GENDER AND AGE DIFFERENCES IN CONDOM USE PATTERNS AMONG YOUTH IN THE EASTERN CAPE, SOUTH AFRICA: *A DESCRIPTIVE AND ANALYTIC STUDY*

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A mini-thesis in partial fulfilment of the requirements for the degree of Masters in Public Health in the School of Public Health, University of Western Cape

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ABSTRACT

GENDER AND AGE DIFFERENCES IN CONDOM USE PATTERNS AMONG EASTERN CAPE YOUTH: A DESCRIPTIVE AND ANALYTIC STUDY

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MPH mini-thesis, School of Public Health, University of Western Cape

Background: South Africa is estimated to have one of the highest epidemics of HIV infection. Recent youth studies have found that youth aged 15-24 years are increasingly becoming vulnerable to HIV. While 10% is estimated to be HIV positive (Pettifor et al, 2004a), more young women are infected than young men (Shisana et al, 2005). A quarter of pregnant women aged 15-24 years are estimated to be HIV infected (Department of Health, 2005). Condom use is promoted as one of the key HIV prevention methods in South Africa. Two-thirds of youth have ever used a condom (Pettifor et al, 2004a & Shisana et al, 2005). Half had used condoms at most recent intercourse. 33-42% used condoms consistently (James et al, 2004; Pettifor et al, 2004). Men were more likely to use condoms at last sex and to use them consistently (Pettifor et al, 2004a; Shisana et al, 2005). These studies indicate a gap in ideal and actual condom use among youth. This study thus aims to describe and compare patterns of reported condom use of South African youth by gender and by age group.

Methods: This is a descriptive study that uses the baseline survey data of the Stepping Stones Randomised Controlled Trial. Face-to-face structured questionnaire interviews were conducted with a volunteer sample of rural sexually active women (n= 1296) and

men (n= 1288) aged 15-26 years living in 70 villages in the Eastern Cape Province. Most of the participants were recruited in schools. Stata 8.0 was used for the analysis, also taking into account the cluster design. Statistics of central tendencies and range for continuous data, frequency distributions and cross tabulations are presented.

Results: Women had significantly more negative attitudes towards condom use than men. 60% of women believed using condoms was embarrassing compared to 37% of men ($p<0.001$). They were more likely to prefer flesh-to-flesh sex than men (30% vs. 24%, $p<0.001$). A majority of both men and women had higher self-efficacy of condom use. Levels of knowledge about condoms ranged between 44% and 65%. About two-thirds of the youth reported having ever used a condom, with youth aged 20-26 years more likely to have used condoms than youth aged 15-19 years. Both men and women had used condoms for the first time at the age of 17 years. The mean age at first condom use was 16 years for 15-19 years olds and 19 years for 20-26 year olds. Older youth and men were significantly more likely to have used condoms for the first time at least 3 years since first sexual intercourse. 43-46% Of youth who were condom users used them at last sexual intercourse. Condoms used at last sex were more likely to have been brought by men or older youth. Youth reported fewer problems with condom use at last sex. Men were marginally more likely to say that the condom broke and was put in halfway during sexual intercourse. 23-26% of all condom users had used condoms consistently in the past year with a main partner. Condom use was more commonly reported with a casual partner than a main partner, by 59% of women and 65% of men, by 62% of youth aged 15-19 years and by 66% of youth aged 20-26 years.

Conclusion: There is a gap between ideal and actual condom among rural youth in this study. While 'ever' condom use was good, consistent condom use was considerably lower. No age or gender differences were observed in these measures. There were still gaps in knowledge and youth had negative attitudes, especially among women. It is unclear whether the lack of correct knowledge and negative attitudes are absolute barriers to condom use because women and men equally used condoms. Men's perceptions of their HIV risk meant that they did not need to use condoms because they trusted their partners not to have HIV. Power imbalance between partners appeared to be at play in preventing condom use as female non-condom users' partners were less likely to agree to use condoms compared to male non-condom users' partners.

Recommendations: Interventions are required to encourage youth to use condoms consistently. There is a need for a change in attitudes and to improve knowledge. Condom availability must be sustained. There must be focus on elevating ideas of personal HIV risk and the notion of 'trust'. Interventions which address HIV and gender equity must be provided to youth.

DECLARATION

I declare that *'GENDER AND AGE DIFFERENCES IN CONDOM USE PATTERNS AMONG YOUTH IN THE EASTERN CAPE, SOUTH AFRICA: A DESCRIPTIVE AND ANALYTIC STUDY'* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Full name .....

Date .....

Signed .....

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CHAPTER 1

INTRODUCTION

1.1 The global overview of HIV/AIDS

In its global report on the HIV epidemic, the UNAIDS (2004) estimated that in 2003, about 4.8 million people became newly infected with HIV, and about 37.8 million people were living with HIV by end 2003. Over 20 million people have died from AIDS worldwide. The sub-Saharan African region, which is occupied by 10% of the world's population, has about 25 million people living with HIV. In 2003 alone, an estimated 3 million people in the region became newly infected, while 2.2 million died of AIDS (UNAIDS, 2004).

The Human Immuno-Deficiency Virus (HIV) is transmitted through blood and sexual fluids of an HIV infected person when sharing needles or syringes during drug usage, through infected blood transfusions, during unprotected sexual intercourse with someone who is not yet infected, and from an infected mother to her baby (CDC, 2006). In the early 1980s HIV emerged as a gay disease in the USA. However, its epidemiology changed with a decline in the proportions of reported AIDS cases globally for the USA in homosexual/bisexual men and marked increases in heterosexual individuals in the 1990s and early 21st century in Africa and other continents (Kilby, 2003; UNAIDS, 2004). A large volume of research in America also points to the substantial HIV burden among injecting drug-users and their partners (Des Jarlais, 1996; Des Jarlais, 1999; Kral et al, 2001).

Heterosexual intercourse is the most common route of transmission of HIV in poor countries. In Africa at least 80% of infections are acquired heterosexually, while mother to child transmission accounts for 5-15% of infections and transfusion of contaminated blood accounts for about 5% (Lamptey, 2002; Paul & Gopalakrishnan, 2003). In sub-Saharan Africa injecting drug use is uncommon and HIV is mostly transmitted through unprotected heterosexual intercourse, particularly affecting women and youth. By the end of 2003, women accounted for nearly 50% of all people living with HIV worldwide. Of the adult population with HIV in sub-Saharan Africa 57% are women. Of all young people living with HIV, 75% are female. Among youth 15-24 years of age in sub-Saharan Africa, 6.9% of women were living with HIV by the end 2003 compared to 2.1% of men (UNAIDS, 2004).

Youth in the 15-24 age group are a high risk of HIV infection. They form the largest proportion of the world's population with nearly half of the world's population (almost 3 billion people) under the age of 25 years. The prevalence of HIV infection among them is very high and 62% of the 10 million youth globally living with HIV have lived in sub-Saharan Africa (UNAIDS, 2004).

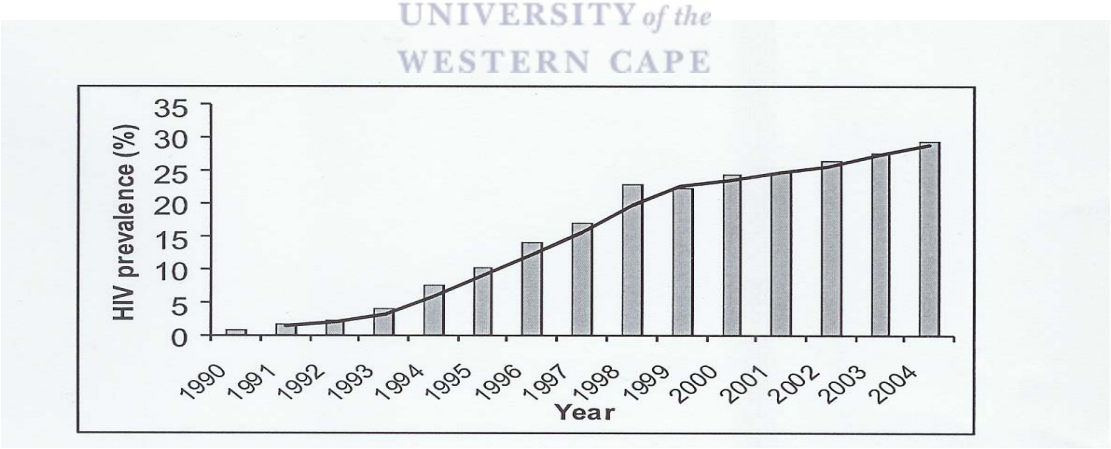
1.2 HIV/AIDS epidemic in South Africa

South Africa, located at the bottom tip of sub-Saharan Africa, has one of the highest HIV/AIDS epidemics. It is estimated that by mid-2004, 5 million people in South Africa were living with HIV (Dorrington et al, 2004). The overall prevalence of HIV infection is estimated to be 11%. Of adults aged 15-49 years, 18.5% were living with HIV. AIDS was estimated to account for 44% of all deaths by end 2004 (Dorrington et al, 2004). The

2002 Nelson Mandela/HSRC HIV survey found that 11.4% of South Africans aged two years and older had HIV (Shisana et al, 2002). Most HIV in South Africa is transmitted through heterosexual sex (Dorrington et al, 2004).

It is evident from local research that the HIV epidemic is 'feminised' in South Africa, as in other parts of the world. Of the adult population aged 15-49 years, an estimated 20.2% of women compared to 16.6% of men were HIV infected (Dorrington et al, 2004). According to the 2005 Nelson Mandela/HSRC HIV survey of people two years and older, the prevalence of HIV among women (13.3%) was significantly higher than that of men (8.2%). The HIV prevalence in the Eastern Cape Province, the site of this study, has increased from 6.6% in 2002 to 8.6% in 2005. 15.5% of adults aged 15-49 years were also living with HIV (Shisana et al, 2005).

Figure 1.1 Prevalence of HIV among antenatal care attendees in South Africa, 1990-2004.



(Source: Department of Health. (2005) *National HIV and Syphillis sero-prevalence survey in South Africa 2004*, page 7).

A significant year-on-year increase in HIV among pregnant women in South Africa has continued to be observed (see Figure 1.1). The 2004 national HIV infection prevalence

estimates among pregnant women attending public antenatal services were 29.5% compared to 27.9% in 2003. In the Eastern Cape province, an estimated 28.0% of women attending antenatal care were HIV positive in 2004, compared to 23.6% in 2003 (Department of Health, 2005).

1.2.1 Youth and HIV in South Africa

In South Africa, the prevalence of HIV infection among youth is high. The overall 2004 HIV prevalence among pregnant women aged 15-24 years was estimated at 25.2% (Department of Health, 2005). The 2004 National Youth survey reported that 10.2% of youth aged 15-24 were infected with HIV (Pettifor, et al, 2004a). According to the 2005 Nelson Mandela/HSRC HIV survey (2005: 45) "the largest increase in (the national) prevalence is found among females 15-24 years – 12% in 2002 compared to 16.9% in 2005". The Eastern Cape is rapidly becoming one of the provinces with the highest levels of HIV/AIDS among youth. Among women attending antenatal clinics in the Eastern Cape province, HIV infection was estimated at 28.0% in 2004, compared to 23.6% in 2002 (Department of Health, 2005). The HIV prevalence of people aged two years and above in the Eastern Cape had increased from 6.6% in 2002 to 8.9% in 2005. Of adults aged 15-49 living in the Eastern Cape 15.5% were living with HIV. Of youth 15-24 years living in the Eastern Cape the HIV prevalence was 11.7% (Shisana et al, 2005).

The distribution of HIV among youth shows marked gender and age group disparities (see Table 1.1). In the National Youth Survey, 15.5% of young women were HIV infected compared to 4.8% of men (Pettifor, et al, 2004a). A similar HIV prevalence was found in the HSRC study. The 2005 HIV survey (2005: 45) also stated that "the female to

male ratio for HIV infection in 2005 was also highest among youth aged 15-24 years", as the prevalence in females was almost four times that of males – 16.9% vs.4.4%. Age group differences were evident in the antenatal survey as the HIV prevalence was estimated at 16.2% for 15-19 year-olds and 30.8% for 20-24 year-olds (Department of Health, 2005). The same age and gender patterns were found in Pettifor et al (2004a).

Table 1.1 HIV prevalence by sex and age group, South Africa 2005

Table 3.10: HIV prevalence by sex and age group, South Africa 2005

Age	Male			Female			Total		
	HIV+			HIV+			HIV+		
	(n)	%	95% CI	(n)	%	95% CI	(n)	%	95% CI
2–4	364	4.9	1.8–12.8	365	5.3	3.1–9.0	729	5.1	2.8–9.1
5–9	638	4.2	2.2–8.0	703	4.8	2.8–8.0	1 341	4.4	3.0–6.6
10–14	809	1.6	0.8–3.4	936	1.8	0.9–3.4	1 745	1.7	1.0–2.8
15–19	1 001	3.2	1.4–7.1	1 153	9.4	7.1–12.4	2 154	5.9	4.3–8.0
20–24	784	6.0	3.8–9.4	1 182	23.9	19.8–28.4	1 966	15.2	12.5–18.2
25–29	383	12.1	8.0–17.9	598	33.3	27.7–39.4	981	23.2	19.1–28.0
30–34	341	23.3	17.2–30.7	691	26.0	21.5–30.9	1 032	24.9	21.1–29.2
35–39	375	23.3	17.8–29.8	727	19.3	14.9–24.6	1 102	20.8	17.3–24.9
40–44	399	17.5	12.0–24.7	694	12.4	9.4–16.2	1 093	14.8	11.4–19.0
45–49	312	10.3	6.5–16.0	605	8.7	6.0–12.6	917	9.4	6.9–12.7
50–54	286	14.2	8.5–22.7	538	7.5	4.9–11.2	824	10.8	7.5–15.2
55–59	197	6.4	1.9–19.8	359	3.0	1.6–5.6	556	4.5	2.0–10.0
= >60	451	4.0	1.9–8.2	956	3.7	2.2–6.3	1 407	3.9	2.5–5.9
Total	6 342*	8.2	7.1–9.6	9 509*	13.3	12.1–14.6	15 851*	10.8	9.9–11.6

Note: * Totals include data on age not reported for four respondents (two among males and two among females)

Source: Shisana et al. (2005) *South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey*, page 35.

