girls may be more able to counter the persuasion tactics used.

Forced sex

In both the survey and qualitative studies, young people reported that they had been forced (including threatened) into engaging in sexual relations by family or non-family members. As can be seen in Table 2, 16% of girls and 4% of boys reported being forced into first sex, while 12% and 4% respectively reported that their last sexual experience was forced.

Forced sex within families

In focus group discussions with both adolescents and parents/adults, participants identified incestuous relationships as an issue in Kenya. Indeed, as mentioned earlier, 7% of boys and 3% of girls reported having first sex with a 'relative' (Table 1), suggesting that this is clearly not insignificant behaviour.

Participants also talked of sexual relationships between girls and their brothers, cousins, fathers, uncles and grandfathers. Boys cited the desire to learn and practise how to have sex 'in safe grounds' as one of the reasons why boys have sex with their relatives. Indeed, the Luhya use cultural expressions to condone such behaviours. For example, 'A bull starts by eating the maize crop within its homestead'. As one boy narrated his experience: *'My friends told me if you want to learn to cycle ... you train yourself in the home, meaning that if you want a lady for friendship you begin with your relative. Since I was young, I did exactly what my friends had told me to do'* (focus group discussion, fifteen to nineteen-year-old out-of-school boys; Busia).

Discussions with key informants reveal that men who have had intercourse with their daughters justified their behaviour by blaming their daughters, their wives or the prevailing HIV situation. Girls were perceived as tempting their fathers because 'they look so much like their mothers' while mothers were perceived as having failed in their familial and sexual responsibilities to their husbands, leaving their husbands with no alternative but to be attracted to their daughters. Others reported that with the prevailing HIV/Aids situation, men felt they should restrict their sexual activity to the women in their homes who 'they trust are safe from HIV infection'. Individuals and family members attempt to keep such relationships secret.

Forced sex outside the family

Thirteen% of boys and 37% of girls reported that they were ever persuaded or forced into sex by a friend or acquaintance (not shown in tabular form). Cultural definitions of masculinity justify the use of threats and force to have sex. For example, fears of being declared 'not a man enough' or impotent or afraid of girls were cited as reasons why boys resorted to pressurizing girls to have sex:

'My elder brother was forced by his age-mates who used to tease him and ask him: "Are you truly a man? If you are, why don't you have a girlfriend?" This became too much, such that he could not leave the house, so he just decided to look for a girlfriend' (focus group discussion, ten to fourteen-year-old school-going boys; Busia). Moreover, boys also reported that when a girl is unwilling and refuses to succumb to sexual advances, they use physical threats or violence to have sex so as to prove their manhood. *'When a girl continuously refuses, this is often taken to mean that the girl is demeaning his manhood. The boy then has to use force'* (focus group discussion, fifteen to nineteen-year-old out-of-school boys; Vihiga).

Young men openly admitted that they pressurize girls to have sex with them, and many could not understand why a girl would visit them and not be interested in having sex: *'And me, you know, the day she has come [she visits me], my body temperature changes and I feel like having sex with her ... and when I am drunk, I tell her that she just can't come visiting me and just go without us having sex. Sometimes she gets annoyed with me but later she gives in to my demand.'* (Focus group discussion, husbands of adolescent girls; Busia).

'Yes ... I have even forced a girl to have sex around three to four times ... I insisted on having sex with her. In fact I had one who told me that she could not have sex with me until she completes her Form Four [secondary school]. I told her I was suffering, so I told her to give in so that I could satisfy my sexual desires not minding how she could feel' (focus group discussion. husbands of adolescent girls; Busia).

Some boys also believed that using force is an integral part of the seduction process: *'Girls want sex as much as boys, but they have to say "no" to maintain their reputation'* (focus group discussion, fifteen to nineteen-year-old out-of-school boys; Vihiga).

Rape is frequently unreported to the authorities and legal procedures to prosecute the perpetrator are rarely followed; if the rape is discovered, the families of both parties are likely to try to settle the matter between them. One girl narrated her experience when she accepted an invitation to visit an acquaintance in his hut: *'He came and grabbed me by force and I started screaming. When his parents and neighbours heard my screams,*

they came and requested him to open the door. He refused and went ahead to rape me. These people broke the door and entered the house but it was too late. He had already done it and hurt me badly ... I don't know how much he paid because the money was given to my father. Part of that money was used to pay for my hospital treatment and later to pay for my enrolment in a tailoring course...My father and mother insisted that they use the money paid to them to procure an abortion. I refused ... they constantly abused and emotionally harassed me for refusing to have an abortion.' (In-depth interview, eighteen-year-old girl)

Correlates of non-consensual sex among boys

Boys were asked whether they had ever persuaded or forced someone to have sex, or whether they had been persuaded or forced to have sex (using the response categories listed earlier). As Table 4 shows, two-thirds of sexually active boys had never been involved in non-consensual sex, either as perpetrators or as victims. Of all the sexually active boys who responded to questions on experience and perpetration of non-consensual sex, 21% reported that they had persuaded or forced a girl at least once to have sex with them, whereas 17% reported ever having been victims of non-consensual sex in any of their sexual encounters, whether their first, last or any other time.

Table 4: Sexually active boys who have ever perpetrated or suffered non-consensual sex in Western province, Kenya (weighted percentages, n=182)

		Ever been persuaded or forced to have sex		
		Yes %	No %	Total %
Ever persuaded or forced a girl to have sex	No	7	14	21
	Yes	10	69	79
	Total	17	83	100

Note: Of the 283 boys, who reported a sexual experience, 101 boys did not respond to one or more of the four questions used to construct this table.

Using multivariate logistic regression analysis, the relative contribution of eight characteristics to the possibility of boys reporting ever coercing (that is, persuading or forcing) girls to have sex was determined and reported as odds ratios (see Table 5). These characteristics were derived from items in the survey questionnaire, and included characteristics that occurred prior to the coercive incident or characteristics that could be argued as proxies for long-term behaviour. They were divided into three categories to facilitate interpretation: family aspects, schooling, and experience at first sex. As this

analysis has been undertaken using the existing data-set for the baseline survey rather than using data deliberately collected to address this issue, the items and categories included as potential determinants of such behaviour were selected on the basis of the researchers' judgment and experience in the field.

Two of the eight characteristics were significantly associated with predicting an increased possibility of reporting ever having persuaded or forced a girl to have sex (Table 5, Model I). Boys who felt that it was acceptable for a man to hit his partner were significantly more likely to have coerced a girl to engage in sex, than boys who did not support wife-beating. Moreover, boys who initiated sex at an earlier age were significantly more likely to force a girl to have sex than others.

None of the seven variables included in the multivariate regression analysis were found to be significantly associated (at $p < 0.05$) with an increased possibility of reporting ever having been persuaded or forced to have sex (Table 5, Model II).

As mentioned earlier, in constructing the questionnaire no allowance was made for reporting same-sex behaviours in the response categories, because the researchers assumed heterosexual behaviour to be the norm. It should be noted, however, that when asked who their first sexual partner was, seven boys explicitly mentioned a male-to-male experience in the category of 'other person'; in five cases, the boys reported wanting to have sex with this male partner and in two cases the boys reported that they were forced.

These findings suggest that acceptance of physical violence and early age at sexual initiation appears to be predictors of non-consensual sex among boys in western Kenya. During a focus group discussion with young out-of-school girls an incident was narrated wherein 'a boy who was going to a funeral was forced by girls.' A married male adolescent similarly recalled during an in-depth interview: *'One day a girl tried to force me to have sex with her. Immediately we started having sexual intercourse, I got bored and this forced me to withdraw'*. Thus whether boys reporting being coerced were persuaded or forced by a female or male is not clear.

During focus group discussions, boys frequently mentioned being forced into same-sex liaisons in exchange for support or protection, including shelter and cash. For example, a young male reported that *'boys are cheated to come for a lift [given a ride], or to show [give directions to] a certain area, and they end up being abused. The boys are forced to have sex with these men and given money'* (focus group discussion, ten to fourteen-year-old school-going boys; see also Njue and Vandenhoudt 2001).

Table 5: Logistic regression analysis predicting characteristics of boys 10-19 years old reporting ever perpetrating or suffering non-consensual sex¹ in Western province, Kenya

Characteristics	Model I Perpetrators of non-consensual sex (n=181)		Model II Victims of non-consensual sex (n=168)	
	Odds Ratios	95% CI	Odds Ratios	95% CI
Family aspects				
Living Arrangements				
With both parents (Ref)	–	–	–	–
Mother only	3.15	0.34-29.38	0.10	0.01-1.31
Other	1.92	0.23-15.85	1.93	0.03-126.40
Parents have verbal arguments				
Have arguments	1.30	0.63-2.65	1.33	0.15-12.18
Never (Ref)	–	–	–	–
Acceptable for a man to hit partner				
Agree	2.65*	1.24-5.69	1.17	0.09-15.00
Disagree (Ref)	–	–	–	–
Schooling				
Currently attending school				
Yes	–	–	–	–
No	0.72	0.32-1.61	6.51	0.69-62.47
Experience at first sex				
Age at first sex				
<13 yrs	3.26*	1.09-9.68	13.03	0.25-62.56
13-15 yrs	1.82	0.69-4.79	4.49	0.08-24.90
>15 yrs (Ref)	–	–	–	–
Wanted first sex				
Yes (Ref)	–	–	–	–
No	1.72	0.81-3.68	–	–
Protection at first sex				
Yes	1.20	0.50-2.88	1.02	0.09-12.02
No (Ref)	–	–	–	–
First sex with girlfriend				
Yes (Ref)	–	–	–	–
No	1.24	0.98-1.50	0.53	0.07-4.26

* p<0.05

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Limitations of the study

A number of methodological issues relating to studying non-consensual sex emerged from the study. First, as discussed earlier, the cultural norm (and one that is universal in most of sub-Saharan Africa) that the male is expected to take the lead in initiating intimate relationships, which may or may not involve sex, renders the category of being 'sweet-talked' into having sex difficult to interpret. This category was included in the study because respondents had used it frequently during formative research and it was perceived to be distinct from and intermediate to 'wanted to have sex' and 'convinced to have sex'. For future research, it is crucial that the nuances of the language involving phrases such as this are better understood so that the actual meaning for the respondent is clearly captured.

Second, the category of 'convinced with money or gifts' is also open to different interpretations, depending on the meaning and role that gifts play in developing intimate relationships and creating the conditions for sex to become part of the relationship. An instructive study of adolescents in Durban, South Africa, highlights the fact that although economic exchange often underpins sexual coercion and exploitation, especially when it is characterized by age and/or power differentials (see, for example, Luke and Kurz 2002), gift-giving among age-mates is integral to shaping the nature and direction of relationships (Kaufman and Stavrou 2002). The symbolism and expectations involved in giving and receiving gifts within the adolescent cultural context need to be better understood if programmes promoting abstinence and safe sex are to address this practice within the context of intimate relations.

Both these observations highlight the critical importance of thoroughly understanding concepts and pre-testing the language to be used as well as the need to understand the cultural context of social behaviour when undertaking research on non-consensual sex among adolescents.

The third methodological issue that emerged from this study reflects the naivety of the researchers, i.e. their failure to adequately detect and describe same-sex encounters in experiences of sex with relatives and 'other persons'. Clearly this information is sensitive and thus difficult to collect. The realization that such behaviours probably form a significant proportion of the experiences of non-consensual sex perpetrated or suffered by adolescent boys should motivate researchers to pay more attention to designing instruments that can collect valid information about stigmatized sex from adolescents in sub-Saharan Africa. Studies that have addressed this issue suggest that the audio computer-assisted self-interviewing (ACASI) methodology may be promising (Hewett et al. 2004).

Discussion and moving ahead

The findings of the study demonstrate that a large proportion of adolescent girls and boys report having experienced non-consensual sex, especially at sexual initiation. Our findings also suggested that boys who were acceptable of wife beating were significantly more likely to coerce a girl to engage in sex than were other boys. The nature of the first sexual experience was also important in influencing subsequent coercive behaviour: those whose initiation was at an early age appeared to be significantly more likely to have ever persuaded or forced a girl to have sex than others.

A significant finding of the study is the link between the experience of coerced first sex and subsequent perpetration of forced sex. Given the belief that boys should take the lead with girls in initiating sex, boys who report unwanted first sex may feel pressured to adhere to these traditional norms and start coercing girls. Even when these experiences are recognized as abuse, the victims may be viewed as having been 'weak' or 'not man enough' because they were unable to either stop the incident or defend themselves (Lisak 1994; Lisak et al. 1996; Munro 2002; Myers 1989). Abused boys may become angry and defensive – socially acceptable emotions for men. Several studies have shown that male survivors may cope by drinking heavily, using drugs, practising unsafe sexual behaviours and avoiding intimate relationships; an increase in the frequency and intensity of drinking are both associated with sexually aggressive behaviour. These factors can trigger coercive behaviours in male victims as a way of camouflaging their pain and as revenge (Koss and Gaines 1993; Myers 1989). Sexually abused males may attempt to 'prove' their masculinity by having multiple partners, sexually victimizing others and/or engaging in dangerous or violent behaviours (Bruckner and Johnson 1987; Lew 1988).

The process of socialization for Luhya boys appears to approve the practice of non-consensual sex through definitions of masculinity ingrained in the language, jokes and even through the media. Boys begin to learn at an early age that men are expected to be strong, emotionally tough, daring, virile, self-reliant, aggressive, competitive and a little 'reckless' in their sexual behaviour, otherwise they may be seen as soft, too timid and not 'macho' enough. These cultural definitions of masculinity contribute to the use of threats and force to have sex and may explain the results of the 2003 Kenya Demographic and Health Survey, which shows that domestic, physical and sexual violence suffered by women is particularly high in Western Province. Qualitative research among adolescent men in Latin America, Asia, North America and sub-Saharan Africa suggests that viewing women as sexual objects, using coercion to obtain sex and viewing sex from a performance-oriented perspective begins in adolescence and often continues into adulthood (Brown et al. 2001).