1.3 Factors associated with heterosexual HIV spread in South Africa

1.3.1 HIV risk factors for men

Whilst the prevalence of HIV amongst women is higher than that of men in South Africa, these men are husbands and partners of the women who are particularly at risk. In South Africa, a limited number of studies have shown HIV risk factors for men. Research has shown that age, non-completion of high school education, having many lifetime partners, having casual sex partners, having STDs, having made a woman pregnant and having sex with another man were significantly associated with young men testing positive for HIV (Auvert et al, 2005; Pettifor et al, 2005; Auvert et al, 2001; Jewkes et al, submitteda).

Four studies found that age (being older than 20 years) was positively associated with being infected with HIV (Auvert et al, 2005; Pettifor et al, 2005; Auvert et al, 2001; Jewkes et al, submitteda). The risk associated with having multiple sexual partners was shown by Auvert et al (2005) and Pettifor et al (2005); and having at least one casual partner with 20 or more sexual acts and having a casual partner who was married have also been associated with increased odds of being HIV positive (Auvert et al, 2005).

The relationship between having sexually transmitted infections (STIs) and having HIV was observed in two studies. In South Africa the National Youth survey found that a history of genital ulcers in the past 12 months among young men aged 15-24 years was associated with HIV infection (Pettifor et al, 2005). In an intervention study in Carletonville, in the North West Province, young men who had tested positive for herpes virus-2 (HSV-2) had a higher risk of being HIV infected than men without herpes (Auvert et al, 2001).

Three studies found that male circumcision has a significantly protective effect against HIV infection. Nationally in Pettifor et al (2005), men who reported being circumcised were marginally significantly less likely to have HIV compared to men who were not circumcised. In the Eastern Cape where male circumcision is a common cultural practice, Jewkes et al (submitteda) also found men aged 15-26 years who were circumcised were significantly less likely to test positive for HIV. Evidence of protection from circumcision has been demonstrated empirically in a randomised controlled intervention trial conducted with 3274 uncircumcised men aged 18-24 years living in Orange Farm area of Gauteng Province, the relative risk of HIV infection in the intervention arm was 0.40 in comparison to the control arm, thus corresponding to a significant protection (of 60%) against HIV infection (Auvert et al, 2005).

1.3.2 HIV risk factors for women

South African literature illustrates factors that exacerbate women, and young women's, vulnerability to HIV infection. Similar to men, age, STIs and non-completion of high school education were also found to be risk factors for women getting HIV infection (Pettifor et al, 2005; Auvert et al 2001). Relationship characteristics, namely the age difference between the women and her partner, the level of communication, extent of abuse and concurrent sexual partnerships were among the factors associated with women testing positive for HIV (Jewkes et al, submittedb; Pettifor et al, 2005; Dunkle, 2003; Auvert et al, 2001).

Two studies reported a positive association between age and HIV infection. Women aged 20-24 years were more likely to be HIV positive compared to women who were aged 15-

19 years (Pettifor, et al, 2005). In Carletonville, Auvert et al (2001) found that women aged 22-24 years were significantly more likely to be HIV positive compared to younger women.

In the National Youth survey, Pettifor et al (2005) found that young women aged 15-19 whose sexual partner was 5 or more years older and women aged 20-24 whose partners were 1-4 years older were significantly more likely to be HIV positive. In Jewkes et al (submittedb), HIV positive women had increased odds of having a partner who was 3 or more years older.

A study of women aged 16 years or more who attended antenatal care in Soweto, Gauteng province, in 2001/2002, found that intimate partner violence placed women at elevated risk of HIV infection (Dunkle et al, 2004b). Physical abuse and a combination of physical and sexual abuse by an intimate partner were associated with increased odds of HIV infection.

The risk between STIs and HIV infection in relation to women in particular is evidenced by two local studies (Auvert et al, 2001; Pettifor et al, 2005). Similarly with the male sample discussed in the previous section, herpes virus-2 (HSV-2) was among the sexually transmitted infections identified as strongly associated with increased HIV risk among young women (Auvert et al, 2001). Pettifor et al (2005) also found that the odds of women being HIV infected were increased if women reported having had unusual genital discharge in the past 12 months.

More HIV risk factors were found in a study of rural Eastern Cape young women aged 15-26 years (Jewkes et al, submittedb). These included having had last sex less than three months prior to interview, and having had a partner who was more educated. In the National Youth survey inconsistent condom use was reportedly associated with young women being HIV positive (Pettifor et al 2004b).

1.3.3 Other risk factor for HIV

Several other factors are also considered to contribute to the transmission of HIV through heterosexual sex in sub-Saharan Africa. These include not using condoms, poor access to treatment of STIs, commercial sex work, sex in exchange for money, the subordinate position of women in society, poverty, poor knowledge and skills on sexual and reproductive health, economic dependence of women on men, lack of employment, migration, and urbanisation (Wojcicki & Malala, 2001; MacPhail & Campbell, 2001; Buve, Bishikwabo-Nsarhaza & Mutangadura, 2002; Jewkes et al, 2003; Turmen, 2003; Dunkle, 2004a; King et al, 2004**;** UNAIDS, 2004).

1.4 Ways of preventing heterosexual HIV transmission

HIV transmission from heterosexual intercourse can be prevented through a variety of ways such as improved STI treatment, the provision of sexual health and life skills education programmes for youth, national HIV awareness programmes, and targeted interventions with those particularly at risk such as commercial sex workers or migrant workers (Jewkes et al, 2002). Condoms (male and female) are the only effective protection methods for acts of sexual intercourse as they prevent contact with infected sexual fluids (Jewkes et al, 2002). Condoms have a special place in prevention among

young people as few are in stable partnerships, and young women in particular, are extremely vulnerable to STIs including HIV (UNAIDS, 2004).

The World Health Organisation (2005) promotes condom use as part of an overall strategy to promote safer sexual behaviour. Consistent with international standards, condom use was a priority area of prevention outlined in the South African HIV/AIDS Strategic Plan (Department of Health, 2000). The plan proposed to expand condom distribution through non-traditional outlets; to improve access to condoms in high transmission risk areas (e.g. truck stops, borders, mines and brothels); and to increase acceptance of, attitudes towards, perceptions of, self-efficacy of and use of condoms as a form of contraception, among the youth. The main source of condoms in South Africa is the Department of Health's public sector condom programme. Condom distribution has increased noticeably from 267 million in 2001 to 346 million in 2004 (Shisana et al, 2005). Male condoms are the most commonly available to the South African population while female condoms are less accessible (Manzini, 2001). The majority of the adult population who use free condoms live in rural rather than urban areas, and in informal than formal areas. Most use the new government-provided brand, Choice, and a great majority find the most recent brand satisfactory (Shisana et al, 2005).

Whilst the government has made condoms available there are challenges in the uptake of condom use and in getting youth to use them effectively. HIV infection rates inform us that youth, in particular young women, have an overwhelming unmet need for protection. A 2005 national study on youth sexual practices showed a gender difference in condom use, with figures for young men using condoms exceeding those of young women which seemed to be consistent with the higher levels of HIV in women. Although two-thirds of

youth had used condoms, men were significantly more likely to report doing so than their female counterparts (72.5% vs. 61.6%) (Shisana et al, 2005). The National Youth survey showed similar gender differences in condom use, with men reporting more condom use than women (57% vs. 44%) (Pettifor et al, 2004a). The mismatch between the need for condom use and actual use necessitates an understanding of the context of youth's safer sex behaviours of young women and men.

Barriers to condom use among South African youth have been reported in Hartell (2005), James et al (2004), Harrison et al (2001) and MacPhail & Campbell (2001). Factors preventing youth from using condoms included engaging in early and unprotected sex, partner's refusal to use condoms, coercion by partner, poor information about safer sex methods, pressure to have a child, lack of access to services, negative perceptions about condoms, low perceived risk for HIV and low perceived self-efficacy in condom use. Information about barriers to effective condom use in South Africa is also critical. These included low perceived HIV risk, careful selection of girlfriends, unavailability of condoms, force by a partner and dislike of condoms (Hoffman et al, 2006; Harrison et al, 2001; MacPhail & Campbell, 2001).

1.5 Rationale for the study

As can be seen above, youth in South Africa are at high risk of HIV infection. While condoms have been identified as one of the key prevention methods for youth, there is a

gap between ideal and actual condom use among South African youth. This research will discuss rural youth's current condom practices by making comparisons by gender and age. Frequency of condom use; age at initial use; use at last sexual intercourse; the proportion of consistency of use compared to intermittent use; and comparisons by partner type will be investigated. In addition, problems experienced in condom use, potential barriers to effective use; and gaps in relation to knowledge about condom use, attitudes towards condoms, and self-efficacy will be obtained inform the sample namely, rural youth living in post-apartheid South Africa. This study sampled youth aged 16-23 years residing in the former Transkei region of the Eastern Cape Province of South Africa.

This study will analyse sexual behaviour data collected as part of the baseline in the Stepping Stones Study to evaluate the effectiveness of an HIV behavioural intervention in 70 villages in the former Transkei, Eastern Cape. Sexual behaviour data from the baseline interviews conducted for the trial will be presented to address the research question: *Does condom use vary with gender and age among sexually active youth in the Eastern Cape Province, South Africa?* The study will suggest how potential barriers to condom use and facilitating factors might be considered in the context of future HIV prevention programmes provided by the Departments of Health and Education in the province.

1.6 Aim of this study

The overall aim of the study is to describe how reported condom use and barriers to condom use differ, depending on gender and age amongst young people aged between

15-26 years living in 7 districts of the Eastern Cape Province, South Africa, so as to inform and improve the content of local HIV educational interventions aimed at young people.

1.6.1 Study Objectives

The study aim will be achieved through the following objectives:

- To describe the differences in attitudes towards condom use between men and women, and by age group (i.e. between the 16-19 year olds and the 20-26 year olds);
- To compare the reported use, correct use and consistency of use of condoms by sexually active women and men, and by age group;
- To describe the differences in reported use of condoms with current sexual partners between women and men, and by age group;
- To compare potential barriers to condom use between sexually active women and men, and by age group;
- To use the findings to make recommendations for future HIV prevention programmes

1.7 Structure of the mini-thesis

This research will be presented in a number of chapters. The next chapter will review literature on the background of youth sexual activity. This will include a consideration of early sexual intercourse, including age at first sex and forced sex and other aspects of

youth sexual relationships. International and local evidence of condom use and the differences in condom use by gender and by age, in addition to the knowledge and attitudes of youth towards condoms will be discussed. The methods chapter will explain the study setting, the sample and sampling calculation, the data collection method and analyses. The results chapter will consider the study objectives in relation to the findings of this research study. This will be followed by a discussion of the findings, and some final recommendations.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Condom use has been identified as a significant and effective prevention tool against HIV infection. Its promotion among sexually active populations is endorsed by the World Health Organisation (WHO, 2005). Youth have emerged as one of the most vulnerable groups to HIV infection. Evidence of this is documented in national antenatal and youth surveys in South Africa (Department of Health, 2005; Pettifor et al, 2004a; Pettifor et al, 2004b; Pettifor et al 2005; Shisana et al, 2005).

In this chapter studies using both qualitative and quantitative methods will be considered. The following aspects of youth sexuality and condom use will be addressed:

- The prevalence of sexual activity and aspects of sexual initiation
- Risk factors for unprotected sex
- Levels of knowledge about HIV/AIDS and attitudes towards condom use
- Reported condom use, patterns of condom use, barriers and facilitating factors

2.2 Socio-demographic characteristics of South African youth

Nationally, youth aged 15-24 years constitute about 20% of the total population of South Africa. Of the 9.2 million youth, 4.5 million are men and 4.7 million are women. Of youth aged 18 years nationally, 65.5% are attending school while 2.8% are at a university or technikon and 2.4% at a technical college. Of 18 year olds nationally, 31.9% of women are not attending an educational institution compared with 26.6% of men (Statistics South Africa, 2005).

2.3 Youth sexual activity

2.3.1 The proportion of youth who reported being sexually active

Recent studies show that more than 50% of South African youth are sexually active. The proportion of 15-24 years olds who have ever has sex ranges from 55-67% (Simbayi et al, 2004; Pettifor et al, 2004a; Shisana et al, 2005). There are indications that this varies across gender and age groups (Simbayi et al, 2004; Pettifor et al, 2004a; Shisana et al, 2005). Pettifor et al (2004a) found that of youth aged 15-19 years, 48% reported having had sex compared to 89% of youth aged 20-24 years. Shisana et al (2005) found that more women (62.3%) reported having ever had sex than men (53.9%).

2.3.2 Early sexual intercourse

Sexual activity started in the early teenage years for many young people. Young men start sex significantly earlier than young women (Simbayi et al, 2004; Pettifor et al, 2004a & 2005). Age at first sex is an important indicator used in research on youth sexual behaviour. The mean age of first sex in South Africa for 15-24 year olds is between 16.5 and 17 years (Pettifor et al, 2004a & Shisana et al, 2005). Sexual initiation sometimes occurred before the age of 14 years. 18% of men and 8% of women had coital debut before the age of 14 years (Pettifor et al, 2005). Some young women had first sexual intercourse with older partners. In a cluster sample of 796 KwaZulu Natal sexually active adolescent girls, aged 14-22 years, the mean age at first sex was 16.6 years and the mean age of the sexual partner at first sex was 20.2 years (Manzini, 2001).

Experiencing first sexual intercourse at the age of 15 or younger has been shown to be strongly associated with risky sexual behaviour. Harrison et al (2005) found that 13.1%

men (aged 15-24 years) who participated in a cross-sectional household survey reported sexual debut before the age of 15 years. Sex before 15 years was a strong predictor of having more than 3 partners in the past 3 years. Risk behaviours at first sex for women, whilst not researched in South Africa, have been illustrated in a Zimbabwean study by Pettifor et al (2004c). A relationship between early age of first sexual intercourse and HIV risk was found in a logistic regression analysis among urbanized Zimbabwean women aged 18-35 years who attended public health facilities. 11.8% of women reported age of coital debut at age 15 or younger. These women had increased odds of having reported more than one lifetime sexual partner and having ever engaged in commercial sex work compared to 6those who had first sex after the age of 15 years (Pettifor et al, 2004c).

2.3.3 Young women's experiences of first sex

At early sexual debut persuasion, trickery, coercion or rape are commonly reported by South African women (Dunkle, 2004a; Jewkes et al, 2001b; Manzini, 2001; Rutenberg et al, 2001; Wood et al, 1998). There is evidence of sexual debut as a result of being persuaded by a sexual partner. 20% of young teenage women aged 14-22 years who participated in a cluster sample in Kwa-Zulu Natal Province reported having been persuaded to have first sex by a sexual partner while 66% had first sex willingly (Manzini, 2001 & Rutenberg et al, 2001). Jewkes et al's (2004) randomized controlled trial conducted in the Eastern Cape Province found that of the 73.6% of young women aged 15-26 years who were reluctant to have first sex, 58.1% had been persuaded.

Forced sexual intercourse is part of intimate partner violence. The proportion of young women who participated in Manzini (2001), Rutenberg et al (2001) and Jewkes et al (2005) reported forced sex as ranging from 6-13%. Forced sex has been highlighted by

Jewkes et al (2001b), Jewkes & Abrahams (2002a), Jewkes et al (2002b), Taylor et al (2002) and Dunkle et al (2004a) as a risk factor for more violence. Dunkle's (2004a) study of 1,395 women attending antenatal care clinics in Soweto, Gauteng Province, highlighted the link between early first coitus and being forced to have sex by a partner. Among the 45.2% of women who reported initiation before the age of 16 years, 97% reported first sex before 13 years, 26.7% of first sex at 13 or 14 years and 8.9% of first sex at 15 years to have been non-consensual. Forced first sex was associated with more physical/sexual assault of women by male partners. These findings were consistent with those reported in Rakai, rural Uganda, where 575 sexually active 15-19 year old women were interviewed as part of the Rakai surveillance project (Koenig et al, 2004). 13% of these women had first sex before the age of 14, 46% did so at 14 or 15 years and 41% at the age of 16 or older. Overall, 14% of all women reported that their first sexual intercourse was forced. Women whose first sex was at before age 14 were more likely than women whose first sex was at 14 or 15 years and 16 years and older to report that first sex was forced (26% vs. 15% vs. 10%).

Women who have engaged in sexual activity at very young ages have increased vulnerability. In a qualitative study of 24 pregnant young teenage women under the age of 18 years, Wood et al (1998) found that male violent and coercive practices dominated these sexual relationships. Many described their first sexual intercourse as resulting from deception or being forced by their partners. Some mentioned that their partners would continue to have sex with them despite their verbal refusal. Almost all the women reported experienced violence from their male partners, being beaten on multiple occasions particularly when they refused to have sex, when trying to end the relationship and when using contraceptives (Wood et al, 1998). Violent sexual experiences occurring in childhood and adolescence, particularly forced sex, are

believed to have a lasting negative impact on sexual behaviour in later years (Jewkes et al, 2002b).

There is a link between forced sex and sexual ill-health among young women. This is demonstrated in South Africa by a case control study which showed forced sexual initiation to be closely associated with the risk of pregnancy (Jewkes et al, 2001b; Vundule et al, 2001). Jewkes et al (2001b) investigated factors associated with teenage pregnancy among sexually active adolescents living in Cape Town. They found that 30% of pregnant women reported forced sexual initiation compared with 18% of controls. 97.4% of the pregnancies were unplanned. The pregnant women were also significantly more likely to have been beaten, and to be unwilling to confront an unfaithful partner. Vundule et al (2001) reported that they had more frequent sex and were less likely to use reliable contraception. Also consistent with this study, is that of young women in Rakai, Uganda. Those who had experienced coerced first coitus were significantly less likely than those who did not to be currently using contraceptives (18% vs. 34%). They were also more likely than those whose first sex was not coerced to have ever been pregnant (81% vs. 65%). This difference was found to be significant among unmarried women. Married women whose first sex was coerced were also more likely than those who were not coerced to report that their current or most recent pregnancies were unplanned. 66% of young women whose first sexual intercourse had been coerced reported having had two or more sexual partners in their lifetime compared to 51% of those who had not been coerced (Koenig et al, 2004). The link between forced sex and the ultimate exposure to sexually transmitted diseases was made in a US study of high school girls where those with a history of forced sexual intercourse had higher odds of having STDs than those with no history of forced sex (Upchurch & Kusunoki, 2004).

Pregnant women are at higher risk for HIV infection (Gray et al, 2005). Vundule et al (2001) found that pregnant women were also more likely to have had previous STDs. In South Africa, teenage pregnancy can be seen as an indicator of HIV risk among youth (Shisana et al, 2005 & Department of Health, 2005). The 2004 national ante-natal survey measuring the HIV prevalence of South African pregnant women found that 19.5% were under the age of 20 years and 31.1% among 20-24 year olds. The HIV prevalence among teenage girls was 16.1% and 30.8% among women aged 20-24 years (Department of Health, 2005). According to the most recent national HIV survey (Shisana et al, 2005), of 9.4% of all women aged 15-19 years had HIV but the prevalence was 19.7% among those who had been pregnant in the past 24 months. 23.9% of all women aged 20-24 years had HIV compared with 30.8% of women of this age who had been pregnant in the last 24 months.

2.4 Condom use: the overview

This section was developed through a web-based literature search on condom use among youth. 30 papers on condom use in South Africa were reviewed, and summaries are presented in Table 2.1. The remaining 19 papers from the US and Australia, and 11 papers from African countries other than South Africa, were also reviewed and summaries can be found in the appendix section.

2.4.1 Knowledge and attitudes about HIV and condoms

Correct information and positive attitudes to HIV are prerequisites for healthy sexual practices for all. However, in both their reviews of published papers between 1994-1999 on safe sex behaviour among South African youth, Hartell (2005) and Eaton et al (2003)

found serious gaps in knowledge about HIV and condoms. Even lower perceptions of personal HIV risk and low self-efficacy were observed, although intentions to use condom were higher. Findings from the South African Demographic and Health Survey have shown that 83% of young women knew that condoms provided effective protection from HIV infection (Department of Health et al, 2002). Similar findings have been found in a more recent demographic and health survey in Mozambique (Measure DHS+, 2004).

Levels of awareness about HIV and condoms seem to have increased among youth interviewed in the recent youth surveys (Shisana et al, 2005; Pettifor et al, 2004a; Rutenberg et al, 2001). Whilst 94% of all youth believed that there are ways to avoid getting HIV infection, 77% mentioned condom use during sex (Pettifor et al, 2004a). These findings were quite similar to Rutenberg et al (2001). They found that 90% of youth believed that HIV infection could be avoided by consistent condom use.

2.4.2 Ever used a condom

A number of studies in South Africa have documented condom use practices of the general sexually active population including young people (Hartell, 2005; Maharaj & Cleland, 2005; Pettifor et al, 2005; Shisana et al, 2005; James et al, 2004; MacIntyre et al, 2004; Simbayi et al, 2004; Camlin & Chimbwete, 2003; Eaton et al, 2003; Taylor et al, 2003; Williams et al, 2003; Campbell et al, 2002; Hartung et al, 2002; Myer et al, 2002a; MacPhail & Campbell, 2001; Manzini, 2001; Myer et al, 2001; Reddy et al, 2000; Reddy et al, 1999).

Many young people in South Africa have used a condom at least once in their sexual lives (Hartell, 2005; Pettifor et al, 2005; Shisana et al, 2005; James et al, 2004;

MacIntyre et al, 2004; Simbayi et al, 2004; Eaton et al, 2003; Taylor et al, 2003; Williams et al, 2003; Manzini, 2001). Cross-sectional surveys have found that between 60 and 69% of sexually active youth aged 15-24 years had reported having ever used a condom (James et al, 2004; Pettifor et al, 2004a; Simbayi et al, 2004).

Reported condom use among youth from 2000-2003 has reached the levels reported by sex workers (69.7%) in 1998, the group that at the time reported the highest levels of condom use in 1998 (Williams et al, 2003). The proportion of youth using condoms has also increased over time when compared to that reported by STD clinic patients (Hartung et al, 2002; Reddy et al, 1999). However, two-thirds of youth having used a condom is suboptimal. Condom use among youth ideally needs to reach the levels (92-94%) reported in some studies in Zimbabwe and the United States (Meekers, 2003 & DeLamater et al, 2000).

2.4.3 Condom use at last sex

In South Africa, fewer youth reported condom use at most recent sexual intercourse than had reportedly ever used a condom. Pettifor et al (2004a) found that 52% of youth reported using a condom at last sex.

2.4.4 Consistent condom use

Consistent condom is another measure of effective condoms use. In South Africa, reported consistent condom use among youth aged 15-24 years is even lower than reported condom use at last sex (James et al, 2004; Pettifor et al, 2004a; Taylor et al, 2003). Reported consistent condom use ranged between 33-42% (James et al, 2004); Pettifor et al, 2004a). These findings are higher than had been reported by

married/cohabiting couples (Maharaj & Cleland, 2005), and by older research studies (Reddy et al, 1999).

2.4.5 Gender and condom use

Gender differences have been observed in all aspects of condom use among South African youth aged 15-24 years, suggesting that men were more familiar to condom use compared to women. In 2002, 72.5% of men had ever reported using condoms compared to 61.6% of women (Simbayi et al, 2004). Youth surveys also indicated gender disparities in reported condom use at last sexual intercourse (Pettifor et al, 2004a; Shisana et al, 2005). More young men reported condom use at sex at 57%, compared with women (a range of 44-46%) (Pettifor et al, 2004a; Simbayi et al, 2004). Shisana et al (2005) documented a three-year increase in reported condom use at last sex among youth aged 15-24 years. Condom use at last sex had increased from 57% in 2002 to 73% in 2005 for men and from 46% in 2002 to 56% for females in 2005 (Shisana et al, 2005). Two surveys also showed that gender differences in condom use patterns were more marked among young women reporting consistent condom use (Pettifor et al, 2004a; Magnani et al, 2005). Pettifor et al (2004a) reported that women (28%) were significantly less likely than men (39%) to report always using condoms with their most recent sexual partner. In contrast, Ugandan youth reported that men (36%) were less likely to report consistent condom use compared to women (45%) (Tumwesigye et al, 2005).

2.4.6 Condom use and partner type

Some studies indicate that condom use also depends on the type of partner. Selective condom use by partner type has been shown in research in Zimbabwe. Meekers (2003) found that 95% of male urban workers aged 20-24 years had used condoms with

someone just met, 86.4% with a casual partner, 80% with a regular partner and 12% with a spouse. Condom use at last sex was lower with a main partner compared to a casual partner. Condoms use was lower (32%) if last sex was with a main partner compared to if last sex was with a regular casual partner (53%) and if with non-regular casual partner (56%) (Pettifor et al, 2004a). These findings were consistent with research among Angolan youth aged 15-24 years (Prata et al, 2005).

2.4.7 Other aspects of ineffective condom use

Condom practices which are ineffective in providing protection from HIV infection have been discussed in other studies, in South Africa and elsewhere (de Visser & Smith, 2000; Katz, 2000; Friedman et al, 2001; Meekers, 2003; Civic et al, 2004; de Visser, 2004; Simbayi et al, 2004; Pettifor et al, 2004a & 2004b, 2005; Prata et al, 2005; Shisana et al, 2005). These practices include delay in putting on a condom during sex with initial penetrative sex taking place without a condom; condom slippage; condom breakage; removal of condoms during sex; intermittent use either within one sexual relationship and not in others; and having occasions when condoms were not use.

2.4.8 Factors that inhibit condom use

Some of the factors influencing incorrect or inconsistent condom use have been described in studies both in South Africa and elsewhere (Hartell, 2005; Maharaj & Cleland, 2005; Prata et al, 2005 & Sunmola, 2005; Eaton et al, 2003; Williams et al, 2003; UNFPA, 2002; Harrison et al, 2001; MacPhail & Campbell, 2001; Reddy et al, 1999). Barriers to condom use include negative attitudes and beliefs about condoms, serious gaps in HIV knowledge, low perceptions about personal HIV risk, low perceived self-efficacy in condom use, perceived lack of benefit from condom use, lack

of intentions and low self-esteem, embarrassment or timidity to obtain condoms from sources that require person-to-person contact, inability to use condoms, lack of access to condoms, trusting one's partner, peer pressure to have sex, discouraging views of peers and sexual partners, partners' objection and accusations of unfaithfulness and threats, fear or experiences of violence and women's lack of negotiation skills.

Harrison et al (2001) emphasised low perceived personal HIV risk, careful selection of girlfriends and assessment of risk as based on trust and relationship duration influenced condom use among young men aged 16-19 years. Sunmola's (2005) cross-sectional survey of Nigerian university students highlighted the strongest barriers to condom use at last sex for both men and women as the perception that condoms caused health problems, that condoms hindered their sexual satisfaction and reduced sexual interest.

2.4.8.1 Gender power as an inhibiting factor to condom use

Two studies have found gender power to inhibit consistent condom use among young women. Pettifor et al (2004b) reported that being HIV positive, having low relationship control, having been forced by a most recent partner to have sex, and having frequent sex were strongly associated with inconsistent condom use among young women. These findings are partly consistent with Pulerwitz et al (2001) whose study found that low levels of relationship power inhibit American women's ability to successfully negotiate condom use with a partner. 8% of women reported consistent condom use while regression models demonstrated that women with a high score on the relationship power scale were very much more likely to report consistent condom use than women with low scores. Male threat, or use, of force against a woman was identified as a predictor of inconsistent condom use in Hoffman et al (2006). Forced sex also emerged as impeding condom use among Ugandan women who had been coerced. They were less

likely to report condom use than those who had not been coerced (13% vs. 33%) and less likely to report consistent condom use (Koenig et al, 2004).

2.4.9 Factors that facilitate condom use

Enabling factors for consistent condom use have been observed in a Carletonville study among women who participated in sports club and burial societies (Campbell et al, 2002). Maharaj and Cleland's (2005) study conducted among married/cohabiting couples in KwaZulu Natal found that a higher level of education and positive attitudes of both parties were directly associated with the couple's condom use. In a U S survey, Civic et al (2002) observed that having a partner who thinks condom use is very important decreased the likelihood of delayed condom use. More facilitating factors for consistent condom use included peer norms that supported condoms use, if youth were not problem drinkers, and if they were men (Friedman et al, 2001).