Clearly, the growing efforts of concerned national and international organizations to raise awareness of the magnitude and consequences of non-consensual sex in Kenya need to advocate for interventions to be initiated among adolescents before they become sexually active (i.e. between the ages of ten to fourteen) if they are to influence the timing and the nature of their formative first sexual activity. The data also suggest that in many cases when boys were persuaded or forced into having sex, this may have been by other boys or men. The Luhya (and all other cultures in Kenya) abhor same-sex relations, however, and the community does not know how to handle these situations; consequently, little is done to prevent such incidents or to punish the perpetrators. Evidence of boys as victims of non-consensual sex tends to be mixed and tentative. While 17% of boys reported having been victims of non-consensual sex, it is unclear whether this coercion was perpetrated by a female or male, but data from focus group discussions indicate that non-consensual and same-sex coercion among young males may be more common than is generally acknowledged in this society.

More research is needed to better understand not only the magnitude of sexual exploitation by and of adolescent boys, but also the context in which such behaviour occurs. Such an understanding is critical to guide the formulation of appropriate policies and programmes that explicitly recognize this reality and address both the prevention of such incidents and care for victims.

A second issue that needs further research is a better understanding of the range of persons who perpetrate forced sex, particularly in the context of the finding that non-consensual first sex is largely perpetrated by known persons, including relatives. Whether this is sexual experimentation among age-mates, or coercion by an adult relative or

acquaintance of a young girl or boy, this study suggests that both types of behaviour are more common than is generally recognized and more needs to be known about their frequency and context.

For both these issues, the cultural norm of not discussing sexuality within the family, social group or community (and often not within personal relationships) has prevented the open acknowledgement that these transgressive behaviours are not uncommon and can lead to serious psychological, social and health problems. Likewise, the development of mainstream public sector interventions to address these issues has been inhibited because of the socio-cultural taboos in Kenya against a public discussion about sexuality. Moreover, the fact that one quarter of adolescent boys openly persuade and force girls to have sex is perhaps even harder to address, as this behaviour is tolerated and even approved as part of the coming-of-age process among Luhya adolescents. Furthermore, in view of the fact that fewer than one third of girls report having first sex within the context of a romantic relationship, it is clear that the idealized conception of sex as a physical expression of love is clearly not the norm for these girls.

In the short term, skills to exercise assertiveness to resist physical and psychological pressure to have unwanted sex are urgently needed, for both girls and boys. For a longer-term approach to reducing non-consensual sex among adolescents and adults, efforts are clearly needed to provide young people, their families and the wider community with opportunities to talk openly about issues related to adolescent sexuality. Such forums and venues, perhaps using the existing institutions of the Church, schools and community groups, could also help boys and girls develop egalitarian attitudes towards gender roles and communication skills in male–female relations.

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Chapter 6

“If you don’t abstain, you will die of AIDS”: AIDS education in Kenyan public schools

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Abstract

Objective: We explored constraints of implementing AIDS education in public schools in Kenya.

Methods: Sixty interviews with teachers and 60 focus group discussions with students were conducted in 21 primary and 9 secondary schools.

Results: System/school level constraints included lack of time in the curriculum, limited reach of secondary school students (because AIDS education is embedded in biology, which is not compulsory), and disapproval of openness about sex and condoms by the ministry of education and parents. Alternative strategies to teach about AIDS had their own constraints. Teachers lacked training and support, and felt uncomfortable with the topic. They were not used to interactive teaching methods, and sometimes breached confidentiality. Teachers' negative attitudes constrained students from seeking information.

Conclusions: Training interventions should be provided to teachers to increase their self-confidence, foster more positive attitudes, and stimulate interactive teaching methods. The ministry of education needs to have a clear policy towards the promotion of condoms.

Introduction

Like many African countries, Kenya is facing serious health challenges as a result of the HIV/AIDS epidemic. The number of new infections was 55,000 in 2006, of which the majority was in the age group of 15 to 24 years (NACC, 2006). According to several studies, HIV/AIDS, STIs and other reproductive health outcomes increase rapidly after the age of 15, especially among girls (CBS, MOH, KEMRI, CDC & Measure DHS+, 2003; Buvé et al, 2001; Johnston, 2000). Kenya has taken a very constructive step in trying to get AIDS education to all children. In 1999, the Kenyan government through the ministry of education developed an HIV/AIDS curriculum for use in Kenya’s primary and secondary schools. The AIDS education syllabus outlined learning goals aimed at the prevention and control of HIV and STI infections. They included the ability for learners to acquire knowledge about HIV/AIDS and STIs; develop life skills that will lead to AIDS- and STI-free life; make decisions about personal and social behaviour that reduce risk of infection; show compassion for those infected; and become actively involved in school-based and out-of-school activities (Kenya, 2003a; Mwebi Bosire, 2008).

The implementation process of AIDS education began in 2000. The curriculum mainly covers the biomedical aspects of HIV/AIDS, transmission, prevention, and care for people living with AIDS. Because HIV/AIDS is primarily transmitted through sexual intercourse, the curriculum’s main focus is to encourage learners to abstain from sex. At primary school level the curriculum is taught by integrating it into subjects such as geography, history, ethics, science and religious education, while at secondary school level, the curriculum is infused within biology (Mwebi Bosire, 2008).

While the Kenyan government deserves credit for mandating HIV/AIDS education in public schools, the diversity in AIDS education in terms of style, content and the extent to which the curriculum is currently implemented at schools, presents challenges of coherence (Boler, Ibrahim, Adoss & Shaw, 2003; UNICEF 2002). There has been no systematic attempt to evaluate the implementation of the Kenyan AIDS curriculum. This paper identifies multilevel constraints that undermine the delivery of effective HIV/AIDS education in Kenya. Using qualitative data, the paper explores experiences of teachers and learners regarding AIDS education in Kenyan public schools. The two groups were studied in order to get a complete understanding of social realities and increase the reliability of results (Barbour, 1998; Alvermann, O’Brien & Dillon, 1996). The study was embedded in a larger research project, aimed at providing baseline measurements for a sexual and reproductive health intervention. Lessons learnt from this study can contribute to debates and understanding of HIV education, within and beyond the context of Kenyan

public schools. The study provides a blueprint for the issues that need to be considered when mandating the introduction of an HIV/AIDS curriculum into a country.

Methodology

For this study, interviews were held with school staff members, and focus group discussions were held with students. The research was carried out in schools in two districts in Kenya, Meru South in Eastern Province and Kajiado in the Rift Valley Province. The two areas are inhabited largely by the Meru and the Masaai people, respectively. The two sites differed regarding HIV prevalence rates: in 2001 prevalence was 38% in Meru South and 7% in Kajiado (NASCO, 2001). Using the National Master Sample frame from the Central Bureau of Statistics, one division was sampled randomly within each district: Mwimbi Division in Meru South and Isinya Division in Kajiado. Mwimbi had a total of 59 public primary schools and 7 secondary schools while Isinya had 21 primary schools and 2 secondary schools. The study aimed to include a third of the total of 89 public schools, i.e. 30 schools. All the 9 secondary schools were included in the study, of which 6 were boarding schools for girls and 3 for boys. The 80 primary schools were divided by district, school type (day vs. boarding schools), gender coverage (boys vs. girls vs. mixed schools) and by location (semi-urban vs. rural areas), and 21 schools were randomly sampled from these categories including at least one school per category.

Semi-structured interviews were conducted with school staff to gain their perspectives on the AIDS education provided. In each of the 30 selected schools, the head teacher facilitated recruitment by identifying 2 key staff members (purposive sampling). They included guidance and counselling teachers, head teachers, school administrators, school nurses, and other professionals involved in AIDS education. In total 60 interviews were held with 27 male and 33 female staff members. The interview guide consisted of open-ended questions which explored staff members' perspectives on the introduction and implementation of HIV/AIDS education, the teaching of the curriculum, logistical issues, and the socio-cultural context in which they live and teach in. The fieldworkers probed for other salient and emerging issues. On average, interviews took about 40 minutes.

Focus group discussions (FGDs) were held to explore the students' views towards AIDS education. In each school, 2 FGDs were conducted, with male and female pupils/students separately, by same-sex interviewers. Each FGD had 8 to 12 participants, with ages ranging from 12 to 18 years. In the primary schools, pupils were drawn from the upper primary classes Standard 6 to 8 (about 12 to 15 years), while in the secondary schools students were drawn from Forms 1 to 3 (about 14 to 18 years). Within each class, every fifth pupil/

student was sampled for the FGD. In mixed schools, the sample of respondents was drawn with emphasis on even representation of both sexes i.e. in a school with mostly boys, the girls were over-sampled. In total, 27 and 33 FGDs were conducted with 321 male and 394 female participants, respectively; 42 were held in primary schools and 18 in secondary schools. The high number of FGDs was to ensure that the views of diverse youth (both in primary and secondary schools, in day and boarding schools, in mixed and single-sex schools, and in peri-urban and rural schools) were incorporated, in each of the 2 districts. A topic guide was used, that was pre-tested for face and construct validity. The FGDs mainly focused on understandability and relevance of topics in the curriculum, the educational strategies that were used, and teachers’ comfort level teaching HIV/AIDS. To increase confidentiality, teachers were requested not to be present at the FGDs. On average, FGDs took about one hour and ten minutes.

Data collection took place in 2004. Prior to the fieldwork, the Ministry of Education, Science and Technology granted ethical approval for the study. Further consent was obtained from the District Education Office, school principals, parents/guardians (for those under 18 years), and the interviewed staff members and students (Schenk & Williamson, 2005). The interviews and FGDs were conducted by a team of trained fieldworkers. All interviews with school personnel were conducted in English. Most FGDs were conducted in Kiswahili and English, but in some rural primary schools a mixture of Kiswahili, English and the local languages (Kimeru in Meru and Maa in Kajiado) was used due to language problems. The interviews and FGDs were audio-taped. Fieldworkers in addition kept field notes for additional data gathering.

The interviews and FGDs were transcribed verbatim and translated into English, where necessary. To ensure accuracy, some transcripts were back translated into Kiswahili or local languages by another team of Kimeru or Maa speaking fieldworkers, and verified by the research managers. The qualitative software program QSR NU*DIST N6 was used to identify any codes, patterns and categories. The program also assisted in quantifying some results of the teachers’ interviews (Richards, 2002). Data analysis followed the principles of the grounded theory approach (Patton, 2002). This inductive approach consists of carefully reading and rereading interview and FGD transcripts, exploring and coding responses, and allowing analytical themes to emerge during the process. First, the data of the learners and school personnel were analysed independently. Then cross-cutting and group specific themes in both learners and school personnel were highlighted. This paper presents the analysis of responses at three levels: the system, teacher and the student level. Each level is illustrated by quotes from both teachers and students.

Results

System/school level constraints

The AIDS curriculum has been implemented in most of the participating schools in this study: a majority of the learners reported having received lessons on AIDS, especially in primary schools. At the secondary school level, the curriculum is embedded into biology, but since biology is not compulsory many students are not reached by the AIDS curriculum. Moreover, the curriculum relies on factual information provision, largely biological or biomedical, and does not equip students with the skills to implement behavioural self-protection; nor does it address the social, sexual, gender, or maturational issues that should receive attention in a sound prevention curriculum.

Political sensitivities and agendas have limited the inclusion of training in – or possibly even the mention of – correct condom use. Extensive debates have been going on between the government, donors, religious and secular groups, on the content of the curriculum and on the teaching of condom use. Teachers were faced with ambiguous and conflicting requirements from the ministry of education to promote sexual behaviour change on the one hand, but not to mention ‘sensitive’ issues such as condom use on the other. *“When they introduced the AIDS syllabus, we had a seminar where the ministry urged us not to discuss contraceptives and condoms to students,”* (guidance & counselling teacher, secondary school). This has made it difficult for teachers to address the topic in a way that is relevant to the real-life situations and contexts of young people at home and in their communities.

Our findings also reveal a lack of guidance as to where the curriculum should fit into the schools’ offerings and how it should fit within the daily schedule of classes. A majority of teachers had no prior instruction on how to use the curriculum and were uncertain of how AIDS education should be organized. As a result, most teachers acknowledged that they paid very little attention to the curriculum. *“There is no time in school to respond to what the youth may want to know, too much work”* (deputy head, secondary school). *“You know, we do not have enough time for AIDS lessons. “However we try as much as possible to talk about AIDS in class when we are teaching other subjects especially the sciences,”* (female teacher, secondary school).

Adding AIDS modules into an already crowded work schedule was viewed as a burden. The introduction of universal free primary education in Kenya in 2002 led to a phenomenal enrolment growth from 5.9 million children in 2002 to 7.2 million in 2003 (Kenya, 2004): *“In primary schools it is becoming worse due to the introduction of free primary education which has increased our workload”* (head teacher, primary school).

The pupils too described the effect of time shortage: *“AIDS lessons are normally short and in most cases the teacher just distributes some books on AIDS for us to read on our own”* (male FGD, primary school). Because the content of the curriculum is not reflected in the examinations, teachers focus on the examination materials that will directly impact the students’ educational options in the future.

Many schools have tried to overcome some of the challenges of teaching the AIDS curriculum within school hours, by introducing alternative strategies (Boler et al 2003; Kenya, 2003b). The teachers reported they discuss AIDS during extra-curricular activities, for example in student clubs such as debating, drama, music and science clubs. The use of student clubs to provide AIDS education appeared to be more common in secondary schools than primary schools, probably because secondary school students had extra-hours at school because they board there. Another alternative strategy to teach AIDS education was during guidance and counselling sessions. The school heads appointed the guidance and counselling teachers from among the teachers to provide the learners with group and individual counselling: *“I was appointed by the head teacher as a G&C teacher...he appointed people with good reputation and hardworking...”* (female teacher, primary school). AIDS education was also taught through multimedia (folk, electronic and print media) and other teaching aids, and by inviting external experts such as medical professionals, puppeteers, people living with AIDS and representatives from NGOs.

Although the mentioned alternative strategies offered schools a way to give AIDS education outside the regular school-hours, the strategies had their own constraints. First, no funding had been provided for implementing the alternative strategies. Primary schools were particularly in an acute need of funding. *“The ministry should allocate enough money to AIDS education in schools if it is serious. Otherwise we cannot do much”* (headmistress, secondary school). But also secondary schools struggled with limited funds, for example to invite external experts: *“Once in a while we call in people to talk to our girls. But you see we cannot do it every time because some may need something small [money] and also there may be no time to do it because of the school program”* (female teacher, secondary school).