2.5 Conclusion

A high proportion of young people are reportedly sexually active from an early age. Most men and women started having sexual intercourse at the age of 17 years although some did so before the age of 14 or 15 years. Evidence shows that having had early sex was strongly associated with HIV risk behaviour such as having multiple sexual partners. Associations were highlighted between young women having experienced forced sex, early sexual debut, intimate partner violence, pregnancy and STDs.

Increased levels of HIV and condom knowledge were marked among young people compared to previous years. Condom practices indicate a serious gap in effective condom use among young people in South Africa. Having ever used a condom had

reached two-thirds among youth, however, only half reported effective condom use. Half had reported condom use at last sex while a lesser proportion reported consistent condom use. Gender differences in condom use were observed in all aspects of condom use. Young men were more likely to have ever used condoms, to have used them at last sex, and to have used them consistently. Condoms also were more commonly used with casual partners than with regular main partners. It is important to note that these findings emerged in the presence of widespread and comprehensive prevention programmes such as loveLife, Soul City and Khomanani.

Studies indicated quite a number of factors inhibiting condom use, including having negative attitudes towards HIV and condom use, lower levels of knowledge about HIV prevention and lower self-efficacy, trust, and perceptions that condoms interfere with sexual pleasure. Low levels of power in the relationship and forced sex by a sexual partner were found to be serious inhibiting factors to young women using condoms consistently. Factors facilitating condom use that have been reported are women's participation on social clubs, positive attitudes towards HIV and condoms, having a partner who thinks that condoms are very important and being male.

Table 2.1: South African Literature on Condom use				
Author/s	**Design**	**Study Objective**	**Data Source & Sample**	**Findings**
James et al 2004	Cross-sectional study	To assess students' knowledge and general awareness and sources of information about HIV/AIDS, their perceptions and attitudes to condom use and sexual behaviour	N=1113 grade 11 students up to 22 years	**Knowledge and attitudes:** 76% believed STIs can be prevented by having one faithful partner; 86% believed STIs can be prevented by using a condom Men more likely than women to agree that condoms take the fun out of sex (30vs. 18%, $p<0.05$) More men than women disagreed that condoms are embarrassing to use (61vs. 54%, $p<0.05$) 58% of both men and women disagreed that using a condom shows distrusting one's partner **Condom use behaviour:** 33.3% had not used condoms at all Of ever used condoms: 41.8% used them consistently & 42.6% used them sometimes More men than females said it was their idea to use a condom (74 vs. 57%, $p<0.05$) Of non-condom users, 49% men said it was their personal preference to do so; 18% women said their partners refused to use condoms
Harrison et al 2001	Peer group discussion	To understand sexual risk perception of youth, how this influences negotiation and decision-making in relationships and how these factors in turn influence access to prevention.	N=4 peer group discussions with youth aged 13-19 years	Obtaining was not a problem for male participants, most obtained them from older male friends or the clinic/local shops, For females safe sex was associated mainly with condoms, obtaining condoms was difficult for them, **Knowledge about safer sex:** -both mentioned not having sex, -poorly informed about other safer sex methods, **Perceived HIV risk:** Boys assessed their risk as low, due to use of condoms, careful selection of girlfriends, trust and duration of relationships, Girls considered themselves to be low risk, due to sex being a domain of older people, those having sex at 18 years, Girls reported non-condom use
Harrison et al 2005	Cross-sectional	To examine early sexual debut (<age	N= 314 men aged 15-24 years in	13.1% men reported first sex before the age of 15 years (range 9-14 years),

	household survey	15) among young men including risk behaviours at first sex and age at first sex as a predictor of later sexual risk	2003	Condom use at first with men whose first sex older than 15 years compared to younger than 15 = 19% vs. 9%, p<0.05. 35.2% had more than 3 sexual partners in past 3 years, 42.3% had 1 partner, 23.5% had two partners, 11.2% had more than 5 partners in past years Earlier sexual debut was the only significant predictor of more than 3 partners in past year (OR = 10.26, p<0.01)
Campbell et al 2002	Biomedical and social survey	To investigate the links between sexual health and social capital in a mining community	N= 1,211 residents in Carletonville	79% women & 82% men belonged to at least one association, 18% men & 28% women always used a condom with casual partner, **Women aged 15-25 years significantly less likely to have HIV if:** -they belong to a sports club (OR: 0.46, p=0.0006), -they belong to a youth club (OR: 0.60, p=0.012), % of women who always used condoms with casual partner was higher than men who did so (28% vs. 18%, p=0.032), **Failure to use condoms consistently is less prevalent among women who:** -belong to a sports club (OR 0.32, p=0.046), -belong to a burial society (OR: 0.48, p=0.036, >20 years)
Magnani et al 2005	Multi-purpose panel survey	To assess the impact of exposure to life skills education on knowledge and behaviours associated with the spread of HIV/AIDS	N= 2,222 youth aged 14-24 years in 1999-2001 in KwaZulu Natal.	**Statistically significant increases in knowledge were observed for oral contraceptives, condoms and injectables:** Women were more knowledgeable about pills and injectables than men, Males are more knowledgeable about condoms than women **Condom practices at follow up:** More women used condoms at first sex than men (50% vs. 48%, pp<0.01), More men used condoms consistently than women (49.1% vs. 24.3%, p<0.05), More men used condoms at last sex than women (64.0% vs. 42.8%, p<0.05)
Williams et al 2003	Cross-sectional surveys	To investigate changes in sexual behaviour and the prevalence of STI before and 2 years after the start of the HIV prevention programme	Miners, sex-workers, youth men & women in the community were interviewed in 1998 and 2000.	**HIV prevalence:** 28.6% of miners, 68.8% of sex-workers, 37.1% of women and 20.2% of men in the community were HIV positive Among 15-24 year olds, 10.2% men and 45.5% women had HIV **Knowledge and attitudes of miners - 1998 vs. 2000:** Having one faithful partner protects from HIV - 83.5% vs. 94.0%, p<0.0001; Using a condom 83.3% vs. 90.5%, p<0.0001 **Behaviour of miners:** Ever used a condom - 39.5% vs. 51.3%, p<0.0001 Always use condom with casual partner – 13.2% vs. 27.2%, p<0.0001

				Knowledge and attitudes of sex workers - 1998 vs. 2000: Having one faithful partner protects from HIV - 84.3% vs. 83.9%; Using a condom 88.4% vs. 92.5%, p=0.32; **Behaviour of sex workers:** Ever used a condom – 69.7% vs. 77.2%, p<0.34 Always use condom with casual partner – 54.3% vs. 41.9%, p=0.07 **Knowledge and attitudes of youth - 1998 vs. 2000:** Having one faithful partner protects from HIV - 79% vs. 90.1%; p<0.0001 for men compared to 83.6% vs. 92.8%; p<0.0001 for women Using a condom – 92.8% vs. 94.1%; p<0.84 for men compared to 89.5% vs. 93.8%; p=0.02 for women **Behaviour of youth:** Ever used a condom – 62.5% vs.63.2%; p<0.74 for men compared to 50.3% vs. 59.3%; p<0.01 for women Always use condom with casual partner – 18.9% vs. 44.4%; p<0.001 for men compared to 22.2% vs. 29.2%; p<0.15 for women **Reasons for youth never using condoms:** Partner objection - 11.1% men vs. 43.9% women Don't like condoms – 27% men vs. 12.2% women Made a decision not to – 17.5% men vs. 15.9% women
Rutenberg et al 2001	Modified multi-stage cluster sample	To measure the impact of a life skills programme in addressing STDs/HIV transmission and personal risks, attitudes to AIDS, risk-tasking and health seeking behaviours of youth	3,096 men and women aged 14-22 years in KwaZulu Natal	99% had heard about AIDS, 94% knew that HIV is sexually transmitted, **95% believed one can do something to protect from HIV namely:** 90% said through always using condoms, 33.3% through abstaining from sex, 10% by having only one partner **Sexual behaviour:** 52% men vs. 47% women had ever had sex, 29% men vs. 14% women had sex by age 16 years. **Experiences at first sex**: 97% men vs. 66% women were willing, 2% men vs. 20% women were persuaded, 2% men vs. 4% women were tricked, 0% men vs. 105 women were forced/raped **Attitudes to condoms for all who agreed:** Using them is not a sign of trust of one's partner (26%), Stop condom use if relationship is serious (19%),

				It is embarrassing to but/ask for condoms (19%), Using condoms reduces pleasure (23%)
MacIntyre et al 2004	Multi-stage cluster sample	To identify factors that influence the calculation of HIV risk perception among adolescents	N= 2,716 youth aged 14-22 years	**Believed not at risk for HIV because:** 17% abstained from sex 26% had one sexual partner 30% always used condoms **Believed at risk for HIV because:** 30% had unprotected sex 18% had multiple partners
Manzini 2001	Multi-stage cluster sample	To provide insight into sexual initiation and childbearing among teenage girls	N= 796 sexually active women aged 14-22 years in 1999	Age at first sex from 10-21 years, mean = 16 years Age of partners ranged from 8-42 years, mean age difference with partner was 4 years. First sex was done willingly (66%), through persuasion (20%), trickery (4%), force or rape (10%). 61.8% used a condom
MacPhail & Campbell 2001	Focus group discussions obtained through a convenience snowball sample	To examine the representations of adolescent sexuality and ways in which these representations might be deconstructed and reconstructed in ways that promote safer sex behaviour	N= 44 people, half female and half male, aged 13-25 years in 1999.	**Six factors hindering condom use were:** -lack of perceived risk for HIV infection – e.g., they have knowledge to instigate condom use, but the majority has chosen to externalise the threat of HIV, making it other people's responsibility -peer norms – e.g., in regular relationships, trust mitigates against using condoms. Young women argued that for a steady partner to insist on condoms use is a sign of lack of respect and trust that could destroy one's reputation within peer group. -condom availability -adult attitudes to condoms and sex -gendered power relations -economic context of adolescent sexuality
Hoffman et al 2006	Prospective study	To determine gender dynamics in intimate relationships of rural youth that contribute to risk for HIV infection	N=50 youth, 25 males & 25 females in high school	**Sexual history:** Mean no. of lifetime partners – 8.8 men & 2.5 women ($p< 0.01$); Mean no. of current partners – 2.5 men & 1.6 women ($p< 0.01$); Any unprotected sex – 56% women & 59% men Woman ever initiated condom use – 88% women & 67% men **Predictor of inconsistent condom use:** - at least one occasion of male threat or use of force against a woman
Myer et al 2001	Prospective study	To determine the fate of free male condoms	N= 384 condom procurers at public health facilities in	67.7% of condoms distributed were successfully followed up; 43.7% of these were used during sex (95% CI: 42.2-45.1); 21.7% were given away (95% CI: 20.7-22.9);

		distributed to the public	1998-9	**Sexual behaviour of follow-up participants vs. those lost to follow-up:** Procured condoms actively (69 vs. 56%, p <0.01); Ever had sexual intercourse (99 vs. 97%, p=0.10); Used a condom at last sex event (56 vs. 42%, p <0.01); More than 1 sex partner in last month (25 vs. 15%, p=0.02);
Myer et al 2002a	Prospective study	To determine sexual behaviours and barriers to condoms use	N= 384 condom procurers at public health facilities in 1998-9	96% had sex during 5-week follow-up period Median of 9 sexual episodes per person 41% men vs. 10% women had sex with more than 1 partner in the 5-week period 72% had sex with regular partners Irregular partners more likely to be perceived at risk of HIV infection and STDs than were regular partners (68 vs. 48%, p<0.01) **Factors significantly associated with increased condom use**: Male sex (OR: 0.07, 95% CI: 0.01-0.37) Fewer sex partners (OR: 0.18, 95% CI: 0.07-0.45) Sex with an irregular partner (OR: 0.26, 95% CI: 0.10-0.66) Sex with someone perceived at risk of HIV/STDs (OR: 2.42, 95% CI: 1.04-5.65) Lack of use of other contraceptives (OR: 0.36, 95% CI: 0.18-0.70)
Myer et al2002b	Cross-sectional survey	To investigate the prevalence and practices of informal condom distribution	N= 269 people who participated in any kind of informal distribution of condoms in a months before study	18% had only given condoms, 14% had only received condoms, 16% had both given and received condoms **Predictors of informal distribution included:** -having higher level of education, being male, having multiple sexual partners in past months, having used a condom at last sex, to be younger Median **number of times receiving** condoms informally in past months = 2, range = 1-50 times Median **number of condoms received** the last time = 4.5, range = 1-50 condoms 83% obtained condoms from a public health facility Women more likely to receive condoms from a family member (40% vs. 6%, p< 0.01), Men more likely to receive condoms from another man (81% vs. 44%, p< 0.01) 42% men vs. 26% women gave out condoms in month prior to interview. Median **number of times giving** condoms in previous year = 2, range = 1-60, Median **number of condoms given** the last time = 5, range = 1-70.
Hartung et al 2002	Cross-sectional study	To assess AIDS awareness and sexual behaviour in a rural community	N= 100 patients attending health facilities in Kwa-Zulu Natal in 1999	40% had ever used a condom Significantly more men than women…: Used condoms (55 vs. 30%, p = 0.033); Had more than one sexual partner in last year (47 vs. 11%, p< 0.0001);

		with high HIV prevalence	Mean age 22 years; range = 13-45 years 64% males & 36% female	Significantly more condom users had more than one partner in last year (47 vs. 22%, p = 0.026) **Knowledge of HIV/AIDS:** Sexual mode of transmission = 81% men vs. 80% women Condom protective = 83% men vs. 70% women
Reddy et al 1999	Cross-sectional study	To describe gender, age and education differences, STD knowledge and attitudes to condoms and behaviour	N= 2,978 patients at STD clinics in Cape Town in 1996-7. Age below 20 years = 20.7%; 21-25 years = 39%; 26-35 years = 31%; 36 + older = 9.3% 75% males & 25% females	46% had ever used a condom in their lives 35% of both men and women reported ever used a condom in last 6 months Of condom-users, 25% used it always & 76% used it sometimes 58% men vs. 30% women ever had an STD **KAB re STDs & condom use:** 89% men vs. 92% women said STDs are caused by sex with infected person without a condom; 88% men vs. 89% women said STDs are caused by sex with many people without a condom **Significantly (p< 0.001 more men than women believed**… -using condom means distrust of partner (45 vs. 35%); -using condom lessens sexual pleasure (44 vs. 20%); -using condom means you have AIDS (14 vs. 8%); -using condom is bad because its not flesh to flesh (45 vs. 22%)
Reddy et al 2000	Cross-sectional study	To analyse the determinants of condom use behaviour among patients attending STD clinics	N=1,473 patients at with STD symptoms in 1996-7 in Cape Town Age below 20 years = 22%; 72% males & 28% females	37% had used a condom in the past 6 months 81% used with a steady partner, 35% with outside partners
Taylor et al 2002	Cross-sectional survey	To investigate self-reported HIV risk behaviours of youth	N= 901 learners from grades 8-10 in rural KwaZulu Natal	95.5% knew that HIV/AIDS could be sexually transmitted 64.8% viewed the threat of acquiring HIV/AIDS and other STDs as discouraging multiple sexual partners 18% males and 28.5% females had been coerced to have sex (p<0.0005)
Taylor et al 2003	Cross-sectional survey	To investigate self-reported HIV risk behaviours of youth from a rural area of KZN	N= 901 high school learners from grades 8-10	58.7% had a boyfriend/girlfriend 30% were sexually active 53.1% used a condom in past 30 days Modal age at first sex = 16 years, ranging from 10 – 25 years 31.8% always used a condom, 13.6% mostly, 15.9% sometimes and 22.7% rarely or did not use condoms