Where AIDS education was folded into extra-curricular activities, few students were exposed to the information: *“Teachers are too busy in academic activities to get time to organize these HIV/AIDS activities”* (teacher, secondary school). Another school head teacher explained: *“Ideally we are supposed to use sports, music, and drama to spread the AIDS message. However, the only time we are using them for that purpose is when there are national competitions”* (headmaster, secondary school). Learners agree: *“We use our debating club to talk about AIDS issues, but we need to know more, so that we*



can share with others. The teachers do not even bother to join us. We need an AIDS club and we can invite people who know more to come" (female FGD, secondary school). The effectiveness of guidance and counselling sessions was also questionable, because the moderators were not autonomous and the school authority wanted to control the activities. Moreover, guidance teachers lacked time, skills and commitment to provide on-going advice and support to school youth.

The use of multimedia materials, though much admired, was constrained in most schools especially in rural settings. Most of the teachers (43/60) suggested that audiovisual means such as radios and TVs could assist teachers in presenting information, but lack of electricity and equipment precluded this option: *"Apart from drama and music, videos can be very effective means of educating pupils on the risks and issues relating to HIV/AIDS. Our schools do not have electricity, video players or even TV sets. In those circumstances, that approach is not an imaginable option!"* (female teacher, secondary school). Another respondent indicated: *"Showing students videos about AIDS is very effective. We have some videotapes in the school provided by some donors, but they are useless without necessary accessories like TV"* (headmaster, secondary school). Moreover, multimedia materials did not always reach the intended beneficiaries or if they reached the schools, the materials were not being put into good use for various reasons. One participant observed: *"The head masters office has many posters and video tapes but we do not know what they are doing there"* (female FGD, secondary school).

While visits by external resource persons were reportedly popular with the students, this was an option limited to urban areas: *"People from outside cannot come to a remote school like this one. The school is not only far from the markets, but the roads are also poor. For one to come here they really have to be motivated"* (headmaster, primary school). Moreover, in schools where external experts had been used, there were concerns about coordination, follow-up and the multiple messages given by the different stakeholders. Some learners reported that the visits are far apart: *"Sometimes doctors and nurses come to talk to us and they tell us many things but they go and we never see them again"* (male FGD, primary school). The teachers on their part expressed concern that there was no way of ensuring the quality of what was taught, as they were often not allowed to attend the sessions.

Teacher level constraints

The vast majority of the teachers (47/60) felt that they lacked training: *"The problem is that we have few teachers and most of them are not well prepared to handle the subject"* (head teacher, primary school). Another added: *"We have these handbooks for teachers but there is nothing else on how to use them"* (head teacher, primary school). More than

half (34/60) felt uncomfortable with the subject matter and as a result of this discomfort they tended to gloss over sensitive sexuality issues and were reluctant to talk about AIDS freely.

Of the 25 appointed guidance and counselling teachers, most (17) had never attended any course on counselling: *“As teachers, we are not provided with any training in counselling. The school or the Ministry of Education assumes that by simply qualifying as a trained teacher, you gain skills on how to deal with students. This is certainly very wrong. Some teachers, I know, need counselling even much more than the students. We as teachers also need quality training in HIV/AIDS counselling so that we can be effective in dealing with students”* (female teacher, secondary school). Moreover, guidance teachers lacked time and autonomy to provide on-going advice and support to school youth.

Religious’ and parents’ sensitivities constrained what teachers felt able to teach, leading over half of them (38/60) to skip sections of the curriculum that they judged to be potentially sensitive, thereby creating a highly idiosyncratic and inconsistent delivery of the intended curriculum. *“When it comes to contraceptives, it [curriculum] is a bit contradicting on the side of the church. We teach them about having good morals and living holy lives, (we) want them to abstain”* (head teacher, primary school). Teachers said they were only talking about the dangers of AIDS and its modes of transmission without addressing key issues related to sex, sexuality, reproductive organs and contraceptives including condoms. *“I did not teach about the use of contraceptives because it could encourage the pupils to try”* (female teacher, primary school). This appeared to be more prevalent in primary schools. In the secondary schools, teachers appeared to be slightly more open in discussing issues of safe sex, condom use and abstinence.

Our findings also show that in public schools, instructional methods are typically uni-directional and exam-focused to provide informational instruction. Thus, teachers’ usual instructional method may not readily transfer to a subject that would benefit from a more interactive style. Teachers often resort to telling students rather than discussing. Most of the teaching methods used – such as lectures, videos and discussions – also seem to be designed to instil fear such as in the message *“if you don’t abstain you will die of AIDS.”* However, by inundating students with fear, they fail to seek out information on how to reduce their risk or to find out whether or not they are infected.

Teachers sometimes breached confidentiality and disclosed personal information of students to others. This has led to strained teacher-student relations. Students expressed the difficulties they faced when disclosing personal secrets to teachers: *“When you tell your teacher especially female teachers anything about your sex life, and sometimes you*

need serious advice, they go around gossiping, and the information might even get to your parents” (female FGD, secondary school). The pupils in primary schools expressed fear of being punished for asking questions. Teachers’ negative attitudes were a deterrent for students to seek information or assistance on HIV/AIDS, sex and other reproductive health concerns: *“How do you approach a teacher on something to do with sex? Most of them are too harsh and could even punish you. Even the counselling master is harsh”* (female FGD, primary school).

Student level constraints

Students realized teachers’ discomfort and, in turn, felt unable to discuss the issues or ask questions to their teachers. The messages they received were prescriptive, inaccurate, and reflected a counterproductive reliance on fear messages. Contraceptive information was omitted and if students posed questions about the topic, they were ignored. A primary school pupil said: *“Teachers only talk of AIDS. Sometimes when you ask about the condoms they just ignore you. The teacher says we will know these things when we are older”* (female FGD, primary school). Another reported: *“What we get in school is just being warned about AIDS. Everybody seems to be careful with what they say”* (male FGD, secondary school). Abstinence was at least in some instances the only message delivered: *“Every time we are told the same things about AIDS. We do not get anything new, we know how people get it and why it is dangerous and that we should avoid sex”* (male FGD, secondary school).

Students felt that the teachers were out of touch with the realities of their lives and experiences, especially with respect to their relationships and sexuality as illustrated in these quotes: *“We have a guidance and counselling teacher, but I don’t think she likes talking about AIDS or sexual matters. She only tells us to avoid boys in order to pass exams. She cannot help with many issues”* (female FGD, secondary school). *“What the counsellor would tell you is that girls can put you in trouble and disrupt your studies. And that they could become pregnant”* (male FGD, secondary school). What appeared to be referred to as ‘counselling’ simply involved indicating to students that sexual relations were bad. Such attitudes have affected students’ information seeking behaviour: *“teachers are not easy to talk to about sexual matters or AIDS because they will mark you and say you have bad manners. This puts us off”* (female FGD, secondary school).

This made visits by external resource persons very popular with the students: *“you see, a doctor will not gossip about what you ask him. A teacher will tell others that you have bad manners especially in a mixed school like this one”* (male FGD, secondary school). Learners however expressed concern that their visits were far apart: *“Once in a while we have people coming to talk to us. But this is rare”* (female FGD secondary school).

Discussion and conclusions

In this paper we explored the experiences and constraints of implementing AIDS education in public schools in Kenya. At the system/school level, we found that not many students were reached because the curriculum is embedded in biology, which is not compulsory. Furthermore there was no time in the curriculum, and some parents and the ministry of education disapproved of openness about sex and condoms. Alternative strategies to teach about AIDS, such as using extra-curricular activities, guidance and counselling sessions, multimedia, and inviting external experts, had their own constraints. At the teacher level, a lack of training and support was the main constraint. Also, teachers felt uncomfortable with the topic and skipped sections of the curriculum that were potentially sensitive. Teachers were not used to interactive teaching methods, and they sometimes breached confidentiality. Teachers’ negative attitudes constrained the students from asking questions or seeking information from their teachers. There were no differences in findings between Meru and Kajiado, nor between mixed and single-sex schools.

There are some limitations to our study. The data described in this paper may not necessarily be representative for all public schools in Kenya. Because we chose our study areas to be rural and semi-urban areas with little NGO activity, there may be urban districts with better-off schools which may have more trained AIDS education teachers. The selection of our teachers may also have been biased and may have included teachers who were more motivated to participate in the study, either because they are interested and enthusiastic about HIV interventions, or because they are highly critical of the HIV/AIDS curriculum. However, the uniform picture that comes out of the teachers’ and the students’ data, and the fact that respondents participated without any incentives, suggests a face validity of the results.

Our findings have a lot of similarities with those from other studies in sub-Saharan Africa. Many teachers from South Africa and Zimbabwe felt unable to provide good quality sex and AIDS education because they did not have adequate training, ongoing support and engagement (Munodawafa, 1991; Ahmed et al, 2006; Mathews, Boon, Flisher & Schaalma, 2006). In rural Mwanza, Tanzania, teachers taught curriculum content well, but sometimes had difficulty adopting new teaching styles (Plummer et al, 2006). We showed that alternative strategies of giving AIDS education had their own constraints. Studies from other countries show similar challenges with these extra-curricular strategies (Gallant & Maticka-Tyndale, 2004). For example, a qualitative study in South Africa demonstrated that the uni-directional didactic approach substantially compromised the guidance teacher’s ability to facilitate critical debate and dialogue during extra-curricular activities (Campbell & MacPhail, 2002). These studies highlight the need for HIV education to form

part of teacher training and for skills building among learners. Our findings also suggest that most of the teaching methods used seem to be designed to instill fear. Previous studies in sub-Saharan Africa, Latin America, Asia and North America show that instilling fear prevents people from adopting protective behaviours (ICRW, 2002; UNAIDS, 2002; Link & Phelan, 2001).

We showed that many teachers rely solely on an “abstinence until marriage” message. Abstinence-only policies by the U.S. government have largely influenced global HIV prevention efforts. In Kenya, one-third of the President’s Emergency Plan for AIDS Relief (PEPFAR) prevention funds must be spent on “abstinence/be faithful” youth programs, even though Kenya’s AIDS Control Program promotes “ABC” messages (“abstain, be faithful, or use condoms”) (Santelli et al, 2006). However, sexual debut in Kenya is quite early: in 2003, 15% of girls and 31% of boys had had sex by the age of 15; the median age at first sex being 16.7 years for girls and 16.6 years for boys (CBS, 2003). In failing to acknowledge that young people are already sexually active, the current AIDS education has been unsuccessful in protecting this vulnerable group against the negative consequences of sex. Sexually active youth are not only feeling excluded from the messages, but also have limited access to potentially life-saving information (Boler et al, 2003). Studies show that U.S government policy has become a source of misinformation and censorship not only in the U.S and but also in sub-Saharan Africa, the Caribbean and Asia. Its emphasis on abstinence may also have limited these countries ability to design prevention programs specific to their people’s needs (Santelli et al, 2006; Wall of Separation, 2008).

Our study proposes a number of actions to improve the implementation of AIDS education in Kenyan schools. First, teachers should be well trained, their negative attitudes should be changed, and they should get greater self-confidence with regard to teaching AIDS education. Through intensive training both pre-service and in-service, teachers can learn how to discuss controversial issues openly and how to be non-judgmental and confident (Boler & Jellema, 2005). Such training would help teachers overcome internalized cultural and religious barriers that make it difficult to address issues of sexuality. Theories that deal with behaviour change, social norms and attitudes can inform teachers training and the delivery of AIDS education (Glanz & Rimer, 1995). A recent UNICEF review of AIDS education in East and Southern Africa concluded that programs are more effective when teachers explore their own attitudes and values. This helps them establish a positive personal value system, and nurture an open, positive classroom climate (Gachuhi, 1999). Besides being trained, teachers should be closely monitored and supervised.

The AIDS curriculum needs to be changed so as to include interactive teaching and skills building sessions. The current curriculum only deals with improving students’ knowledge

on biomedical facts related to HIV/AIDS (Boler et al, 2003). However, as is clear from this paper, AIDS as a disease is not the problem. Rather, it is the context within which it occurs and its relation to sexuality. AIDS education thus requires that teachers engage pupils in active learning sessions to stimulate creative and critical thinking and encourage a more open-minded attitude, so that students will feel personally engaged in the material (FHI, 2005). Suggested sessions could include group discussions using visual aids and materials, brainstorming, performing arts, and role plays on how to say no to sex and how to discuss condom use with partners. These methods will enable young people to become actively involved in and responsible for their own learning (FHI, 2005). Clear guideline on how to use the revised curriculum, teaching aids and materials is also required. In our study, we found that few adolescents in Kajiado were attending secondary school; because the Maasai who live in this district are non-sedentary, boys have to take care of cattle whereas girls marry at a young age. This implies that the AIDS curriculum needs to be implemented in primary school; otherwise such ‘hard-to-reach’ groups will not receive sufficient information and life skills to protect themselves.

If the ministry of education could take a clear stance in the controversy around sexuality education and condom promotion, it would enable teachers to teach about all facets of AIDS prevention including abstinence and delayed sexual initiation as well as condom use for those who are already sexually active. Thus the youth will get an opportunity to learn about sexuality and reproductive health in a more holistic way allowing them to make informed choices (Daily Nation, 2004, 2005). Through a coherent AIDS education program, multiple messages will be avoided. Results from studies in both developing and developed countries have shown that comprehensive sex education programs delay onset of sexual activity, reduce the number of sexual partners and increase contraceptive use especially condoms (Gallant & Maticka-Tyndale, 2004; Cochrane Collaborative Review Group, 2004; Speizer, Magnani & Colvin, 2003; Kirby, 2002; UNAIDS, 1997).

The success of AIDS education in public schools is also unlikely to improve without an increased sector-wide budget, and support of school governing bodies and other actors in the education sector (Kenya, 2003b). The support of the ministry of health, local NGOs, community initiatives, the media and parliamentarians is also critical to HIV/AIDS education’s success. The different implementation strategies discussed in this paper need to be properly coordinated, monitored and evaluated to ensure their feasibility and sustainability.

In conclusion, school-based AIDS education has the potential to reach virtually every child, especially now that Kenya is offering free schooling to all pupils. However, in the current situation this potential is highly under-used. Changes are therefore needed at various

levels: a clear policy of the ministry of education towards the promotion of condom use; a revised curriculum that acknowledges the positive impact of comprehensive sex education; a well-designed training and support program for AIDS education teachers; clear guidelines on how to use the curriculum and teaching materials; and a proper monitoring and evaluation system so that the implementation and impact of AIDS education is better documented. If these changes are implemented, the curriculum will play a key role, not only as a means of passing information on the HIV epidemic, but also as a means of empowering students to make correct and safe choices, while at school and throughout life.