Maharaj & Cleland 2005	Household survey	To assess the levels of condom use by married or cohabiting couples and to identify the factors that promote or impede use	N=238 marital or cohabiting couples in KwaZulu Natal	Mean age - 33 for women (range: 15-49 years), 38 for men (range: 20-55 years), 15% men vs. 18% women used condoms consistently or occasionally with spouse or partner, 5% men vs. 12% women reported consistent use **Consistency of reporting within couples was high:** In 77% of couples, both partners said they were not using condoms, In 10% of couples, both said they were using condoms always/occasionally **Always or occasionally condom use by setting:** In rural & less educated setting, 10.9% females vs. 7.8% males, In intermediate setting, 17.6% women vs. 15.7% men, **Knowledge, beliefs and attitudes:** 84.8% women vs. 88.6% men believed AIDS is fatal, 88.2% women vs. 94.9% men believe that condoms are effective, 47.4% women vs. 29.4% men view condoms favourably **Associations with couples' consistent/occasional condom use:** -if cohabiting (OR: 2.35, 95% CI: 1.20-4.61), -if from urban area (OR: 3.17, 95% CI: 1.61-6.26), -if wife had higher level of education (OR: 4.42, 95% CI: 1.96-9.94), -if husband has higher level of education (OR: 3.81, 95% CI: 1.61-9.00), -if wife perceives risk of HIV from partner (OR: 4.03, 95% CI: 1.53-10.56), -if wife believes condoms are effective (OR: 5.53, 95% CI: 1.30-23.62), -if husbands attitude to condoms was positive (OR: 4.29, 95% CI: 1.81-10.17)
Pettifor et al 2004a	Cross-sectional stratified household survey	One of the objectives was …To assess young people's sexual attitudes	N= 11,904 young men & women aged 15-24 in 2003	94% of all youth believed there are ways to avoid getting HIV infection, namely… 77% mentioned condom use during sex, 41% said by not having sex, 10% said by being faithful to one partner, and 7% said by not having many partners. No significant differences either by gender or by age group
Pettifor et al 2004b	Cross-sectional stratified household survey	To investigate the effect of sexual power on the woman's likelihood to use condoms consistently and risk for HIV infection	N= 4,066 sexually active females aged 15-24 years in 2003	HIV prevalence was 21% 71% used condoms inconsistently 12.8% had more than one sexual partner in the past year 275 had low relationship control 4% were physically forced to have sex by their more recent partner **When comparing women with HIV to those without, there were no significant associations between:** Low relationship control and HIV status, Having been forced to have sex and HIV status

				HIV positive women were more likely: -to have had more than one sexual partner, to be 20-24 years old, to have not completed high school, to be of black African race, to be single, and to be inconsistent condom users (78.7% vs. 69.6%, p = 0.01)) **Bivariate analyses: Inconsistent condom users were more likely to report:** -low relationship control (33.4% vs. 13.5%, p <0.001), having been forced to have sex by most recent partner (5% vs. 1%, p <0.001), low condom self-efficacy, being in a relationship with older partners,-having frequent sex with partner, -not to have discussed condoms with partner, -being married, having experienced early sexual debut, not to have completed high school, to perceive themselves as being at high risk for HIV infection, to be in older age group (20-24 years) **Multivariate analyses: Inconsistent condom users were more likely to report:** -to be HIV positive (OR: 1.58, 95% CI: 1.10-2.27); -to have low relationship control (OR: 2.10, 95% CI: 1.17-3.78) -to have been forced to have sex by more recent partner in 12 past months (OR: 5.77, 95% CI: 1.86-17.91), -to have frequent sex with partner in past month (OR: 2.85, 95% CI: 1.69-4.79)
Pettifor et al 2005	Cross-sectional stratified household survey	To determine the HIV prevalence of HIV infection, HIV risk factors, and to identify factors associated with HIV infection among youth	N= 11,904 young men & women aged 15-24 in 2003	Women more likely to have HIV compared to men (15.5% vs. 4.8%, p<0.0001), Mean number of lifetime partners (4.9 for men vs. 2.3 for women, p<0.0001), Mean number of sexual partner in past 12 months (1.8 for men vs. 1.1 for women, p<0.0001), 56.8% men vs. 48% women used condoms at last sex (p = 0.07), 39.2% men vs. 28.6% women always used a condom with most recent partner (p =0.003), Age of coital debut < 14 years - 17.5% men vs. 7.8% women, p< 0.0001, Unusual genital discharge in past 12 months – 9.2% men vs. 19.2% women, p<0.001, Ever been physically forced to have sex – 2.0% men vs. 9.6% women, p<0.001.
Simbayi, Chauveau & Shisana 2004	Stratified household survey	To investigate youth's behavioural responses to HIV/AIDS	N= 2,430 youths aged 15-24 years	Median age of sexual debut = 16.5 years for both men and women 66.6% had ever used condoms, 33.3% had not Significantly more men (72.5%) than women (61.6%) ever used condoms (p=0.010) Condom use at last sex – 58.8% men & 47.6% women (p=0.019)
Shisana et al 2005	Stratified household survey	To identify risky behaviours that predispose people	N= 5,708 men and women aged 15-24 years, from a total	**Youth aged 15-24 years:** 6.1% said no or don't know that it is possible to transmit HIV through unprotected vaginal sex

		to HIV infection	national sample of 10,584 people aged 2 years & older.	95.6% said no or don't know that it is not possible to transmit HIV by touching someone who has HIV/AIDS 11% disagreed or unsure HIV infection is prevented using condoms 32.8% disagreed or unsure HIV infection can be reduced by having fewer sexual partners
Camlin & Chimbwete 2003	Two-stage sample	To examine the hypothesis that personally knowing someone with HIV/AIDS or who died of AIDS may positively influence HIV-preventive behaviour such as condom use	N= 8,014 sexually active women interviewed in the 1998 South African Demographic Health Survey (SADHS)	**Condom use at last sex was higher among those who knew:** -someone with HIV/AIDS compared to those who did not (OR: 1.4, 95% CI: 1.16-1.73); Condom use prevents HIV (OR: 2.9, 95% CI: 2.16-3.80) **Condom use at last sex was higher among those whose type of partner at last sex was:** Casual partner (OR: 3.7, 95% CI: 2.83-4.91) Other regular partner (OR: 2.4, 95% CI: 2.03-2.90) **Condom use at last sex was lesser among those:** Living in rural areas (OR: 0.6, 95% CI: 0.50-0.72)
South Africa SADHS 1998	Two-stage sample	To provide current information on knowledge & attitudes about HIV/AIDS & sexual behaviour	Women of reproductive age: 15-49 years	**Knowledge about HIV/AIDS among 15-24 age group:** Heard of AIDS - 96% of women; Knew that using condoms protect from HIV infection – 83% women; Knew that having only one sexual partner protects from HIV – 81% women **Sexual behaviour among 15-24 age group:** Mean age at first sex – 17.8 for women; Having premarital sex in past year – 53% women; Condom use at last sex – 39% women vs. 69% men; Condom use at last sex higher risk sex - 20% women;
Hartell 2005	Systematic review	To analytically review literature on the sexual behaviour of adolescents	Papers reviewed about sexual behaviour of youth aged 15-24 years	**No practice of safer sex due to:** -engaging in early and unprotected sex, coercion, pressure to have a child, lack of access to services, negative perceptions about condoms, low perceived risk for HIV, low perceived self-efficacy in condoms use **Condom use:** More than 50% had never used condoms, 10% used condoms regularly
Eaton, Flisher & Aaro 2003	Systematic review	To review research on factors promoting and perpetuating unsafe sexual behaviour in	Papers reviewed between 1990-2000 about sexual behaviour of youth aged 14-35 years	At least 50% were sexually active by 16 years, 80% by age 20 years **Knowledge and attitudes about HIV/AIDS:** 70-90% indicated that condoms can protect against AIDS 20-40% could spontaneously cite condoms as a mode of protection 7-10% did not know what condoms are

		youth		**Disadvantages of condoms:** 45% of men believed that condoms are a waste of sperms; Some cited condoms as leading to loss of pleasure; Some claimed that they liked sex to be skin-on-skin; Too many condoms required for the many rounds of sex; Fear of condom slipping or breaking; Awkwardness of purchasing condoms **Negotiating condom use:** Both men and women perceive condoms to be associated with promiscuity, STDs & AIDS, mistrusting one's partner or a sign one had an STD The act of leaving condoms behind symbolizes a new level of commitment within relationship Assumed that loving/long-term relationships involve less risk, even when the partner's HIV status is unknown Condoms are reserved for casual encounters/secret lovers other than one's steady partner 1-5% of females & 10-25% of males reported having more than four partners per year Between 50-60% of sexually active youth reported never using condoms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CHAPTER 3

METHODOLOGY

3.1 Introduction

The methodology chapter presented here describes the steps taken to achieve the study objectives. These steps include the type of study design chosen, where the study took place, the characteristics of the respondents, how they were selected and the sample size. The chapter discusses the research instrument, the questions used in the questionnaire, and how the questions were formulated and validated, and lastly the ethical considerations.

3.2 Null hypotheses of the Study

The null hypotheses of this study are based on the research question and the study aim and objectives (excluding the last objective) as outlined in Chapter 1. The null hypotheses are as follows:

- There are no differences in attitudes towards condom use of sexually active youth either by gender or by age group;
- There are no differences in the reported use, correct use and consistency of use of sexually active youth either by gender or by age group;
- There are no differences in the reported barriers to condom use; of sexually active youth either by gender or by age group.

3.3 Study Design

The study is an analysis of baseline data of a randomised controlled trial. The study was designed as a descriptive and analytic study comparing the effect of gender and age group on condom use patterns among rural youth. The study utilised baseline data on condom use collected as part of a set of secondary outcomes measured in the randomised controlled trial, which sought to determine the effectiveness of a behavioural intervention, *Stepping Stones*, in reducing the transmission of HIV among poor rural women and men. The randomised controlled trial is known as the Stepping Stones Study. The principal investigator for the Stepping Stones Study is Professor Rachel Jewkes, the Director of the Gender and Health Unit, Medical Research Council, South Africa. The study design and methods of the Stepping Stones Study are discussed elsewhere (Jewkes et al, 2006).

3.4 Study Setting

This study has been based on a population of youth living in the former Transkei region of the Eastern Cape Province of South Africa. The Eastern Cape has the second largest provincial population size, with an estimated at 6.5 million people in 2003, i.e., 14% of South Africans (Statistics South Africa, 2004). In 2001, over a third (38.1%) of housing was traditional (rural) and one-fifth (11%) informal. 31% of households had no toilets, 28% used electricity for cooking, 18% had piped water inside, and 62% had access to piped water. The Eastern Cape had the highest level (55%) of unemployment in the country (Statistics South Africa, 2004). The 1998 prevalence of poverty was estimated at 67%, and there has not been much evidence of a significant decrease in this (Day & Gray, 2005).

The area constitutes mainly rural scattered homesteads, two main administrative towns, Mthatha and Gcuwa, running on a national road (the N2), urban townships and informal settlements, and several peri-urban towns, such as Ngcobo and Port St John's. The villages were selected within the Ngcobo district of Chris Hani Municipality, the Mnquma and Mbhashe districts of Amatole Municipality, the Mzimvubu district of Alfred Nzo Municipality, and all the districts within the OR Tambo Municipality (see Figure 3.1). Most villages were rural and lack properly resourced health, education and transport services. Most people were socio-economically disadvantaged and many lived off social welfare grants (Jewkes et al, 2006).

3.5 Study Population

The study population comprises all women and men who enrolled in the Stepping Stones Study between March 2003 and March 2004. They were aged years and lived in 70 villages. Most were recruited through the local schools.

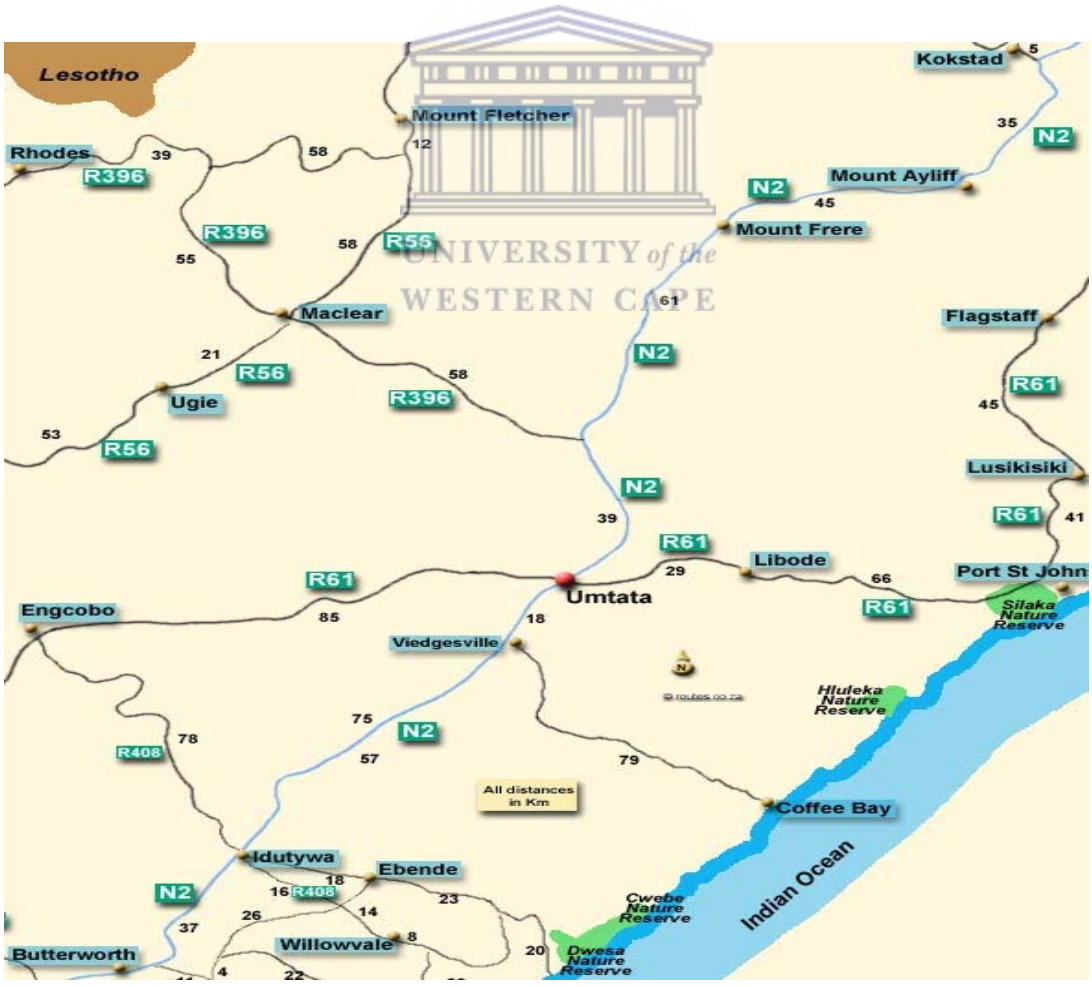
3.6 Sampling

Cluster[1] sampling was utilised for the Stepping Stones Study. The sampling frame was the villages and towns in the study area. Villages were selected upon close proximity (+/-1.5 hours) to the main town of the study area, Mthatha, where the project office is located. These villages had to be 10 or more kilometres apart to avoid contamination between study arms and had to have a high school. They were not to share a high school. Villages were selected if they did not share a Headman/Ward Committee Member even if they shared a Chief/Ward Councillor. Seventy villages

[1] Clusters are villages that were selected to participate in the Stepping Stones Study and then allocated either to the intervention or the control arm.

were identified and then grouped into seven strata according to common features. Six were residential areas of towns, namely Mthatha, Gcuwa, Dutywa, Port St. Johns, Qumbu and Tsolo (see Figure 3.1). These formed one stratum, and the other villages were grouped broadly according to geographical area, either in relation to closeness the main roads within the region and the vicinity. Villages were each given a unique number from 1 to 70. They were listed by chronological order of the allocated numbers and then randomly assigned to either an intervention arm or a control arm using computer-generated randomisation with equal numbers of villages allocated to each arm in each stratum.

Figure 3.1 Map of the study site



Source: http://www.routes.co.za/ec/umtata/location/html#Routes 13h March 2006.

Twenty women and 20 men were recruited from junior and senior secondary schools in each village. The inclusion criteria for the participants were that they were aged 16-23 years; they were from the village where they were attending school (not migrant scholars), and they demonstrated an interest and understanding about the study and the informed consent process (see Appendix 2). All enrolled on voluntary basis. They responded to a call for participation made from announcements at school assembly, at a community meeting or less often from posters and radio. Each participant was given an incentive of R20 for their role in one-day fieldwork.

3.6.1 Sample Size

The sample size was calculated for the Stepping Stones Study based on the primary outcome: HIV sero-incidence. Since the data for the study had already been collected, the final sample became all participants who reported being sexually active, i.e., 1296 women and 1288 men, in the baseline interviews. The confidence limits indicate the degree of precision of an estimated proportion (see Table 3.1). Table 3.1 shows that the proportion of women who used condoms the last time they had sexual intercourse was estimated to a precision of +/- 2.7%.

Table 3.1 Confidence intervals for key variables found in the Stepping Stones Study datasets for women and for men

Variable	%	95% CI
Condom use at last sex for women	42.81	40.11 – 45.51
Ever used a condom for women	62.46	58.28 – 66.64
Condom use at last sex for men	46.35	43.62 – 49.07
Ever used a condom for men	65.37	61.56 – 69.18

3.7 The Research instrument

Face-to-face interviews were conducted with respondents using a structured questionnaire.

3.7.1 Contents of the Study Questionnaire

The questionnaire was divided into 9 sections: background and socio-economic status; knowledge and attitudes about HIV/AIDS, ideas about condoms, reactions to being HIV positive, knowledge of broader sexual and reproductive and gender relations attitudes; sexual practices including male circumcision; gender based violence, current relationship dynamics; relationship communication; alcohol and drug use; mental health and community cohesion.

In this analysis (in Section 1) we used measures of socio-economic status with 3 questions. The questions had 4 answer categories. 3 dichotomous questions on exposure to media were asked. Section 2 had 10 statements on condom use. Of these, 6 were attitude statements, 2 were knowledge statements and 2 were self-efficacy statements. Section 3 asked about sexual health: first sexual intercourse, having ever used a condom and first condom use. Section 4 was about sexual behaviour. Measures of last sexual intercourse, condom use at last sex, problems with using condoms, and condom use in the past year were used. Current partners were measured with 3 questions asking about the main/regular partner, the 'khwapheni'/hidden casual partner and the once-off partner. Condom use with these partners was measured. Non-condom use was measured asking whether condom use was suggested to partners, partners' response. When condom use was not suggested, reasons for not suggesting

were measured. Replicas of the female and male questionnaires used in this analysis are shown in Appendices 3 and 4.

3.7.2 Questionnaire Development

Prior to the establishment of the RCT in Mthatha, a pilot evaluation of the Stepping Stones HIV behavioural intervention was conducted in Winterveldt, Tshwane, Gauteng province between January - June 2001. It is from this evaluation that some of the items on condom use and number of partners were developed and adapted into the questionnaire ultimately utilised in the Stepping Stones Study conducted in the Eastern Cape (Jewkes et al, 2001a). Other questions had been previously used in other surveys in South Africa or were components of standard instruments (Department of Health et al, 2002 & Jewkes et al, 2006).

3.7.3 Pre-testing the questionnaire

In November 2002 interviewers pre-tested the questionnaire. Pre-testing entailed a process of identifying villages and high schools that were not part of the Stepping Stones Study. The schools in Tsolo, Ngcobo, Gcuwa and Mthatha were visited. The study was explained to the school principals and teachers. Once access to the school was obtained, participants were recruited, enrolled and then interviewed. Reliability and validity of the questionnaire was ensured through rigorous development of the questions, pre-testing the questionnaire in the local setting of the main study, and practicing quality control during the process. One of the changes made from the pre-test relate to the question asking the participant's age: 'How old are you now?' Since some participants were confused about whether to include the upcoming birthday or not, the question was rephrased to: "What is your date of birth?'

3.7.4 Piloting the questionnaire

The draft questionnaire was refined through extended discussion and revision of the items by the members of the research team. The questionnaire was translated into Xhosa and then discussed with interviewers to ensure correct translation and meaning, and whether the questions were applicable to the local area. Terminology was refined and the Xhosa version was again compared to the English version, to check that meaning was retained in the translation (Jewkes et al, 2006).

The study fieldwork, viz. the mobilisation of communities and participants, the interviews, HIV testing and interventions, was piloted in selected places within the study site. The pilot study was undertaken with 240 young women and men in Xhosa between January and March 2003. This mini-thesis will discuss the pilot of the questionnaire as it is most relevant to the objectives of the study. Six sites were selected, in a rural school in Tsolo; in a rural and a township school in Gcuwa; in 2 township schools in Mthatha and in a semi-rural school in Ngcobo.

3.7.5 Fieldworker training

Interviews were conducted by trained interviewers of a similar age (22-30 years) and gender as participants (Jewkes et al, 2006). Interviewers were trained from October 2002 to February 2003. During this period, they attended a three week workshop on HIV, sexual and reproductive health and communication skills, and interviewing skills. Other opportunities for practicing interviewing skills were presented in the November 2002 pre-test and the January-March 2003 pilot study. In all occasions interviewers were given feedback on their progress, and appraised based on their individual questionnaire interviews completed. The interviewers and their supervisors

also participated in the development of questions for the final questionnaire. This ensured an understanding of the questions, the rationale for asking them and their shared meaning.

3.7.6 Community access and mobilisation

The author in this study was employed in the study as a coordinator to mobilise the community and participants, and to manage the data collection process. All possible villages were first identified using a map and driving through the study area. At each village, the Chief/Headman or Councillor's home was located, if found at home, would be informed about the purpose and process of the study. All the key community figures welcomed the study into their villages, and with their cooperation, the study was presented to their village in a community meeting. In each community meeting the attendants were able to ask questions and some would enrol there and then. Access to many of the participants was obtained after these community meetings.

Afterwards, the research team visited the schools and the local clinics. At the school, they met with the school principal/deputy or lifeskills educator, all of whom welcomed the team into their schools. Some were concerned about the disturbance of their normal routine. This was solved by explaining that interviews were short, and that the team would try to use the breaks in between classes, and after school. Participants were then recruited through a presentation in the school assembly, following which a question and answer session was conducted. Potential participants were given approximately two days to a week to decide about participation. Two days of data collection were allocated to each village. Information leaflets written in

Xhosa, the local language, were disseminated in all meetings with the community and participants.

The Stepping Stones Study established a Community Advisory Board with representatives from the Department of Health, the Department of Education, the Department of Social Development, Mzimvubu Municipality, local traditional leaders, the National Association of People Living with HIV/AIDS, and the Dutywa HIV information centre. The author was the organiser of the quarterly meetings of the advisory board (Jewkes et al, 2006).

3.7.7 Validity and Reliability

3.7.7.1 Validity

All the items used in the questionnaire went through some form of validation. Age was asked in the form of date of birth instead of interviewees mentioning how old they were in order to reduce potential bias as some people tend to count their age as turning 1 year at birth. Using dates of birth also created consistency in the way of reporting. The question on 'ever condom use' may have led to respondents over-reporting or misrepresenting their actual sexual practices as there is potential for guessing what the interviewer wants to hear. However, this was minimised by assigning respondents to same sex interviewers who were of similar age groups and not much older than 30 years, so that they may feel comfortable disclosing sensitive experiences or practices. Over-reporting or misrepresentation of actual condom practice was minimised by asking a follow-up question about consistency of condom use. Here respondents were given an opportunity to quantify the generalised practice of condom use, and hopefully they would have been honest enough to provide truthful

information. Knowledge, attitude and self-efficacy questions only relied on the respondents answering truthfully.

3.7.7.2 Reliability

We did not directly test reliability of questions formally.

3.7.7.3 Generalisability of findings

The respondents were not randomly selected into the study, and therefore findings may not be generalisable to the population of youth in the 15-24 age group living in the study area. However, the social significance of the findings may give weight in a way that demands consideration of the results.

3.8 Ethics

Ethical approval for the Stepping Stones Randomised Controlled Trial was obtained from the University of Pretoria ethics committee (Ref no. 2000/5, renewed annually). Since this study is based on analysis of primary Stepping Stones Study data, it is covered by the ethics approval obtained from the University of Pretoria ethics committee.

Participants joined this study voluntarily. They were given a leaflet about the study to discuss it at home. They had 3-7 days to consider their participation and could withdraw at any stage. It was emphasised that participation was an individual choice. Lists were left with either the schools' lifeskills teacher or fellow pupils who showed interest so that potential participants could freely enrol without pressure.

A group informed consent process was undertaken to ensure that all potential participants understood the study. A question and answer session was held between the fieldwork coordinators and potential participants at their schools or community halls. Participants asked questions relevant to possible participation in the study. After potential participants demonstrated understanding and maintained interest in the study a new list was drawn. All interviews were conducted after obtaining signed informed consent from participants. This was read out loud to the participant by the interviewers so that they understood upfront the content of the questionnaire. Interviewers verified that the participants were in agreement before signing and starting the interview. One form was given to the participant and the other remained with the interviewer so that it would be filed in the RCT office.

Interviewers and participants were matched by sex to enable participants to freely respond to sensitive questions related to sex. The interviews were conducted privately, away from other people. Each participant was also told that they had a right not to answer any questions they did not wish to answer. They were told there were no right or wrong answers, that their opinions and views were acceptable. They were also assured that the information shared in the interview would be treated as confidential.

All interviews were anonymous. Questionnaires were individually assigned study identity numbers instead of participants' names. The completed questionnaires were sent to the principal investigator's office in Pretoria, where they were kept in a locked store room with limited access. The principal investigator and other research team members were the only people allowed to take the completed questionnaires by plane to Pretoria.

Participants were told that there was no benefit for taking part in the study except information about HIV for both study arm participants and information about HIV, attitudes and skills which will help protect them from HIV infection. They were also told that although there were no immediate risks in participating in the study, it was possible that some of the questions could cause emotional distress for them. In the event of emotional distress, participants were sent to the clinical staff who evaluated the participants' problems and sometimes referred them for further services such as counselling by psychologists. There was also a small risk that information about them could become known although precautions to protect their information were taken by the study staff.

Lastly, we agreed that data would not be analysed and presented by cluster (i.e. village selected to participate in the Stepping Stones Study) in order to ensure anonymity and avoid stigmatising any area.