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Chapter 7

Evaluation of a community and school-based reproductive health and HIV prevention program for adolescents in Kenya

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Abstract

Background: The objective of this study was to evaluate a public multi-sectoral adolescent reproductive health and HIV prevention program in two districts in Western Province, Kenya. The program aimed to improve reproductive health knowledge, delay onset of sexual activity, and to decrease high-risk sexual behaviour.

Methods: We performed a community-randomized controlled trial. Three locations in two districts were randomly allocated to being intervention sites A (community-based intervention) or B (community plus school-based intervention), or control site C. Cross-sectional baseline surveys were conducted (n=3522) and endline surveys 3 years later (n=3758), to evaluate the impact of the interventions with regard to knowledge, attitude and practices.

Results: Intervention sites A and B showed significant changes in the following indicators, as compared to the control site: increased awareness of sexual and reproductive health issues including contraception and STI, increased knowledge of ways to avoid HIV/STI such as abstinence and being faithful (the latter, site A only), a strengthened attitude

favouring pre-marital abstinence (site A only), delayed sexual debut of boys (site A only) and girls (site B only), increased use of condom/modern contraceptive at first sex (site A only), and decreased non-consensual sex.

Conclusion: The community-based intervention had a significant impact on knowledge and sexual behaviour. Adding a school-based intervention component did not have an additional effect. The success of these reproductive health and HIV prevention activities has led to a large scale-up in Kenya.

Introduction

One third of the Kenyan population consists of young people aged 10-24 years [1]. Approximately three-quarters of women and men have sex by the age of 20, with a median age at first sexual intercourse of 17.8 years [1]. Half of all new HIV infections occur among young people aged 15-24 years. Females aged 15-24 are three times more likely to be infected than their male counterparts. One in ten adolescents aged 15-19 years report that they have experienced sexual violence and 1 in 5 that they were coerced or forced into their first sexual encounter. Almost half of all females begin child bearing before the age of 20 [1]. These figures show that there is a need to educate the Kenyan youth on sexual behaviour, contraception, HIV/STIs, and sexual coercion.

In the late 1990s, the majority of reproductive health programs in Kenya targeting young people tended to be small-scale [2,3]. Efforts to provide sexual and reproductive health services to sexually active adolescents were controversial because of the concern that they would lead to promiscuity, although no studies had shown such a link. Parents, teachers, religious and community leaders, and health care providers often lacked the capacity and courage to educate adolescents about sexuality [4]. Adolescents relied on the media and their friends and peers for (often faulty) sexual and reproductive health information.

It is with this in mind that the Population Council (FRONTIERS) implemented a Global Agenda program of operations research projects to address the reproductive health needs of adolescents in four countries - Kenya, Bangladesh, Mexico, and Senegal. The project was implemented in two districts of Western Province in Kenya, and was known as the Kenya Adolescent Reproductive Health Project (KARHP). The project, implemented jointly with the Kenyan government and the Program for Appropriate Technology in Health (PATH), supported a public sector, multisectoral intervention to improve knowledge about sexual and reproductive health, to encourage a responsible and healthy attitude towards sexuality, to delay onset of sexual activity among younger adolescents, and to

reduce risky behaviour of sexually active youth (defined as sex without using a condom/ contraceptive or non-consensual sex). The project was systematically tested with regard to feasibility, acceptability, effectiveness and cost. The purpose of the current paper is to describe the effect of the interventions on adolescents' knowledge, attitudes and sexual behaviour.

Program Description

The operations research project examined a complementary package of interventions – a program of community, school-based and health facility-based interventions. Two out of the eight districts in the Western Province were selected – Vihiga and Busia – on the basis that adolescent reproductive health was identified as a priority issue by the district authorities; and because of high incidence of sexually transmitted infections including HIV/AIDS, teenage pregnancy, and school dropout [5]. A multistage sampling procedure was applied. One division from each district was randomly selected for inclusion in the study – Sabatia Division in Vihiga and Butula Division in Busia. Then, three locations (with an administrative area of approximately 20,000 people) were randomly selected in each division and randomly assigned to be the experimental site A or B or control site C. The two locations of site A received the community-based intervention; the two site B locations received the community plus school-based intervention, whereas the control locations of site C received no intervention (Figure 1).

The community-based intervention was delivered through public social services institutions, to ensure sustainability and replicability. Four Social Development Assistants from the Department of Social Services (one in each site) received training to act as change agents. They worked closely with 20 civic and 80 religious leaders, 120 peer educators and 83 peer group leaders, organizing community discussions concerning adolescent reproductive and sexual health. The Social Development Assistants supervised the peer educators and undertook community mobilization, organizing religious meetings, community *barazas* (a formal meeting called by the local chief), drama, theatre, video shows and targeted public events. The peer educators and peer group leaders were trained using a manual focusing on increasing knowledge, changing attitudes and providing skills to adopt safer sexual practices [6].

The school-based intervention consisted of a teacher-led, peer-assisted in-school programme, comprising of 34 one-hour curriculum sessions to be taught at least once a week over three school terms. The content covered a range of topics including facts about HIV/AIDS, modes of transmission, sexuality, gender and STIs, pregnancy, and life skills focusing on risk behaviour [7].

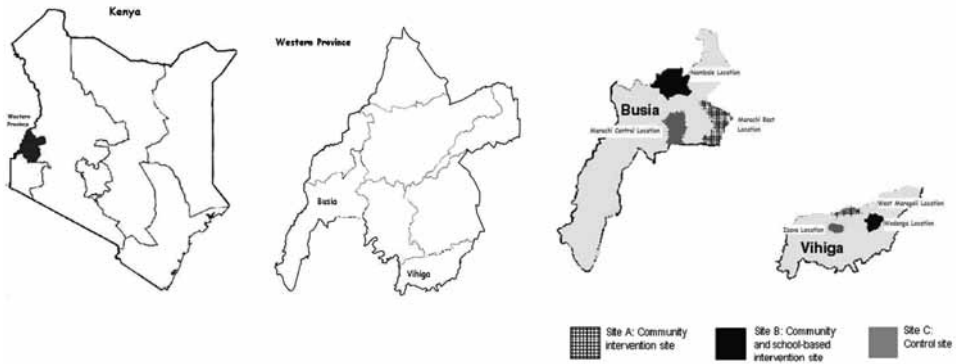


Figure 1: Maps showing the locations of Kenya, Western province, Vihiga and Busia districts and study sites.

The programme was implemented in all 6 secondary schools and 21 of 25 primary schools in the intervention site B (the 4 smallest schools were not included). Six staff members from the divisional level of the Ministry of Education were trained, who then trained 29 head teachers and 74 Guidance and Counselling teachers. Some schools conducted the 34 sessions after school, others during the official school schedule. The teachers also trained and supervised 600 school-based peer educators to reach their schoolmates through activities such as theatre, debates, festivals and essay competitions.

Both intervention arms were supposed to be supported by health facility-based activities. However, participating clinics found it difficult to spare rooms to provide ‘youth friendly’ services, and records about the services they provided were poorly kept. Over time, the level of participation of the providers dwindled, until by the end of the implementation phase none of them could be described as actively participating in the project.

The interventions were implemented and sustained over an 18 months’ period (from March 2000 till August 2002). The total population of the intervention sites was around 85.000, of which about half were adolescents aged 10-19 years old [8].

Methods

Pre- and post-intervention population-based surveys were conducted in 1999 and 2002, respectively, in the experimental site A, B and control site C. Because we wanted to study the effect of the interventions on the community as a whole, random samples were

drawn for both the baseline and endline survey, without individuals being followed-up. In each location, five enumeration areas (each with approximately 100-120 households) were randomly sampled from an average total of 21 enumeration areas per location. For each sampled enumeration area, a listing of all households and their members was prepared, and every fifth household with male and female adolescents aged 10-14 years and 15-19 was considered eligible. Within a household only one adolescent per sex and age group was interviewed, through random selection if necessary.

A baseline semi-structured questionnaire was developed to collect data with respect to demographic characteristics of adolescents and a range of the outcome variables that were to be addressed by the program. These included knowledge questions (Have you ever heard of 6 sexual/reproductive body functions; contraception; HIV/AIDS; STI? Can you mention ways to avoid STI/HIV?); attitude questions (Do you approve of men/women having premarital sex, and of adolescents using condoms/contraceptives?), and sexual behaviour questions (Have you ever had sex? If yes, at what age did you first have sex? Did you have sex in the past 6 months? How many sexual partners have you ever had? Do you use a modern contraceptive? Did you use a condom at last sex? Did you use a modern contraceptive/condom at first sex? Were you ever persuaded or forced into sex?). The questionnaire was translated from English to Kiswahili and then back translated to English, to ensure a similar understanding of the questions between the two language groups, and pre-tested among the adolescents in the research areas to ensure construct and face validity. The questionnaire was adapted, tested and then finalised. Adolescents could respond to the questionnaire in English or Swahili. The post-test questionnaire used after 18 months of implementation was similar to the baseline questionnaire. Additional questions on the participation in an intervention were added.

Confidentiality was assured by explaining to the adolescents that only the researchers had access to their questionnaires, that no names were attached to the questionnaires, and that their responses would not be discussed with school or project staff. Clearance and ethical approval were obtained from the Kenyan national review board and from the Institutional Review Board of Population Council, USA. Before each survey round, informed consent was received from all adolescents, and written assent from parents or guardians for those aged less than 18 years. Face-to-face interviews were carried out individually and in privacy, by trained same-sex interviewers.

From a total of about 45,000 adolescents in sites A and B, about 1 in 20 was interviewed in each survey round (i.e. 2400). This sample size was calculated to be able to detect a 40% reduction in the proportion of those aged 10-14 years who ever had sex, and a 40% increase in the proportion of sexually active adolescents aged 15-19 using modern

contraceptives (including condoms). As the estimated rate of sexual experience was much lower among girls than boys, and among younger than older adolescents, we required a larger sample size for girls and the younger age groups, to be able to detect the aimed effect size.

Following data cleaning, SPSS Version 15 was used for statistical analysis. Weighted data were used to compensate for the oversampling of women and the younger age group. We adjusted outcomes to account for possible differences between baseline and endline regarding age, sex, and location. Statistical analyses compared baseline and endline for the sites A, B and C, using logistic regression analyses with the various binary knowledge/attitude/behaviour variables as outcomes, and the variable “survey” (baseline or endline) as predictor. For the continuous variable “number of lifetime partners” we used loglinear regression analysis. Age of first sex was analysed by survival analysis, using Kaplan Meier to calculate the mean age at first sex, and Cox regression to calculate p-values.

We expressed the impact of the interventions by giving the percent points improvement in the intervention group, compared to control group (pre-post difference in intervention group minus pre-post difference in control group). To estimate p-values of the impact of the interventions, we performed logistic regression analyses with the various binary knowledge/attitude/behaviour variables as outcomes, and the variables “site” (A, B, or C), “survey” (baseline or endline), and the interaction of these two as predictors; the p-values of the interaction terms (site A versus C and site B versus C) were the outcomes of interest. Using the same predictors, we performed Cox regression analysis for “age at first sex” and loglinear regression analysis for the variable “number of lifetime partners”, to estimate the impact of the interventions.

Results

The interventions succeeded in implementing a large number of activities (see Table 1). In the community-based intervention, over 500 community activities were organized and over 15,000 meetings with individuals were realized in site A and B together. In the school-based intervention (site B only), an average of 14 sessions (of the intervention curriculum of 34 sessions) were taught per teacher, and over 60 school activities were organized per school.

Table 1: Overview of activities implemented in the community and school-based interventions

Community-based activities¹	
Persons	Activities
83 Peer group leaders	161 Group discussions 92 Drama presentations 55 Outreach meetings 90 Condom demonstrations 35 Video shows 18 IEC material distributions 34 Sport tournaments and other events
4 Social Development Assistants + 80 Religious leaders	60 Community meetings, covering over 7000 persons
120 Peer educators + 83 Peer group leaders	15,669 Individual meetings, covering the following topics – STI (23%) – relationships (13%) – drug use (12%) – teenage pregnancy (9%) – contraceptives (9%) – other (34%)
School-based activities	
Persons	Activities
74 Guidance and Counselling Teachers in 27 Schools	14 Curriculum sessions (average per teacher) 2 Group discussions per month (average per teacher)
600 Peer educators	26 Group discussions (average per school) 16 Drama presentations (average per school) 14 Outreach meetings (average per school) 4 Video shows (average per school) 2 Condom demonstrations (average per school)

¹Total number of activities in sites A and B together

The total baseline and endline survey sample sizes were 3,522 and 3,758, respectively. Response rates varied between 78%-99%, with the lowest rates among the older girls, probably because of their high level of travel to urban areas in search of work. During the endline survey, 20% and 35% of respondents in site A and B respectively, reported to have ever participated in any intervention activity. Only 3% of adolescents in site C reported to have participated in any intervention activity, indicating negligible contamination. Participation in any intervention activity was defined as having attended /taken part in either the community or school-based intervention activities, or in both intervention arms during this period.

Results show that there were little socio-demographic differences between sites, and between baseline and endline surveys (see Table 2). The vast majority of adolescents interviewed had ever attended school and over 80 percent were still in school. Between 1-3% of interviewed adolescents were married. Over half of the adolescents were living with both parents and about one quarter with their mother only.

Baseline versus endline knowledge is described in Table 3. Multivariate analyses revealed that both interventions had a significant positive impact on knowledge/awareness of sexual and reproductive body functions, contraception, STI, and abstinence as a way to avoid STD/HIV. The intervention in site A also contributed to a significant positive impact on knowledge of faithfulness as a way to avoid STD/HIV, and asking a partner to be faithful. The interventions in site B had a negative (NONE) impact on knowledge of HIV/AIDS (although knowledge remained very high at 96%), and on knowledge of condom use as a way to avoid STD/HIV (which increased more in site A and C than in site B).

Regarding attitude, disapproval of premarital sex for men and women increased in intervention site A, but remained equal in site B and site C (Table 3). The interventions did not have any impact on approval of condom or contraceptive use by sexually active adolescents; approval of condom use increased in all sites whereas approval of contraceptives remained equal in all sites.