3.9 Data Collection

The data collection for the Stepping Stones Study commenced in March 2003 and the baseline terminated in March 2004. Two activities of data collection were conducted. These were a face-to-face interview using a structured questionnaire followed by drawing blood for HIV testing. HIV testing will not be elaborated on here as this study concerns itself with data which was collected at baseline only through an interview using the structured questionnaire. Interviews took place at the schools where most participants enrolled, and sometimes in community halls or village clinics.

The interviews took about 45 minutes to an hour. On the day of the interview at the school or community hall the enrolled participants were allocated individually assigned and unique study identity numbers. They were then allocated an interviewer depending on gender. The interview was preceded by reading out the written informed consent form to the participant, if the participant agreed to continue, they signed the form.

3.10 Data management

All data management in the RCT was the overall responsibility of the study statistician, Dr Jonathan Levin, Statistician of the Biostatistics Unit of the Medical Research Council, who worked in close collaboration with the research team. Data analysis for this study was conducted by Nwabisa Jama, the author of this mini-thesis.

3.10.1 Data cleaning and management

All questionnaires were edited in the field by the author and her colleague, and then re-edited prior to data entry. Questionnaire errors were corrected immediately in the field if the informant was still available. All research members attended bi-weekly meetings to discuss questionnaire errors detected at editing. Data was double entered by Alta Hansen and Martie Swart, the Data Capturers employed by the Biostatistics Unit in Pretoria, and verified by Dr Jonathan Levin.

3.10.2 Data coding and analysis

The questionnaire did not have open questions. All items were pre-coded. Questions assessing ideas and attitudes towards condom use were measured on a 4-point scale. For this mini-thesis they were recoded so that each question was changed into a

dichotomous variable. ‘Strongly agree’ and ‘agree’ were pooled as a positive response, and ‘strongly disagree’ or ‘disagree’ were pooled as a negative response. Questions on the socioeconomic status were measured as a 4-point scale, and were treated in a similar fashion as the attitudes to condoms questions. These were also dichotomised into ‘very often’/’often’ and ‘seldom’/’never’. The question regarding difficulties in obtaining money for household emergencies was dichotomised into ‘very difficult’/’difficult’ and ‘very easy’/’easy’. Access to condom use was also treated the same, ‘very difficult’/’difficult’ made up the negative response and ‘very easy’/’easy’ made up the positive response.

The statistical package, Stata release 8.0, was used for analysis. Survey commands of Stata 8.0 were used for the whole analysis to take into account the study design, i.e., clustering. Statistics of central tendencies and range were used for continuous variables. The age-groups variable was derived. These comprised 15-19 years olds and 20-26 year olds as the age range was 15-26 years. Variables were also stratified by either age group or gender to measure the effect of either in various condom behaviours reported.

The analysis is focused on sexually active youth. Analysis began with the listing of all questionnaire items that were relevant to the condom study. Continuous variables were stratified by gender and by age group and analysed using “svymean” from which a mean and 95% confidence interval were obtained. Discrete variables, such as ‘ever having used a condom’, were analysed using “svytab”, having stratified by either gender or age group. This provided row and column proportions, the count, and the uncorrected chi square *p*-value. The row proportion and the uncorrected chi square *p*-value were presented in the study. The Bonferroni correction was used to determine

significance. Those proportions with more than p=0.01 were not interpreted as being statistically significant.

3.11 Study Limitations

The study design, introduces selection bias to the study. Since participants were not randomly selected, but were volunteers the findings may not be generalisable to the entire population of youth aged 15-26 years in the area.

There is strong evidence that volunteer participation bias occurs in randomised trials. Volunteer participants in research studies may have a low risk to the disease under study, have better attitudes and sexual behaviour, be more interested in HIV and so more receptive to prevention messages or interventions. Comparisons of volunteers and other groups can thus show unreliable effects (Bland, 2003; MUSC, 2005). Participation in this study could also have been affected by the incentive given to those who decided to enrol. Volunteer participation bias may also affect the relationship between condom use and age, as older youth (20 years and above) have more sexually active years than younger youth and may also report more experiences with condoms relative to the younger age group.

The study also is analysing data on self-reported sexual and condom behaviour, which may result in social desirability bias. Respondents may have provided inaccurate information so that they may look good in the eyes of the interviewer. Male respondents may have over-reported the number of sexual partners so as to affirm their masculinity to the male interviewers. Female interviewers may have under-reported the number of sexual partners in order to appear less at risk of HIV infection. Condom use information could have been distorted in order to compensate for

negative attitudes towards condoms. Reported condom use practices may be inaccurate as they are self-reported behaviour, and cannot be verified on their own. The invalidity of reported condom practices has also been documented in De Visser & Smith (2000), and De Visser (2004).

Lastly, the interpretation of the gender and age group findings is also a concern as the men were older than the women, and therefore the older age group was disproportionately male, and males disproportionately older. This is a limitation of crude analysis as it only presents proportions and does not look at relations between condom use and other variables, for example, whether consistent condom use is connected with having used a condom at first sex.

Many of the limitations of the study were reduced by vigorous and continuous training of fieldwork interviewers.

CHAPTER 4

RESULTS

4.1 Introduction

This chapter presents the results from the analyses in the following sub-sections:

- Background characteristics,
- Knowledge, attitudes and self-efficacy of condom use, and
- Sexual practices, condom practices, and access to condoms

4.2 Background characteristics of youth according to gender

The results presented here are from a total population of 2582 sexually active young people who were enrolled in the Stepping Stones Randomized Controlled Trial. 51.0% were young women and 49.0% were young men. They ranged from 15-26 years of age. Men were older than women, with a mean age of 18.7 years (CI: 18.5 – 18.8). The average age for women was 18.1 years (CI: 17.9 – 18.2).

Table 4.1 shows the background characteristics of youth by gender. While 97.7% of women and 97.3% of men were in-school, 51.2% of women and 44.3% of men had passed grade 10. There were significant differences in the social activities into which women and men participated. Men were more likely to be members of other clubs/societies, and women were more inclined towards active church membership. Disparities were also observed in the proportions of women and men who reported exposure to media such as magazines or newspapers, radio and television in the 7 days

prior to the interview. Women were significantly less likely to report either reading newspapers or magazines, listening to the radio or watching television. All youth read less compared to listening to the radio or watching television. With regards to socio-economic standing, women were poorer than men as 35.2% reported that they often or very often go without food at home compared to 29.7% of men, and the difference was statistically significant. While there were no vegetarians, a large proportion of both genders (79.8% women and 80.8% men) reported unavailability of meat at home and almost two thirds of both said they thought it would be it difficult or very difficult to find R100 for medication or health care in an emergency.

Table 4.1: Characteristics of sexually active men and women

	Women (n=1296)			Men (n=1288)			
	N	**%**	**95% CI**	**n**	**%**	**95% CI**	**P-value**
Mean age in years		18.2	18.05, 18.35		18.7	18.53 , 18.88	<0.0001
Passed grade 10	660	51.2		569	44.3		0.03
Currently studying	1264	97.7		1252	97.3		0.55
Member of more than 1 club	579	44.8		958	74.4		<0.0001
Active church membership	910	70.5		604	47.0		<0.0001
Read magazine in past week	174	13.5		343	26.6		<0.0001
Listened to radio in past week	1127	87.2		1184	91.9		0.0009
Watched TV in past week	940	72.7		1130	87.7		<0.0001
Often without food at home	455	35.2		382	29.7		0.01
Often without meat at home	1033	79.8		1041	80.8		0.58
Very difficult to get R100 for treatment/medication in an emergency	825	63.8		796	61.8		0.33

4.3 Background characteristics of youth according to age group

In Table 4.2 a comparison of sample characteristics of both men and women by age group is presented. When considered by age group, fewer youth of both age groups were in grade 11 or 12, although younger youth were less likely to have passed grade 10 compared to older youth. Older youth were more likely to be members of clubs or

societies than the younger group. There were no differences between older & younger youth in church activity, exposure to the media or measure of socio-economic status.

Table 4.2: Characteristics of sexually active youth by age group

	15-19 yrs (n=1882)		20-26 yrs (n=700)		
	N	**%**	**n**	**%**	**P-value**
Passed grade 10	173	9.2	171	24.4	<0.0001
Currently studying	1864	99.0	652	93.3	<0.0001
Member of more than 1 club	1089	57.9	448	64.2	0.009
Active church membership	1125	60.0	389	55.7	0.08
Read magazine in past week	398	21.2	119	17.0	0.03
Listened to radio in past week	1680	89.4	631	90.1	0.56
Watched TV in past week	1519	80.8	551	78.7	0.21
Often without food at home	605	32.1	232	33.1	0.7
Often without meat at home	1492	79.3	582	83.1	0.03
Very difficult to get R100 for treatment/medication in an emergency	1157	61.5	464	66.3	0.04

4.4 Ideas and attitudes towards condoms and their use

Youth were asked a range of different questions on knowledge, attitudes and self efficacy of condom use as outlined in Table 4.3. Overall, women held more negative attitudes to condoms than men. 59.5% of women thought that using condoms was embarrassing compared to 36.5% of men. 30.4% of women said they would not use a condom because they wanted the pleasure of flesh to flesh sex with a partner, compared to 23.5% of men who reported the same attitude. Women were also more likely than men to interpret a partner's request to use condoms to mean that the partner has HIV, and more likely to state that if a partner asked them to use a condom they would think that the partner is having sex with other people. They said that their partners would think the same of them if they wanted to use condoms. Similar proportions of women and men thought that trusting one's partner made condom use unnecessary.

Table 4.3: Women and men's condom attitudes, knowledge and self-efficacy

	Women		Men		
	N	**%**	**n**	**%**	**p-value**
Attitudes					
Using a condom is embarrassing	770	59.5	444	36.5	<0.0001
I would not use a condom because I want flesh to flesh sex	393	30.4	303	23.5	0.0008
If a man and a woman trust each other, there is no need to use condoms	771	59.6	746	57.9	0.42
If someone wants to use a condom, you know they have HIV	570	44.1	425	33.0	<0.0001
If my partner asked me to use a condom, I would think they are having sex with other people	730	56.5	544	42.2	<0.0001
If I asked my partner to use a condom, they would think I am having sex with other people	882	68.2	675	52.4	<0.0001
Knowledge					
If you forgot to use a condom once or twice, there is no need to use it with the person you were having sex with	565	43.7	579	45.0	0.55
A condom can slip off, but it cannot get lost in the vagina	817	63.1	831	64.5	0.44
Self-efficacy					
I know how to use a condom	1070	82.7	1148	89.1	0.0001
I can ask my current partner to use condoms	1234	95.4	1231	95.6	0.81

The level of knowledge about how condoms work was similar between women and men. 63.1% of women and 64.5% of men knew that a condom may slip off during sex but it will not get lost in the vagina. Condom use self-efficacy was relatively high among both groups. Significantly more men (89.1%) reported that they knew how to use a condom compared to women (82.7%). 95.4% of women and 95.6% of men said they could ask their current partners to use a condom than 65.6% of men.

In Table 4.4 it can be observed that youth of both age groups held similar attitudes to condoms. Levels of knowledge were also similar. A majority of both felt they could use condoms.

Table 4.4: Condom attitudes, knowledge and self-efficacy by age group

	15-19 yrs		20 yrs +		
	n	**%**	**N**	**%**	**p-value**
Attitudes					
Using a condom is embarrassing	888	47.2	326	46.6	0.79
I would not use a condom because I want flesh to flesh sex	502	26.7	194	27.7	0.48
If a man and a woman trust each other, there is no need to use condoms	1082	57.5	435	62.1	0.02
If someone wants to use a condom, you know they have HIV	727	38.6	268	38.3	0.895
If my partner asked me to use a condom, I would think they are having sex with other people	929	49.4	345	49.4	0.97
If I asked my partner to use a condom, they would think I am having sex with other people	1115	59.3	442	63.1	0.06
Knowledge					
If you forgot to use a condom once or twice, there is no need to use it with the person you were having sex with	829	44.1	315	45	0.66
A condom can slip off, but it cannot get lost in the vagina	1207	64.1	441	63	0.49
Self-efficacy					
I know how to use a condom	1601	85.1	617	88.1	0.05
I can ask my current partner to use condoms	1798	95.5	667	95.3	0.78

4.5 Sexual practices: comparisons be gender and by age group

Men's sexual initiation occurred earlier in their lives compared to women (Table 4.5a). The mean age at first sexual intercourse was 14.4 years for men compared to 15.7 years for women. 26.4% of women reported they were willing to have sex the first time, compared to 97.4% of men. The remaining 73.5%, of women described their first sexual experiences as having been persuaded (58.1%), tricked (11.5%), forced (1.5%) and raped (2.5%).

Men had more recent social intercourse than women (Table 4.5a). In the analysis by age group (see Table 4.5b), men and women aged 20-26 years reported an older age at first sex and greater likelihood of willingness than men and women aged 15-19 years. Women were significantly more likely than men to have their last sexual intercourse with a main

partner. 94.2% of women had their last sexual intercourse with a main partner, 4.6% with a 'khwapheni'[1] while much fewer had last sex with either a once-off partner or an ex-partner. In contrast, 67.6% of men had their last sexual intercourse with a main partner, 22.6% with a 'khwapheni', 5.3% with a once-off and 4.3% with an ex-partner. Youth in the older age group seemed to have had more recent sexual intercourse compared to youth in the younger age group (see Table 4.5b).

Table 4.5a: Sexual Practices: comparison by gender

	Women			Men			
	N		**95% CI**	**n**		**95% CI**	P-value
Mean age at first sex		15.7	15.5 , 15.8		14.4	14.2 , 14.6	<0.0001
Willing to have sex (%)	343	26.5	-	1254	97.4	-	<0.0001
Type of partner at last sex (%):							<0.0001
• Main partner	1215	94.2	-	868	67.6	-	
• Khwapheni	59	4.6	-	290	22.6	-	
• Once-off	5	0.39	-	68	5.3	-	
• Ex-partner	11	0.85	-	59	4.6	-	
Median total days since last sex		35	-		17.5	-	-

Table 4.5b: Sexual Practices: comparison by age group

	15-19 age group			20-26 age group			
Age at first sex		14.8	14.6 , 14.9		15.68	15.5 , 15.9	<0.0001
Willing to have sex (%)	1096	58.3%	-	501	71.6%	-	<0.0001
Type of partner at last sex (%):							0.0033
• Main partner	1547	82.4	-	536	76.8	-	
• Khwapheni	226	12.0	-	123	17.6	-	
• Once-off	50	2.7	-	23	3.3	-	
• Ex-partner	54	2.9	-	16	2.3	-	
Median total days since last sex		28	-		14	-	-

4.6 Reported number of sexual partners by gender

Table 4.6 shows that men were significantly more likely to report more sexual partners of all types in both the past year and in their lifetime than women. The 75th percentile and

[1] 'Khwapheni' means a casual partner with whom there is a relationship occurring concurrently with a main partner.

the range demonstrate a difference in the number of partner between men and women. However, a large sub-group of men reported more sexual partners.