The proportion of adolescents 10-19 years who ever had sex decreased among boys in site A (from 38% to 29%, $p=0.002$), whereas it increased among girls in the control site C (from 15% to 19%, $p=0.04$) (Table 3). The interventions had a significant positive impact for boys in site A and girls in site B, and a non-significant impact ($p=0.1$) for girls in site A and boys in site B. For adolescents aged 10-14, the intervention aimed to decrease the proportion ever having had sex by 40%. In site A this proportion declined 44% (from 15% to 9%). In site B it increased slightly by 3%, whereas in the control site it increased 44% (from 9% to 13%); thus, compared to the control sites, site B had a decrease of about 40% (although the impact was not-significant, $p=0.1$). Mean age of first sex increased significantly for boys in the intervention site A, going from 15.7 to 17.4 years. For the girls in site A and boys and girls in site B it remained equal. In the control site C however, the age of first sex decreased for girls, from 17.6 years to 17.1 years; for boys it remained equal. Thus, the interventions had a positive impact on the age of first sex, for boys in site A and girls in site B.

Table 2: Socio-demographic characteristics of respondents aged 10-19 at baseline (n=3522) versus endline (n=3758)¹

	Community intervention site A			Community + school-intervention site B			Control site C		
	Baseline, % (n=1186)	Endline, % (n=1232)	p-value ²	Baseline, % (n=1222)	Endline, % (n=1279)	p-value ²	Baseline, % (n=1114)	Endline, % (n=1247)	p-value ²
Sex			0.9			0.9			0.9
Male	49	49		50	50		48	48	
Female	51	51		50	50		52	52	
Age, mean (yrs)	14.0	14.0	1.0	14.1	14.1	1.0	14.2	14.2	1.0
Ever attended school	96	96	0.4	97	96	0.9	98	97	0.2
Currently attending school	81	84	0.02	85	89	0.02	84	83	0.7
Marital status			0.2			0.3			0.2
Single/Never married	97	98		98	98		99	98	
Married	3	2		2	2		1	2	
Living with:			0.001			0.7			0.2
Both parents	60	57		51	50		53	50	
Mother only	24	21		28	30		29	31	
Father only	3	5		6	5		4	3	
Other arrangements	13	17		15	16		15	16	

¹ Data are controlled for differences between baseline and endline regarding age, sex and location.

² p-values are calculated using the Chi-squared test for categorical variables and the Student's T-test for "age".

Table 3: Knowledge, attitudes and sexual behaviours of respondents aged 10-19 at baseline (n=3522) versus endline (n=3758)¹

Selected outcomes	Community intervention site A		Community + school intervention site B		Control site C		Impact of the interventions ²		
	Baseline, % (n=1186)	Endline, % (n=1232)	Baseline, % (n=1222)	Endline, % (n=1279)	Baseline, % (n=1114)	Endline, % (n=1247)	A vs. C, ³	B vs. C, ³	A vs. B, ³
Knowledge of sexual and reproductive health									
Ever heard of at least 3 of 6 sexual and reproductive body functions ⁴	61	69	67	76	64	59	0.01	13***	14***
Ever heard about contraception	53	53	61	54	52	39	<0.001	13***	6*
Ever heard about HIV/AIDS	89	96	96	96	92	96	<0.001	2	-5**
Ever heard of sexually transmitted infections (STI)	59	80	69	74	63	59	0.07	25***	8**
Mentioned the following ways to avoid getting STI or HIV/AIDS:									
Abstain	41	57	41	58	42	41	0.6	18***	17***
Use condom	15	40	16	32	14	37	<0.001	2	-7*
Be faithful	2	21	4	14	3	12	<0.001	10**	0
Ask partner to be faithful	0	24	1	10	1	13	<0.001	12*	-2
Reported attitudes towards sexuality and reproductive health									
Disapproved of men having pre-marital sex (n=4110)	83	91	91	91	87	85	0.4	11***	2
Disapproved of women having pre-marital sex (n=4088)	86	92	92	91	87	86	0.8	7**	1
Approved use of condoms by sexually active adolescents (n=4246)	73	82	63	74	58	68	0.009	-1	1
Approved use of contraceptives by sexually active adolescents (n=4126)	64	67	52	56	42	40	0.6	6	7



Selected outcomes	Community intervention site A		Community + school intervention site B		Control site C		Impact of the interventions ²	
	Baseline, %	Endline, %	Baseline, %	Endline, %	Baseline, %	Endline, %	A vs. C, ³	B vs. C, ³
	(n=1186) (n=1232)		(n=1222) (n=1279)		(n=1114) (n=1247)			
Reported sexual behaviour								
Ever had sex								
Boys	38	29	27	23	34	36	0.5	-11** -6
Girls	21	21	17	15	15	19	0.04	-5 -6*
Age-group 10-14	15	9	7	7	9	13	0.02	-11*** -4
Mean age at first sex ⁵								
Boys	15.7	17.4	16.5	16.8	16.2	15.9	0.3	2.0*
Girls	17.3	17.1	17.5	17.6	17.6	17.1	0.003	0.3 0.6**
For those who ever had sex:	(n=227) (n=358)		(n=263) (n=250)		(n=210) (n=428)			
Had sex in the past 6 months	42	42	44	42	38	46	0.07	-8 -10
Mean number of lifetime partners ⁶	2.3	2.6	2.8	2.7	2.4	2.5	1.0	0.2* -0.2
Currently uses modern contraceptive	25	30	38	31	33	30	0.5	7 -4
Age-group 15-19	32	34	41	37	38	38	0.9	2 -4
Used condom at last sex	25	30	35	32	27	30	0.3	1 -7
Used modern contraceptive or condom at first sex	14	20	23	19	20	16	0.2	10* 0
Ever had non-consensual sex ⁷	16	12	22	13	14	19	0.08	-9* -15**

vs. = versus, * p<0.05, ** p<0.01, *** p<0.001

¹ Data are controlled for differences between baseline and endline regarding age, sex and location.

² Percent points improvement in intervention group, compared to control group (pre-post difference in intervention group minus pre-post difference in control group).

³ p-values are obtained through logistic regression for binary outcomes, Cox regression for "Mean age at first sex", and loglinear regression for "Mean number of lifetime partners". To estimate the p-value of the impact of the interventions, "site" (A, B, or C), "survey" (baseline or endline), and the interaction of these two were taken as predictors; the p-values of the interaction terms (site A versus C and site B versus C) were the outcomes of interest.

⁴ How the human body works, menstruation, ejaculation, dating, sexual intercourse and how girls get pregnant.

⁵ Analysed through survival analysis, using Kaplan Meier to calculate the mean age at first sex, and using Cox regression to calculate p-values.

⁶ Analysed through loglinear regression analysis.

⁷ Persuaded and/or forced.

Although the interventions paid a lot of attention to enhancing behaviour change among the sexually active adolescents, overall the interventions had no significant impact on having had sex in the past 6 months, on the use of contraceptives, or use of condoms during last sex (Table 3). The intervention in site A had a positive effect on the use of contraceptive/condom during first sex, whereas both interventions had a positive effect on non-consensual sex (almost halving it in site B, whereas it increased in the control site). Results also show that the number of lifetime partners slightly increased in site A versus the control site ($p=0.04$).

Discussion

This study aimed to evaluate the population-level effects of a community and a community plus school-based intervention among adolescents aged 10-19. The interventions had a large impact on knowledge of sexual and reproductive health issues, a less significant impact regarding attitude, and a small but significant impact on sexual behaviour. More specifically, results showed that adolescents in the intervention sites had an increased awareness of sexual and reproductive body functions, contraceptives and STI. Knowledge of abstinence as a method to prevent HIV/STI also increased in both interventions, illustrating that abstinence as a preventive behaviour was well communicated. The intervention in site B seemed to have a negative impact on awareness of HIV/AIDS, although it remained above 95%. One should note that such extremely low or high percentages, i.e. below 5% or over 95%, influence p-values to be highly significant. The intervention in site B also had a negative impact on knowledge of condom use as a way to prevent STI/HIV. This outcome probably suggests that condoms remained a difficult subject to be discussed in schools, which may be related to the disapproval of openness about contraceptives and condoms by the ministry of education and by parents [4].

It is interesting that attitude regarding premarital sex in all sites remained conservative, indicating that the interventions did not challenge these, and even reinforced them in the community-based intervention. This confirms findings in literature that exposure to factual and accurate sexual and reproductive health information does not promote a 'promiscuous' attitude [10, 11]. Approval of condom use by sexually active adolescents increased in all sites, showing that condoms were well promoted throughout the area including the control sites.

The ultimate goal of these interventions was to influence sexual behaviour among adolescents, by encouraging a delay in becoming sexually active, and enabling sexually active adolescents to practice less risky sex (risky sex being defined as unprotected sex i.e.

sex without a condom/contraceptive or non-consensual sex). Indeed, the interventions succeeded in delaying sex: the proportion ever having had sex decreased significantly for boys in site A and girls in site B (and non-significantly for girls in site A and boys in site B). For the age group 10-14, both interventions reached the goal of decreasing the proportion ever having had sex by 40% (compared to the control site). For sexually active adolescents, the interventions had a small positive impact: in site A condom/contraceptive use at first sex increased, and in both intervention sites non-consensual sex decreased. The latter almost halved in site B, reflecting the emphasis on this topic in the school-based activities [12]. However, the interventions did not have a positive impact on condom use at last sex. The aim of enabling sexually active adolescents to practice less risky sex was thus only half reached.

Although the interventions had only a small positive impact for sexually active adolescents, this can be regarded as a success on the population level. Namely in the intervention sites, less adolescents did have sex, and the lower number of adolescents who did have sex, did *not* have more risky sex. Thus on a population level, risky sex decreased in both intervention sites. These results concur with the findings of a recent review on the effectiveness of HIV/AIDS educational programs for adolescents: none of the 83 evaluation studies reviewed found more frequent sexual activity among those already sexually active, nor a negative impact such as earlier sexual debut [11].

Our study had several strengths. First, our interventions succeeded in engaging and involving the participating communities, and in bringing together a large number of partners in a wide range of activities/strategies [13-15]. Second, the interventions resulted from an intersectoral collaboration of the ministries of social services, education, and health, showing that it is possible to work with the government to develop sustainable interventions. Moreover, the interventions were implemented through existing structures, using teachers and the Social Development Assistants as key figures. Third, only 3% of adolescents in the control sites had participated in some intervention activities, indicating negligible contamination.

Our study had several limitations as well. First, exposure to the interventions was rather low, with 20% and 35% of those surveyed in sites A and B respectively reporting to have ever participated in any intervention activity. Nonetheless, our study was able to show a substantial effect of the interventions. Second, during our study adolescents in the intervention and control sites were exposed to a wide array of HIV/AIDS activities (such as a school-based HIV/AIDS curriculum that was launched in 2000), which could have diluted the effect of our own interventions. However, the small changes observed in the control site suggest that the other activities had little effect. Third, our study relies on

self-reported sexual behaviour, of which the validity is limited [16]. However, we used several techniques to ensure the highest possible validity: questions were derived from previously tested instruments, questionnaires were pilot-tested, and qualitative feedback from youth was used to further refine the instruments and procedures.

Our results showed a larger impact in intervention site A than in intervention site B, although site A received only 1 intervention component (community-based intervention), and exposure to the intervention was lower in site A than B (20% versus 35%). An explanation for this may be, that people in site A did not always recognized that they participated in an intervention activity, and there may well have been a diffusion effect within the community. For example, church leaders who took part in intervention meetings returned to their parishes and talked about the messages, and requested the members to sensitize their families on the key topics. The community-based intervention was most successful, and adding a school-based intervention did not have an additional effect. Our study results imply that community-based activities are the most cost-effective way to reach youth with HIV prevention and sexual and reproductive health issues.

The impact of our interventions is comparable to those recorded in other community and school-based HIV/AIDS educational programs for adolescents in developing countries. Several studies found that community-based HIV/AIDS programs can reduce risk behaviour among youth and lead to lower HIV transmission [17-20]. A recent community-based study found that secondary abstinence and number of partners decreased among females, and condom use increased among males in the project site [17], and results of a four-country study to evaluate the impact of mass media, peer education and “youth friendly” services also found that contraceptive use rose, numbers of partners decreased and abstinence increased [20]. Conversely, a recent review of 11 published and evaluated school-based HIV/AIDS risk reduction programs for youth in Africa, showed a large impact on knowledge, a smaller impact on attitude and a modest impact on sexual behaviour [11,21-22]. These results suggests that knowledge and attitude are easiest to change when schools engage adolescents, but behaviour is much more challenging [21].

The Kenyan government decided to scale-up the intervention components, including an (improved) clinic-based component, into all other districts within Western Province. This scale-up was gradual and followed the pilot design (i.e. introduced in 2 pilot districts and then rolled out to all other districts within the province) [23]. Youth reproductive health services were placed within communities through the community-based public health officers, with links to clinical staff. The sexual and reproductive health lessons were incorporated within the formal school curricula and within inter-school activities (such as sports, dramas and competitions). The cultural, social, religious and political factors have

been taken into consideration to reflect the diverse local contexts during the scale-up. Based on the success of the replication efforts, the interventions have resulted into the HIV prevention activities being integrated into public-sector personnel's routine work and created sustainable mechanisms for continued inter-ministerial cooperation [23]. The government is now scaling up the prevention activities to other parts of Kenya.

Conclusion

Our findings provide significant support that community and school-based reproductive health and HIV education programs in Western Kenya can have a significant impact on adolescents' knowledge, attitude and sexual behaviour and should be implemented more widely. The findings showed that abstinence is the main source of protection among young people – either through delaying sexual initiation or through decreasing non-consensual sex (i.e. fewer adolescents are forced/persuaded to have sex). The interventions did not have a positive impact on the use of condoms during last sex suggesting limited effects towards sustained condom use. This finding calls for further analysis of the content and implementation strategies used in both school and community settings. It is essential for program implementers to continue to carefully design interventions and review their impact [24- 25] including focusing more explicitly on intensifying the skills component of the curriculum to improve the effectiveness of HIV/AIDS educational programs for all adolescents.

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Chapter 8

General discussion

In this thesis, I have studied sexual behaviour and HIV risk among adolescents in Kenya, and the empowerment of youth in HIV prevention. The studies in this thesis fill gaps in knowledge concerning important risk factors for STI/HIV. This thesis provides insight and knowledge for those involved in policies and programs on sexual and reproductive health education in Kenya, and aim to identify effective strategies.

In this discussion chapter I will answer the 3 research questions posed in the introduction (section 8.1), discuss the implications of our studies for sexual and reproductive health policies and STI/HIV prevention in Kenya (8.2) and formulate the main conclusions and recommendations (8.3).

1.1 Answers to the research questions

Research question 1: **What are the information needs and gaps in knowledge of adolescents in Kenya regarding sexuality, HIV/AIDS and reproductive health?**

***Response:** There are many knowledge and communication gaps. In spite of readiness to learn, knowledge appears to be fragmental and sometimes misconceived. Saying no to sex, sexual violence and female circumcision were a great concern for girls. Boys were concerned with managing boy-girl relationships, preventing STI/HIV infection, and condoms. Compounding this is the concern of both girls and boys on inability to communicate with their parents.*

We found that youth have many questions and concerns about sexuality. Their knowledge appeared to be fragmental, and sometimes revealed risky misconceptions. Many questions showed curiosity and anxiousness. The questions differed by gender and age. Concerns about transition to adulthood, sexuality, STI and HIV/AIDS, myths and misconceptions, and intergenerational communication cut across both genders. Older teens were more concerned with questions on boy-girl relationships, norms and values regarding sexuality, and STI. Younger teens (<15 years) wanted to know about reproduction, saying no to sex, HIV/AIDS, condoms, sexual violence and female circumcision.

Many of the questions of young people seem to be telling us what they think (their opinions) or what they have heard and try to confirm. Their questions also show how dangerous it can be when they are left to construct their own truths. They express a need for clear and consistent messages to help them make decisions about their sexuality. The lack of opportunity to ask sensitive questions stems from the fact that in Kenya, and in most African communities, sex is traditionally considered a taboo topic. A culture of silence still surrounds sexuality and most reproductive health issues.

Other studies in sub-Saharan Africa confirm that the prevailing socio-cultural and gender norms hamper the provision of sex education [1-4]. They cite the disappearance of traditional forums for sex education without new alternatives [5-6]. This void has left many parents in a dilemma on what to say and how to say it. Traditionally, parents did not talk to their children about sexual issues, because these were addressed in 'rites de passage'. Other family members would often talk with their children. Nowadays, young people are uncertain of where to look for information [4,7-8].

Our findings echo other studies which also found that provision of sex education has been hampered by controversy, with some adults and religious institutions arguing that giving youth information about sex will make them even more sexually active (4, 9). This has left many adolescents lacking the necessary knowledge and skills to protect them from infection [1,9-11]. It is critical that youth be empowered with unbiased and accurate information [9]. The importance of sex and AIDS education and counselling has been documented across sub-Sahara Africa [12-15]. Frequency, openness, and timing of parent-child communication influence knowledge about sexual and reproductive health, sexual attitudes, and sexual behaviour [16-19]. In education, a more open-minded attitude during pupil-teacher communication is important [15]. Thus parents, families, teachers, and other adults should address the sexual knowledge needs of young people.

Research question 2: What is the sexual risk behaviour of youth in Kenya, and what are cultural, social and economic factors that create risk situations, especially for girls?

Response: *Youth are regularly having casual, unprotected, coerced, and transactional sex with multiple and concurrent partners. Disco funerals, porn video shows, and drinking in local brew dens facilitate risk behaviour in Kisumu. Rape is facilitated by peer pressure, by drug or alcohol use, by watching violent pornography, and by gender norms in Luo society. Out of school, boys with arguing parents and traditional gender attitudes, whose sexual initiation is at an early age and unwanted, are most likely to force girls into sex. Transactional sex is stimulated by the weaker socio-economic position of girls.*

Adolescence is a period during which individuals seek romantic relationships, often involving sexual activities [20-22]. Our findings show that youth in Kisumu engage in sexual activities at an early age, sometimes with multiple and concurrent partners. Few adolescents use condoms during these sexual encounters, and even less use them consistently. Several studies have found the same risk behaviour among youth in sub-Saharan Africa [23-24]. This behaviour puts them at risk of contracting an STI or HIV infection. Adolescents are likely to underestimate both the severity and the risk of HIV

infection, as they tend to link HIV/AIDS to risk groups rather than their own risk behaviour [24-29]. Early initiators of sexual intercourse are less likely to know how to prevent STI/HIV or to be able to negotiate condom use, than are those who delay sexual intercourse [21-22,28-29].

The HIV virus is easily passed to young women because of their physiological immaturity [30-33]. Moreover, the prevailing gender norms encourage young men to have multiple partners as proof of masculinity; young women on the other hand are encouraged to stay chaste until they get married. These conflicting pressures can trap young women into forgoing contraception, in order to avoid having to admit – both to themselves and to others – that they are sexually active [34].

Gender norms condone male violence. In western Kenya, the process of socialization appears to approve the practice of non-consensual sex through definitions of masculinity ingrained in the language, jokes and even through the media. Boys begin to learn at an early age that men are expected to be strong, emotionally tough, daring, virile, self-reliant, aggressive, competitive and a little ‘reckless’ in their sexual behaviour; otherwise they may be seen as not ‘macho’ enough. Our findings also show that boys mostly initiated sex, sometimes using physical force, intimidation, pressure, deception and threats. There were cases of girls being forced to have sex or even being gang-raped. Perpetrators were usually people with whom the victim is familiar, including intimate partners, peers, family members, teachers, and other youth and adult acquaintances. These findings concur with previous studies [35-41].

Though our findings demonstrate the difficulty of eliciting reliable reports on sexual coercion – most instances are not reported to the police – there are a few studies of prevalence of sexual violence and its determinants. Experiencing non-consensual sex has been associated with being sexually and physically abused in subsequent consensual relationships and, in the case of young men, with perpetrating non-consensual sex in subsequent sexual encounters [36-37]. Compared with other young women, those who have been abused tend to have more sex partners [38], less control over the terms of sex, and a lower likelihood of practicing family planning and using condoms [39]. Furthermore, evidence suggests a close association between sexual coercion and women’s increased risk of HIV [40-41]. For example, one study from South Africa found that women who had violent or controlling partners had an HIV infection rate 50% higher than other women, and that abusive men were more likely than non-abusive men to be HIV positive[42]. Literature also shows that the perpetrators of sexual violence rarely use condoms, and because sexual violence can result in genital trauma, victims are at extremely high risk of sexually transmitted infections including HIV infection [43-44].

Drinking alcohol at local brew dens and watching pornography at video halls were identified as recreational situations promoting risky sexual behaviour among young people, contributing to the high HIV prevalence in Luo Nyanza [45]. Our findings show that in the sprawling low SES neighbourhoods of urban Kisumu, alcohol used by young people usually concerns the low priced and widely available locally brewed alcoholic beverages such as chang'aa, kumi kumi and busaa. The users of illicit brews often reported to also use drugs such as cannabis sativa, marijuana, mandrax and 'kuber' [tobacco/betel quid]. Alcohol is commonly used as a disinhibitor, a facilitator in approaching the opposite sex, and a symbol of masculinity, and plays an important role in risky sexual behaviour [46-47]. The link between alcohol use and sexual risk behaviour has been extensively documented [47-51]. Alcoholism has devastating effects such as school dropout, careless sexual behaviour, shattering of families, crime, and low productivity at work [47,52-54].

We found that adolescents especially boys were routinely exposed to sexually explicit images and X-rated movies in local video halls, while others watch these movies at home or at friends' places. Our findings confirm that young people's exposure to pornography in video halls encourages risky sexual behaviour [55-61]. Males are more likely than females to be sexually aroused by pornography and to have supportive attitudes towards it [56-58]. Moreover, repeated exposure to nonviolent online pornography promotes more permissive sexual attitudes [62], whereas violent pornography may reinforce aggressive behaviour and negative attitudes toward women [63]. According to one study, early exposure (under fourteen years of age) to pornography is related to greater involvement in deviant sexual practice, particularly rape [64].

Disco funeral is a cultural practice in western Kenya, in which people congregate for several days to raise money for expenses through music and bidding games. With the frequent AIDS-related deaths, the financial burden of burying the dead person is increasingly falling on the bereaved alone [65-66]. For many young people, these disco funerals double up as a form of night life. During these celebrations, pre-marital sex is condoned. Cultural gender norms in Luo society – in which controlling women is seen as a sign of masculinity - contribute to coerced sex or even gang rape. Transactional sex of girls, often with older men, is stimulated by the weak socio-economic position of especially female school dropouts and orphans. Thus, disco funerals help to explain the high HIV prevalence among youth, and especially girls, in Kisumu.

There is no literature on disco funerals and sex. Funerals are linked to sex by practices as "ritual cleansing" and "widow inheritance" [67]. In ritual cleansing, the widow is forced to have sex with her husband's brother(s), "the first stranger she meets on the road", or some other designated male such as a professional widow cleanser. The intention of this

ritual is to cleanse /expel evil spirits through sexual intercourse. This association with sex may be the reason why some parents see disco funerals as a culturally appropriate way for young people to experiment sexually. Widow inheritance, though a dying custom, also allows AIDS to grow [68]. Moreover, in some communities there is a belief, held by many men, that having sex with a young girl or virgin will cure men of their HIV infection or protect them from future exposure. These child brides may quickly become child widows, compounding the problems of widowhood and youth. In addition, the poverty of AIDS widows, their isolation and marginalization, impels them to adopt high-risk coping strategies for survival, including sex work [69].

Traditionally among the Luo, like in many African cultures, girls approaching puberty would share sleeping huts with a grandmother or would sleep in the household kitchen (usually a dwelling separate from the main house), while adolescent boys would stay in a bachelor's house/cube locally known as 'simba', or with a brother, relative or friends [70]. This practice is still common, both in rural and urban informal settlements of Kisumu. It aims to empower adolescents as young mature adults, and it explains girls' increased freedom to engage in night time activities to explore their sexuality and autonomy. Research on this phenomenon is non-existent. At earlier age, cramped living quarters in slums tend to expose young girls to the sexual behaviour of their parents [71].

Our findings echo other studies in SSA that illustrate how peer pressure and social norms influence sexual identities of young people and contribute to high-risk behaviour [32,36, 72-74]. Males are pressured to be highly sexually active [27,36,74-75]. A recent study in Tanzania describes that men who limit themselves to just one partner are being called "domo zenge", meaning "slow to move", while men having concurrent sexual relationships are referred to as "mshua" (the connoisseur) or "kichwa kikali" (the gifted) [67]. Pressure on females relates to their subordinate position and to cultural scripts that make access to material resources through sexual activity normative [27,36,40,72,76-77].

In Kisumu, a large proportion of youth is not in school. Despite guarantees of free primary schooling, there is a variety of expenses - for tuition, registration, transportation, uniforms, textbooks and supplies, school meals, and school construction. This has resulted in a 'de facto' poverty-based exclusion from school. While young men can more easily access income-generating activities (like the bicycle-taxi trade), few employment opportunities are available to young women. Financial or material exchange between young girls and partners is common during sexual encounters, or it is the reason for sexual activity, and it fuels the HIV pandemic, [33,36,42,74,77-82]. Twenty one percent of adolescent girls aged 15-19 years in Kenya have received gifts or economic support for sex, while 17% of adolescent boys have paid for sex [83]. Of the women attending antenatal clinics in

Soweto, 21% reported having ever had sex with a casual partner in exchange for material goods or money [42]. The association between transactional sex and HIV serostatus underscores its importance for public health [42,81-83].

Research question 3: What are the constraints of HIV/AIDS education in Kenyan public schools, and can community- and school-based interventions be effective in changing knowledge, attitudes and sexual risk behaviour of young people in Kenya?

***Response:** HIV/AIDS education is currently embedded in biology, which is not compulsory. And the ministry of education disapproves of openness about sex and condoms. Teachers lack training and support, and feel uncomfortable with the topic. A multi-approach intervention has given partly favorable results on knowledge, attitudes, and sexual behaviour. The success of these interventions has led to a scale-up in Kenya.*

Our findings showed that, in general, not many students are reached with HIV/AIDS education. The reasons include lack of time, lack of confidence by teachers (most of whom feel uncomfortable with the topic and skip sensitive sections of the curriculum), challenges with the instructional approach and message content, and controversy around sexuality education and condom promotion. Many teachers rely solely on an “abstinence until marriage” message and not the well-known “ABC” messages (“abstain, be faithful, or use condoms”). This emphasis on abstinence has denied young adolescents critical information on AIDS prevention, especially regarding condom use. Alternative strategies to teach about AIDS, such as extra-curricular activities and inviting external experts, have their own constraints.

Our findings are similar to those of other studies in sub-Saharan Africa. Teachers from South Africa and Zimbabwe felt they did not have adequate training, ongoing support and engagement [84-86]. In rural Mwanza, Tanzania, teachers taught curriculum content well, but had difficulty adopting new teaching styles [87]. Studies show that a one-directional didactic approach substantially compromises teachers’ ability to facilitate dialogue [88], while teachers who engage pupils in active learning sessions tend to stimulate open-minded and critical thinking [89]. Through proper training, teachers are able to learn how to discuss controversial issues openly, to be non-judgmental and confident, and to explore their own attitudes and values that make it difficult to address issues of sexuality [90-91]. Comprehensive sex education programs delay onset of sexual activity, reduce the number of sexual partners and increase condom use [14, 92-94].

We assessed the impact of an adolescent reproductive health and HIV multi-approach intervention project in western Kenya. Teachers, parents, religious and community

leaders, and a cadre of peer educators were mobilised to engage young people in conversations about sexual behaviour and reproductive health, with an aim of improving their knowledge, attitudes and sexual behaviour. Two interventions were compared: a community-based intervention in site A, and a combined community and school-based intervention in site B. A large number of community-based activities were realized in both sites, and school-based activities in site B. Both sites showed significant changes, compared to the control site, with regard to knowledge: increased awareness of sexual and reproductive health issues including contraception and STI, and increased knowledge of ways to avoid HIV/STI such as abstinence and being faithful (the latter, site A only). But the intervention in site B had a slight negative impact on knowledge of condom use, probably reflecting the lack of emphasis on this topic in the school-based activities. Attitudes regarding premarital sex remained conservative, and were even reinforced in the community-based intervention. The interventions succeeded significantly in delaying sexual debut of boys (site A only) and girls (site B only), in increasing use of condoms/modern contraceptives at first sex (site A only), and in decreasing non-consensual sex (which almost halved in site B). Also the lower number of adolescents, who did have sex, did *not* have more risky sex.

Earlier community-based HIV/AIDS studies also showed positive changes in knowledge, attitudes and risk behaviour among youth [95-97]. School-based HIV/AIDS risk reduction programmes for youth in Africa suggest that knowledge and attitudes are easiest to change, but behavioural change is much more challenging [14,94,98]. In a review of sex and HIV education programs for youth in both school and community settings, none of the 83 evaluation studies found a negative impact such as earlier sexual debut or more frequent sexual activity among those already sexually active [94], indicating that exposure to factual and accurate sexual and reproductive health information does not promote a 'promiscuous' attitude [92,94]. Peer educators are an important resource for youth, parents, and people living within the communities [88]. A project in Burkina Faso found that youth' involvement in interventions increased their status [99].

In our study, the impact in the community-based intervention was slightly larger than in the combined intervention (community plus school-based), which we cannot explain. Nonetheless, the success has led to a large scale-up of both interventions in Kenya.

8.2 Implications for prevention and education

Our findings imply that HIV prevention programmes for youth should address the concerns of both sexually active and inexperienced youth. Programmes should be tailored to the different ages and genders and work with parents, teachers and health professionals.

Based on the discussion of the three research questions in the previous section, behavioural change programmes for Kenyan youth should consider:

- Community participatory approaches through existing institutions – religious, educational, chief’s barazas and community events. Programmes should encourage community involvement, outreach, and family-community dialogue /activities adapted to the local context. Older youth, peer groups, parents, families, religious leaders, teachers, health professionals, and even political leaders should take on a more active role in empowering adolescents with unbiased and accurate information about sexuality and HIV prevention, and counter entrenched beliefs [100-101].
- Increased dialogue between adults and youth through promoting intergenerational community forums [102]. Community forums should bring parents, grandparents, other relatives and youth together, to discuss the issues and challenges that youth face with regard to reproductive health and HIV/AIDS.
- Educational sessions, in which parents’ ability to talk about sex should be strengthened in both the content and the context of communication, and in the timing and frequency of discussions. Parents should also recognise the need to create space in their daily lives for discussing HIV prevention issues with their children, either directly or by participation in activities that would facilitate discussion, such as charity walks, sports events, family camps or health fairs.
- Mass media campaigns aimed at helping parents/families talk to their children [102]. Community-based media and activities (such as local FM radios, roadshows, music extravaganzas, bicycle rallies, soccer matches) can educate, entertain, and inform, while providing opportunities for discussion and debate.
- The proportion of young people who reported incest is not negligible. The study recommends for community education and prevention interventions that confront commonly held community attitudes and that increase community awareness of issues that may affect children and young people; leverage the role of media in increasing society’s awareness of, and response to incest and child abuse. Media education and entertainment (such as TV documentaries, film, drama and live concerts), may be targeted at all families as part of primary edutainment prevention efforts.
- Teaching of life-skills to girls and boys to resist physical and psychological pressure to have unwanted sex, for example, teaching children to say no and to tell someone

of intended violation or what has happened to them, maybe useful, and skills to develop egalitarian attitudes towards gender roles [36,103]. Boys should be engaged in HIV prevention and encouraged to change behaviour. Sensitization of policymakers, religious leaders, and other gatekeepers to the impact of incest and sexual abuse and to the need to provide a supportive and non-judgmental environment is necessary.

- Under the Kenyan Children's Act, heavy penalties are indicated for parents and guardians who neglect to report to authorities any case of sexual abuse and for those perpetrating or abetting such practices. Moreover, under the penal code, rape, attempted rape and other forms of non-consensual sex are punishable by imprisonment [104]. However, the law is rarely enforced, and society tends to blame rather than support women who report being raped [105].
- For victims of incest and sexual abuse, counseling and support is required. Health care providers should be skilled in counseling and support, including skills to better recognize how sexual coercion affects clients, and to value confidentiality and privacy [43-44]. Young people who may have experienced incest and/or sexual abuse should also be supported, by strengthening the legal and advocacy environment [36, 41, 44].
- As prevalence of incest and sexual abuse is difficult to generalize, we advocate for research and setting up of reporting databases at all public health facilities, schools and police stations to monitor reasonable suspicions and track cases within the counties /districts and divisional levels.
- Regulation and monitoring of video halls, local-brew dens and (disco) funerals by the government, to reduce risks to adolescents. The owners should be informed about the sexual risk behaviour that is stimulated by their venue/event, and point out their possible role as popular peer educators.
- Raising awareness on the negative effects of alcoholism, and making local authorities such as chiefs, religious leaders and teachers' role models for responsible drinking behaviour. In addition, legal action should be enforced for persons selling alcohol, promoting use of drugs and showing porn to under age youth. Also, the law forbidding local brew selling in residential areas should be enforced.
- Increasing the possibilities for loans to youth groups and orphans, such as the Youth Enterprise Development Fund by the Kenyan Government, to reduce the number of young women who have to exchange sex for money [106].
- Targeting practices such as widow cleansing and the habit of separate sleeping arrangements.
- Improvement of the quality of teaching and learning materials (the HIV/AIDS curriculum, teaching aids and materials) , with emphasis on communication, repeated exposure to factual messages, guidelines on using learning materials, and

evaluation of the success of the teaching in terms of condom use and contraception [107]. AIDS education needs to start already in primary school with appropriate messages.

- Budgeting of HIV/AIDS education in public schools in order to make it feasible and sustainable.
- Training and supervision of teachers in order to overcome internalized barriers to addressing issues of sexuality and to create an open-minded attitude to discuss with students sensitive issues. Methods could include group discussions, brainstorming, performing arts, and role plays.
- Making government and partners to take a clear stance in that teaching young people about contraception and condom use does not contradict messages about delaying first sex [92-94,108].
- Basing interventions on theoretical frameworks for social norms and individual behaviour, in order to increase their success chances [100]. Behaviour change models stress the importance of providing correct information, and assume that individuals will use this information to make decisions that will lower their risk of HIV infection.
- Develop and evaluate interventions that go beyond young people themselves, such as broad, high-level support for structural interventions that involve communities as whole, societal interventions to change social norms that impact transmission/acquisition; and behavioural interventions to mitigate the consequences of increased vulnerability and those focusing on adults, especially men [109].

8.3 Conclusions and recommendations

We conclude from the studies in this thesis that:

1. Youth in Kenya have many knowledge gaps and misconceptions regarding sexual and reproductive health.
2. The controversies and the culture of silence which surround the provision of sex education hamper the implementation of effective youth-focused HIV/AIDS prevention programmes.
3. In Kisumu, a town with a generalized HIV/AIDS epidemic, unprotected, coerced and transactional sex exposes young girls to risk for HIV infection.
4. The subordinate position of women in the Luo society facilitates risk behaviour, especially during disco funerals, porn video shows and the drinking of local brews.
5. The current HIV/AIDS education in schools does not reach all students and is not very effective.

6. Community-based STI/HIV prevention programmes have the potential of promoting sexual and reproductive health.

Recommendations

The results of our study lead to the following recommendations for improving HIV-prevention in young people in Kenya:

1. Address HIV/STI prevention interventions for young people with a multi-faceted perspective.
2. Provide young people with accurate information, prepare them for the physical and emotional changes of puberty and adolescence, and learn them the skills and values to have safe and enjoyable relationships.
3. Bridge the intergenerational gap by improving communication between adolescents and their parents, families, teachers, religious leaders, health care providers and communities.
4. Provide life-skills to girls and boys to delay sex, negotiate for safe sex, and to resist physical and psychological pressure to have unwanted sex.
5. Challenge socio-cultural and behavioural factors that perpetuate risky sexual practices. Sensitize policy makers, religious leaders, and other gatekeepers in this respect.
6. Implement educational interventions at social events /places where young adolescents hang out at. Focus not only at youth, but involve parents/guardians and owners of disco funerals, video halls and local-brew dens. Enforce legal action for selling alcohol, drugs and pornography to under-age youth.
7. Improve young girls' possibilities to acquire an income, in order to strengthen their position with regard to sex.
8. Improve the quality of teaching and learning materials of AIDS education, with repeated exposure to messages on sexuality, gender norms, HIV/STI and condom use.
9. Programmers and evaluators of youth-focused projects should involve the young people themselves. And they should involve the governmental and non-governmental institutions which are concerned with youth.

Our study results in the following recommendation for future research:

10. Study the generalizability of our findings, and increase knowledge of the context and settings which risk behaviour of young people occurs.

11. Improve the methods to analyze findings from programs that include multiple interventions, and to determine the added value of community involvement in interventions.

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**Summary
Samenvatting
Acknowledgements
Curriculum Vitae
Publications**

Summary

This thesis explores three topics concerning youth in Kenya: 1) their knowledge and information needs regarding sexual and reproductive health including HIV/AIDS; 2) their sexual risk behaviour; and 3) HIV prevention efforts targeted at them. The different studies that are described in this thesis fill gaps in knowledge concerning risk factors that are crucial in the spread of STI/HIV, but have received little attention in literature. This thesis provides insight and knowledge that is essential for all parties involved in policies and programs on sexual and reproductive health education in Kenya, and aims to assist in identifying effective strategies.

Chapter 1 Introduces the research problem, the HIV/AIDS epidemic in relation to young people's risk, with a special focus on the situation in Kenya. We demonstrate that despite a growing interest in adolescent health, much remains unknown about the factors that enhance sexual risk among young people. Related to the issues discussed, the following research questions are addressed in this thesis (1) what are the information needs and gaps in knowledge of adolescents in Kenya regarding sexuality, HIV/AIDS and reproductive health? (2) What is the sexual risk behaviour of youth in Kenya, and what are the cultural, social and economic factors that create risk situations, especially for girls? (3) What are the constraints of HIV/AIDS education in Kenyan public schools, and can community- and school-based interventions be effective in changing knowledge, attitudes and sexual risk behaviour of young people in Kenya?

In **Chapter 2** we explore the knowledge-gaps amongst adolescents regarding sexuality, HIV/AIDS and reproductive health issues. We concluded that in spite of young people's readiness to learn, knowledge appears to be fragmental and sometimes misconceived. Compounding this is their concern on inability to communicate with their parents. We believe that this information is relevant for policy makers and other stakeholders in the field of HIV prevention, in order to tune their interventions, curricula and education to the information needs of young people.

Chapter 3 focuses on disco-funerals as a risk situation for HIV/STI infection among youth in Kisumu, Kenya. We found that the sexual encounters of girls at disco funerals are extremely risky; unprotected, multiple-partner, coerced, and transactional sex were witnessed, all of which increase their susceptibility to STI/HIV. Interventions should target young people and all adults (including parents/guardians and funeral organisers) at these events, to inform them about STI/HIV risk and promote behaviour change; and engage young men in HIV prevention, especially regarding coercive sex

Chapter 4 describes porn video videos, local brew and transactional sex as a risky combination for HIV infection among youth in Kisumu, Kenya. Our findings underscore the importance of culture, social/peer pressure, exposure to violent pornography, alcohol use, poverty and orphanhood in the dynamics of the HIV epidemic. We conclude that in Kisumu, a town with a generalized HIV/AIDS epidemic, the subordinate position of women and dominance of men in the Luo society clearly contribute to the unprotected multi-partner, coerced and transactional sex dynamics of young girls. Programmes urgently need to: address the role of porn video shows, local brew and transactional sex in exposing young girls to different types and levels of risk for HIV infection; target people, for example, local brew den owners that perpetuate these risky practices; and develop risk-free ways for youth to have fun.

In **Chapter 5**, we explore the type of sexual activities experienced by adolescents, the nature and consensuality of first and subsequent intercourse, experiences of forced sex, and the correlates of perpetrating or suffering non-consensual sex in two districts of Western Kenya. Boys who are out of school, who have arguing parents and traditional gender attitudes, and whose sexual initiation is at an early age and unwanted, are most likely to force girls into sex. Transactional sex is stimulated by the weaker socio-economic position of girls. We conclude that there is need for more research to better understand not only the context in which risk behaviour occurs, but also the range of persons who perpetrate forced sex. We recognize the urgency to address violence against young girls and women and to set up mechanisms and strategies to do so.

In **Chapter 6** constraints that undermine the delivery of effective HIV/AIDS education in Kenyan public schools are described. We found that HIV/AIDS education is currently embedded in biology, which is not compulsory. And the ministry of education disapproved of openness about sex and condoms. Teachers lacked training and support, and felt uncomfortable with the topic. Interventions to strengthen the implementation of AIDS education in Kenyan schools are required.

Chapter 7 gives the results of a multi-approach adolescent reproductive health and HIV prevention program evaluation in two districts in Western Province, Kenya. We found a slightly larger impact on adolescents' knowledge, attitudes and behaviour in the community-based intervention than in the combined intervention (community plus school-based). The success of both interventions can enable incremental improvement in the lives of young people that might otherwise not be achieved. We conclude that interventions that are delivered through existing community systems and structures, especially through outreach, show promising potential for promoting knowledge,

attitudes and life-skills development for youth and engaging adults in youth reproductive health /HIV.

Chapter 8 reviews the research questions and the results of the study in the context of past and present literature, and describes the implications of our studies for HIV education and prevention in Kenya. The conclusions and recommendations that follow from the research for this thesis are formulated in this chapter and repeated below.

Conclusions

We conclude from the studies in this thesis that:-

1. Youth in Kenya have many knowledge gaps and misconceptions regarding sexual and reproductive health.
2. The controversies and the culture of silence which surround the provision of sex education hamper the implementation of effective youth-focused HIV/AIDS prevention programmes.
3. In Kisumu, a town with a generalized HIV/AIDS epidemic, unprotected, coerced and transactional sex exposes young girls to risk for HIV infection.
4. The subordinate position of women in the Luo society facilitates risk behaviour, especially during disco funerals, porn video shows and the drinking of local brews.
5. The current HIV/AIDS education in schools does not reach all students and is not very effective.
6. Community-based STI/HIV prevention programmes have the potential of promoting sexual and reproductive health.

Recommendations

The results of our study lead to the following recommendations for improving HIV-prevention in young people in Kenya:

1. Address HIV/STI prevention interventions for young people with a multi-faceted perspective.
2. Provide young people with accurate information, prepare them for the physical and emotional changes of puberty and adolescence, and learn them the skills and values to have safe and enjoyable relationships.
3. Bridge the intergenerational gap by improving communication between adolescents and their parents, families, teachers, religious leaders, health care providers and communities.

4. Provide life-skills to girls and boys to delay sex, negotiate for safe sex, and to resist physical and psychological pressure to have unwanted sex.
5. Change socio-cultural and behavioural factors that perpetuate risky sexual practices. Sensitize policy makers, religious leaders, and other gatekeepers in this respect.
6. Implement educational interventions at social events /places where young adolescents hang out at. Focus not only at youth, but involve parents/guardians and owners of disco funerals, video halls and local-brew dens. Enforce legal action for selling alcohol, drugs and pornography to under-age youth.
7. Improve young girls' possibilities to acquire an income, in order to strengthen their position with regard to sex.
8. Improve the quality of teaching and learning materials of AIDS education, with repeated exposure to messages on sexuality, gender norms, HIV/STI and condom use.
9. Programmers and evaluators of youth-focused projects should involve the young people themselves. And they should involve the governmental and non-governmental institutions which are concerned with youth.

Our study results in the following recommendation for future research:

10. Study the generalizability of our findings, and increase knowledge of the context and settings in which risk behaviour of young people occurs.
11. Improve the methods to analyze findings from programs that include multiple interventions, and to determine the added value of community involvement in interventions.

Samenvatting

Dit proefschrift is een verkenning van drie onderwerpen met betrekking tot jongeren in Kenia: 1) hun behoefte aan kennis en informatie over seksuele en reproductieve gezondheid, inclusief hiv/aids; 2) riskant seksueel gedrag en 3) hiv-preventieprogramma's die op deze doelgroep zijn gericht. De diverse onderzoeken die worden beschreven vullen leemtes op in de kennis over risicofactoren die cruciaal zijn bij de verspreiding van soa's/hiv, maar die in de literatuur weinig aandacht hebben gekregen. Dit proefschrift biedt essentiële kennis en inzicht aan alle partijen die betrokken zijn bij beleid en programma's ten aanzien van voorlichting op het gebied van seksuele en reproductieve gezondheid in Kenia, en heeft het doel bij te dragen tot het vaststellen van effectieve strategieën.

In **hoofdstuk 1** wordt de probleemstelling van het onderzoek gepresenteerd: de hiv/aids-epidemie in relatie tot het risico voor jongeren, speciaal gericht op de situatie in Kenia. We laten zien dat er ondanks toenemende belangstelling voor de gezondheid van adolescenten veel onbekend blijft over de factoren die seksuele risico's bij jongeren vergroten. In verband met de besproken onderwerpen komen de volgende onderzoeksvragen aan de orde (1) welke behoefte aan informatie en leemtes in kennis bestaan er bij adolescenten in Kenia met betrekking tot seksualiteit, hiv/aids en reproductieve gezondheid? (2) welk riskant seksueel gedrag vertoont de Keniaanse jeugd en wat zijn de culturele, sociale en economische factoren die riskante situaties creëren, vooral voor meisjes? (3) wat zijn de beperkingen bij voorlichting over hiv/aids op de Keniaanse openbare scholen, en kunnen interventies uitgaande van de gemeenschap en scholen effectief zijn om kennis, houding en riskant seksueel gedrag van jongeren in Kenia te veranderen?

In **hoofdstuk 2** verkennen we de leemtes in kennis bij adolescenten met betrekking tot seksualiteit, hiv/aids en reproductieve gezondheid. We hebben geconcludeerd dat ondanks hun leergierigheid de kennis van jongeren fragmentarisch is; soms is er zelfs sprake van misvattingen. Ook hebben zij last van onvermogen om met hun ouders te communiceren. We denken dat deze informatie relevant is voor beleidsmakers en andere betrokkenen op het gebied van hiv-preventie, om hun interventies, leerplannen en onderricht af te stemmen op de behoeften van jongeren.

Hoofdstuk 3 is gericht op discobegravenissen als riskante situatie voor het oplopen van hiv/soa's onder jongeren in de stad Kisumu in Kenia. We hebben ontdekt dat de seksuele contacten van meisjes tijdens discobegravenissen uitermate riskant zijn: er was sprake van onveilige, onvrijwillige, transactionele seks, vaak met meerdere partners, wat de kans op besmetting met hiv/soa's vergroot. Interventies zouden moeten zijn gericht op jongeren en alle volwassenen (met inbegrip van ouders/voogden en de organisatoren van

discobegravenissen) die bij deze evenementen aanwezig zijn, om hen te informeren over het risico van hiv/soa's en gedragsverandering te stimuleren. En tevens om jonge mannen te betrekken bij de preventie van hiv, vooral met betrekking tot onvrijwillige seks.

Hoofdstuk 4 beschrijft pornovideoshows, plaatselijk gebrouwen bier en transactionele seks als een riskante combinatie voor besmetting met hiv onder de jeugd in de Keniase stad Kisumu. Onze bevindingen onderstrepen de betekenis van cultuur, sociale druk van leeftijdgenoten, het vertonen van gewelddadige pornografie, alcoholgebruik, armoede en ouderloosheid in de dynamiek van de hiv-epidemie. We concluderen dat in Kisumu, een stad met een algemeen verspreide hiv/aidsepidemie, de ondergeschikte positie van vrouwen en dominantie van mannen in de Luogemeenschap duidelijk bijdragen tot de onveilige, onvrijwillige en transactionele seksuele activiteiten, vaak met meerdere partners, van jonge meisjes. Programma's moeten dringend aandacht besteden aan de rol van pornovideoshows, plaatselijk gebrouwen bier en transactionele seks, in het blootstellen van jonge meisjes aan diverse soorten risico's om besmet te raken met hiv; ze moeten zich richten op bijvoorbeeld eigenaren van lokale drankhoken die deze riskante praktijken in stand houden; en ze moeten onschadelijke vormen van vermaak voor de jeugd ontwikkelen.

In **hoofdstuk 5** verkennen we de soorten seksuele activiteit waarmee adolescenten te maken hebben, de aard en vrijwilligheid van de eerste en latere keren dat er geslachtsverkeer plaatsvindt, ervaringen met onvrijwillige seks en kenmerken van mensen die onvrijwillige seks bedrijven of ondergaan, in twee districten in West-Kenia. Bij jongens die van school zijn gegaan, die ruziënde ouders hebben en een traditionele houding ten aanzien van rolpatronen en die voor het eerst seksueel contact hebben op jonge leeftijd en onvrijwillig, is de kans het grootst dat zij meisjes tot seks dwingen. Transactionele seks wordt gestimuleerd door de zwakkere economische positie van meisjes. We concluderen dat er meer onderzoek nodig is om tot een beter begrip te komen van niet alleen de context waarin riskant gedrag voorkomt, maar ook van de kenmerken van de mensen die gedwongen seks bedrijven. We onderkennen de noodzaak om geweld tegenover jonge meisjes en vrouwen aan te pakken en methodes en strategieën daarvoor op te stellen.

In **hoofdstuk 6** worden de beperkingen beschreven die het geven van effectieve voorlichting over hiv/aids op openbare scholen in Kenia ondermijnen. We hebben vastgesteld dat voorlichting over hiv/aids momenteel gegeven wordt tijdens de lessen biologie, een niet-verplicht vak. En het ministerie van Onderwijs keurt openheid op het gebied van seks en condooms af. Het ontbreekt leraren aan training en steun, en zij voelen zich ongemakkelijk bij dit onderwerp. Maatregelen om de voorlichting over aids op Keniase scholen in sterkere mate te verwezenlijken zijn vereist.

Hoofdstuk 7 geeft de resultaten weer van de evaluatie van een veelomvattend programma voor adolescenten met betrekking tot reproductieve gezondheid en hiv-preventie in twee districten in de Westelijke Provincie in Kenia. We vonden een iets groter effect op de kennis, attitudes en gedrag bij interventies uitgaande van de gemeenschap dan bij de gecombineerde interventies (uitgaand van gemeenschap en school). Het succes van beide interventies maakt toenemende verbetering mogelijk van het leven van jonge mensen die anders misschien niet zou worden bereikt. We concluderen dat interventies via bestaande gemeenschapssystemen en -structuren, met name via welzijnswerk, veelbelovend zijn wat betreft het bevorderen van kennis, attitudes en het ontwikkelen van levensvaardigheden voor de jeugd en het betrekken van volwassenen bij de reproductieve gezondheid/hiv van jongeren.

In **hoofdstuk 8** worden de onderzoeksvragen en de resultaten geëvalueerd in het licht van literatuur uit verleden en heden, en worden de implicaties beschreven van onze onderzoeken voor hiv-voorlichting en -preventie in Kenia. De conclusies en aanbevelingen die uit het onderzoek voor dit proefschrift voortkomen, worden in dit hoofdstuk geformuleerd en staan tevens hieronder.

Conclusies

Wij komen op basis van de onderzoeken in dit proefschrift tot de conclusie dat:

1. er bij de Keniase jeugd veel kennisleemtes en misvattingen bestaan met betrekking tot seksuele en reproductieve gezondheid;
2. de controverses en de cultuur van zwijgen die er rondom seksuele voorlichting bestaan, de implementatie van effectieve hiv/aids-preventieprogramma's voor de jeugd belemmeren;
3. in Kisumu, een stad met een algemeen heersende hiv/aids-epidemie, jonge meisjes het risico lopen van besmetting met hiv door onveilige, onvrijwillige en transactionele seks;
4. de ondergeschikte positie van vrouwen in de Luogemeenschap riskant gedrag bevordert, vooral tijdens discobegravenissen en pornovideoshows en door het drinken van plaatselijk gebrouwen bier;
5. de huidige hiv/aidsvoorlichting op scholen niet alle leerlingen bereikt en niet erg effectief is;
6. met hiv/soa-preventieprogramma's die uitgaan van de gemeenschap, seksuele en reproductieve gezondheid kan worden bevorderd.

Aanbevelingen

De resultaten van ons onderzoek leiden tot de volgende aanbevelingen ter verbetering van de preventie van hiv bij jongeren in Kenia:

1. bied jongeren hiv/aids-preventieprojecten met een breed perspectief dat vele aspecten beslaat;
2. geef jongeren accurate informatie, bereid ze voor op de fysieke en emotionele veranderingen van puberteit en adolescentie en breng ze de vaardigheden en waarden bij om veilige en prettige relaties te hebben;
3. overbrug de generatiekloof door de communicatie tussen adolescenten en hun ouders, familie, leraren, religieuze leiders, gezondheidspersoneel en gemeenschappen te verbeteren;
4. breng meisjes en jongens de vaardigheid bij om seks uit te stellen, veilig vrijen te bespreken en zich te verzetten tegen fysieke en psychologische druk om ongewild seks te hebben;
5. verander socioculturele en gedragsfactoren die riskante seksuele praktijken in stand houden. Maak beleidsmakers, religieuze leiders en andere poortwachters op dit gebied ontvankelijk;
6. implementeer educatieve projecten op sociale evenementen/plaatsen waar jongvolwassenen zich ophouden. Focus daarbij niet alleen op de jeugd, maar betrek ook ouders/voogden, organisatoren van discobegravenissen en eigenaars van videozalen en lokale drankholen erbij. Onderneem actie tegen de onwettige verkoop van alcohol, drugs en porno aan minderjarigen;
7. vergroot de mogelijkheden voor jonge meisjes om een eigen inkomen te verwerven om hun positie met betrekking tot seks te versterken;
8. verbeter de kwaliteit van het onderwijs en leer materiaal op het gebied van voorlichting over aids, met herhaalde voorlichting over seksualiteit, rolpatronen, hiv/aids en het gebruik van condooms;
9. laat degenen die de programma's voor op de jeugd gerichte projecten maken en evalueren de jongeren zelf erbij betrekken, alsmede de overheids- en particuliere instellingen op het gebied van jeugdzorg.

Ons onderzoek leidt tot de volgende aanbevelingen voor toekomstig onderzoek:

10. onderzoek de generaliseerbaarheid van onze bevindingen en vergroot de kennis van de context en situaties waarin riskant gedrag van jongeren voorkomt;
11. verbeter de methoden om de bevindingen te analyseren van programma's met veelomvattende interventies en om de toegevoegde waarde van het betrekken van de gemeenschap bij interventies te bepalen.

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Carolyn Njue, 2011

Curriculum Vitae

Carolyne Njue was born in Embu in Eastern Province of Kenya. She obtained her graduate degree in Anthropology and her master's degree in Demography & Research from the University of Nairobi, Kenya. While working on a HIV and AIDS research project with the Institut de Recherche pour le Développement (IRD), she proceeded for another masters in Medical Anthropology at the L'EHESS, Marseille, France. Her interest in young people and health research on HIV and AIDS began during her graduate studies and was strengthened by her continued work at the Population Council which motivated her to pursue a PhD, the outcome of which is presented in this dissertation. Carolyne has great passion for her work and for the youth particularly for girls to be versatile, embrace empowerment and realise their potential in life.

Carolyne is a mother to Liam Munene and Leona Noni and is married to Ngari Munene.

Carolyne is a behavioural scientist with extensive experience in research, reproductive health programme management, monitoring and evaluation of HIV/AIDS, Malaria, and health systems strengthening in sub-Saharan Africa. She has been in this field for over 10 years, working for a wide range of projects for government, non-government organizations and universities – conducting assessments and evaluations, program and information management, training and mentoring, performance measurement, and supporting governments and NGOs with grants management. She has published in a number of journals and presented papers in various national and international conferences.

This thesis looks at the sexual behaviour and HIV risk among adolescents in Kenya, and how youth can be empowered in HIV prevention. It provides insight that is essential for all parties involved in programs on sexual and reproductive health education in Kenya, and aims to assist in identifying effective strategies. Some main conclusions are:

- Youth in Kenya have many knowledge gaps and misconceptions regarding sexual and reproductive health.
- The controversies and the culture of silence which surround the provision of sex education hamper the implementation of effective youth-focused HIV/AIDS prevention programmes.
- In Kisumu, a town with a generalized HIV/AIDS epidemic, unprotected, coerced and transactional sex exposes young girls to risk for HIV infection.
- The subordinate position of women in the Luo society facilitates risk behaviour, especially during disco funerals, porn video shows and the drinking of local brews.
- The current HIV/AIDS education in schools does not reach all students and is not very effective.
- Community-based STI/HIV prevention programmes have the potential of promoting sexual and reproductive health.



Youth have the best chance of changing behaviour that puts them at risk for HIV
Photo caption: **KARHP** youth, Western Kenya

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- I. **Njue C**, Ahlberg BM, Voeten HACM. 'Youth in a void': Sexuality, HIV/AIDS and communication in Kenyan public schools. *Sex Education* 2011; 4:459-470
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