Table 4.6: Women and men's number and types of partners

	Women		Men	
		95% CI		95% CI
Mean no. of main partners in past year	1.12	1.09 , 1.15	1.38	1.33 , 1.42
Range	0 - 5		0 - 10	
25th percentile	1		1	
50% percentile	1		1	
75% percentile	3		6	
Mean no. of khwapheni in past year	0.24	0.21 , 0.28	1.24	1.14 , 1.35
Range	0 – 10		0 - 25	
25th percentile	0		0	
50% percentile	0		1	
75% percentile	3		11	
Mean no. of once-off in past year	0.06	0.04 , 0.08	0.49	0.41, 0.57
Range	0 - 3		0 - 14	
25th percentile	0		0	
50% percentile	0		0	
75% percentile	3		11	
Mean no. of main partners in lifetime	1.90	1.80 , 1.96	2.83	2.69 , 2.95
Range	0 - 8		0 – 30	
25th percentile	1		2	
50% percentile	2		2	
75% percentile	7		20	
Mean no. of khwapheni in lifetime	0.44	0.38 , 0.51	2.75	2.48 , 3.03
Range	0 – 20		0 - 50	
25th percentile	0		0	
50% percentile	0		2	
75% percentile	5		24	
Mean no. of once-off in lifetime	0.109	0.08 , 0.14	1.06	0.85 , 1.26
Range	0 - 5		0 - 50	
25th percentile	0		0	
50% percentile	0		0	
75% percentile	3		28	

4.7 Reported number of sexual partners by age group

Youth in the 20-26 year age group had a higher mean number of partners than their younger counterparts both in the past year and in their lifetime (Table 4.7). The 25th and

50th percentiles demonstrated similarities in the number of sexual partners between the two age groups. Fewer youth had many partners.

Table 4.7: Comparing the number and types of sexual partners by age group

	15-19 age group		20-26 age group	
Mean no. of main partners in past year	1.23	1.20 , 1.27	1.31	1.25 , 1.37
Range	0 - 10		0 - 6	
25th percentile	1		1	
50% percentile	1		1	
75% percentile	5		4	
Mean no. of khwapheni in past year	0.66	0.61 , 0.72	0.96	0.82 , 1.1
Range	0 – 11		0 – 25	
25th percentile	0		0	
50% percentile	0		0	
75% percentile	10		9	
Mean no. of once-off in past year	0.24	0.25 , 0.31	0.32	0.24 , 0.40
Range	0 – 14		0 – 11	
25th percentile	0		0	
50% percentile	0		0	
75% percentile	0		6	
Mean no. of main partners in lifetime	2.26	2.18 , 2.34	2.63	2.49 , 2.77
Range	0 - 30		0 – 22	
25th percentile	1		2	
50% percentile	2		2	
75% percentile	18		22	
Mean no. of khwapheni in lifetime	1.34	1.20 , 1.48	2.28	1.91 , 2.65
Range	0 – 50		0 – 50	
25th percentile	0		0	
50% percentile	0		1	
75% percentile	23		40	
Mean no. of once-off in lifetime	0.54	0.41 , 0.67	0.70	0.54 , 0.86
Range	0 – 50		0 – 28	
25th percentile	0		0	
50% percentile	0		0	
75% percentile	25		15	

4.8 Condom use experiences by gender

Table 4.8 shows that a majority of young people reported having used condoms at least once (62.5% of women and 65.4% of men). There was no difference in the mean age at first condom use, as both genders first used condoms by the age of 17 years.

Table 4.8: Initial condom use, at last sex, problems & consistent condom use by gender

	Women			Men			
	N	**%**	**95% CI**	**N**	**%**	**95 % CI**	p-value
Ever used a condom	807	62.5	-	842	65.4	-	0.2
Age at first condom use		17.0	16.9 , 17.2		16.9	16.7 , 17.1	0.3
Condom use at last sex	554	42.9		597	46.4	-	0.05
Condom used in all rounds (of last sex)	533	95.9	-	562	94.3	-	0.18
Who brought the condom - Self	128	23.0	-	535	89.9	-	<0.0001
Partner	401	72.1	-	50	8.4	-	
Both	27	4.9	-	10	1.7	-	
Problems with condoms (at last sex):							
Condom broke	5	0.9	-	16	2.7	-	0.02
Condom slipped off	12	2.2	-	11	1.8	-	0.65
Condom was only put in halfway during sex	31	5.6	-	12	2.0	-	0.02
Condom removed during sex & continued without	12	2.2	-	17	2.9	-	0.5
Problems with condoms in past year	88	11.8	-	123	13.5	-	0.3
Consistent condom use with main partner in past year							
Some condom use with main partner vs. none in past year	685	53.9	-	686	55.5	-	0.5
Always condom use with main partner vs. some/none in past year	289	22.7	-	321	26.0	-	0.07
Consistent condom use with casual partner in past year							
Some condom use with casual partner vs. none in past year	162	58.5	-	502	65.3	-	0.06
Always condom use with casual partner vs. some/none in past year	162	58.5	-	502	65.3	-	0.06

When asked whether a condom was used during the last sexual intercourse with a partner, 42.9% of women and 46.4% of men said that they had. Men (89.9%) were more likely to say they brought the condoms that were used at last sex compared to women (23%, p<0.0001). Overall, few youth reported experiencing problems with the condom used at last sex, although more than 10% of both women and men reported this. There was more consistent condom use reported with casual partners compared with main partners. 58.5% of women reported always using condoms with a casual partner in the past year,

compared to 22.7% who always used them with a main partner in the past year. More men always used condoms with casual partners in the past year (65.3%) compared with main partners (26%). The proportion reporting 'some' use was the same as that reporting consistent use.

4.9 Condom use experiences by age group

Table 4.9 shows significantly more 20-26 year olds had ever used a condom compared to 15-19 year olds. Youth in the 20-26 year range started using condoms significantly later (at 18.5 years) compared to those in the 15-19 year age range (16.3 years). The age difference between average age at first sexual intercourse and average age at first condom use was 1.5 years for youth aged 15-19years, and 2.8 years for youth aged 20-26 years. Hence older youth significantly started using condoms later relative to first sex.

Forty five percent (44.9%) of youth aged 15-19 years and 43.9% of youth aged 20-26 years reported having used a condom at last sex. Significantly more 20-26 year olds brought condoms that were used at last sex. Similarly as in the comparison by gender, fewer youth in either age group reported having experienced problems with condom use at last sex. Consistent condom use was lower with a main partner in the past year compared to a casual partner: 24.7% vs. 62.1% among youth aged 15-19 years, and 23.3% vs. 66.4% among youth aged 20-26 years. The proportion reporting 'some' use was the same as that reporting consistent use.

Table 4.9: Initial condom use, at last sex, problems & consistent use by age group

	15-19 age group			20-26 age group			
	N	**%**	**95% CI**	**n**	**%**	**95% CI**	**P-value**
Ever used a condom	1160	61.7	-	489	69.9	-	0.0005
Age at first condom use		16.3	16.2 , 16.4		18.5	18.3 , 18.8	<0.0001
Total months since last sex		96.6	87.5 , 105.6		82.4	66.4 , 98.4	0.08
Condom use at last sex	844	44.9	-	307	43.9	-	0.67
Condom used in all rounds	803	95.1	-	292	94.8	-	0.8
Who brought the condom - Self	460	54.5	-	203	66.2	-	0.002
Partner	357	42.3	-	94	30.6	-	
Both	27	3.2	-	10	3.3	-	
Problems with condoms (at last sex:							
Condom broke	15	1.8	-	6	2.0	-	0.83
Condom slipped off	17	2.0	-	6	2.0	-	0.95
Condom was only put in halfway during sex	35	4.2	-	8	2.6	-	0.26
Condom removed during sex & continued without	25	3.0	-	4	1.3	-	0.11
problems with condoms in past year	152	12.9	-	59	12.4	-	0.8
Consistent condom use with main partner in the past year (n= 2509)							
Some condom use with main partner vs. none in past year	990	54.3	-	381	55.7	-	0.53
Always condom use with main partner vs. some/none in past year	451	24.7	-	159	23.3	-	0.49
Consistent condom use with a casual partner in the past year (n= 1046)							
Some condom use with main partner vs. none in past year	438	62.1	-	226	66.4	-	0.2
Always condom use with main partner vs. some/none in past year	438	62.1	-	226	66.4	-	0.2

4.10 Suggesting condom use

Table 4.10a shows that of youth who did not use a condom in the past year, significantly more women than men suggested condom use to the main/casual partner. The difference was significant. Men were significantly more likely than women to say that the main partner agreed to use condoms (53.9% vs. 23.3%, p<0.0001), and also to say that the partner was offended (9.1% vs. 3.0%, p<0.0001).

Table 4.10a: Proportions of women and men who did not use a condom with a main partner in the past year, suggesting condom use, the partner's response and reasons for not suggesting condoms

	Women		Men		
	N	**%**	**n**	**%**	P-value
If no condoms used with main partner, was it suggested	310	52.7	224	40.3	0.0001
Proportion who suggested condom use to a main partner giving the partner's response: n= 524					
Agree to use one	71	23.3	118	53.9	<0.0001
Became angry	17	5.7	13	6.0	0.9
Partner said s/he does not like them	81	27.2	75	34.3	0.9
Partner was offended	9	3.0	20	9.1	0.008
Other	144	48.8	20	9.1	<0.0001
Proportion who did not suggest condom use giving the reasons for not suggesting: n= 591					
Never thought of asking	94	35.3	113	34.8	0.9
Trust each other	50	18.9	176	53.7	<0.0001
Does not know how to ask	11	4.2	14	4.3	0.9
Fear partner would leave	16	6.1	12	3.7	0.2
Partner said s/he does not like them	37	14.1	30	9.2	0.1
Trying to get pregnant	3	1.1	5	1.5	0.7
Other	81	30.2	38	11.6	<0.0001

Table 4.10b: Proportion of women and men who did not use a condom with a casual partner in the past year, suggesting condom use, the partner's response and the reasons for not suggesting

If no condoms used with casual partner, was it suggested	58	50.4	73	27.4	0.0001
Proportion who suggested condom use to a casual partner giving the partner's response: n = 131					
Agree to use one	10	17.9	29	38.7	0.04
Became angry	6	10.9	9	12.2	0.8
Partner said s/he did not like them	20	35.7	37	50	0.08
Partner was offended	1	1.8	7	9.5	0.09
Other	24	45.3	5	6.8	<0.0001
Proportion who did not suggest condom use giving the reasons for not suggesting: n= 244					
Never thought of asking	29	50.9	110	58.8	0.29
Trust each other	3	5.4	27	14.3	0.09
Does not know how to ask	2	3.6	10	5.4	0.6
Fear partner would leave	1	1.8	13	7	0.2
Partner said s/he does not like condoms	5	9.1	21	11.2	0.61
Trying to get pregnant	0	0	3	100	0.4
Other	17	32.1	34	18.4	0.04

There were no significant differences between women and men in response to suggesting condom use to a casual partner (see Table 4.10b). However, more men (38.7%) than women (17.9%) said the casual partner agreed to use condoms. 12.2% of men and 10.9% of women said the partner became angry when they suggested condom use (see Table 10b).

One of the reasons given for not suggesting condom use to a main partner was having never thought of asking (35% of both women and men). Interestingly, 50.9% of women and 58.8% of men reported this as a reason for not asking a casual partner to use condoms. Trusting each other was a reason for not suggesting condom use to a main partner, and was significantly more likely to be reported by men compared to women (53.7% vs. 18.9%, $p<0.0001$). The table on comparisons of suggestion of condom use by age group was excluded here because there were no significant differences..

4.11 Access to condoms

Table 4.11a shows that more than 90% of both women and men reported that it would be easy or very easy to find condoms in the village. Almost all women and men reported that they knew they could find condoms at the local clinic. Very few women (3.8%) and men (4.8%) reported that they could find condom at school.

A significant difference can be observed in the proportions who mentioned that shops are also places where condoms can be found: 10.8% in the 15-19 age group and 5.2% in the 20-26 age group (see Table 4.11b).

Table 11a: Ease of access to condoms and where to find them in the community by gender

	Women		Men		
	n	**%**	**n**	**%**	P-value
Very easy to find condoms in the village	1193	92.4	1163	90.5	0.12
Where to find condoms:					
Clinic	1275	98.8	1270	98.7	0.87
Shop	126	9.9	110	8.6	0.34
Shebeen	10	0.8	25	19.6	0.02
School	61	4.8	48	3.8	0.27
Chief/counselor	0	0	6	0.5	0.03
Other	20	1.6	34	2.7	0.07

Table 11b: Ease of access to condoms and where to find them in the community by age group

	15-19 years		20-26 years		
Very easy to find condoms in the village	1715	91.3	641	91.8	0.65
Where to find condoms:					
Clinic	1851	98.5	694	99.3	0.12
Shop	200	10.8	36	5.2	0.0003
Shebeen	30	1.6	5	0.7	0.09
School	78	4.2	31	4.7	0.75
Chief/counselor	3	0.2	3	0.4	0.25
Other	41	2.2	13	1.9	0.58

CHAPTER 5

DISCUSSION AND CONCLUSIONS

5.1. Introduction

This chapter begins with a discussion on the background and sexual behaviour of youth, followed by a discussion of the study objectives. The chapter ends with the conclusions and recommendations.

5.2. Background characteristics of youth

Youth interviewed were aged 15-26 years, and men were significantly older than women. More youth in the younger age group were in-school than the older group. (Youth who had membership in more than one club were more likely to be men, and older.) Active church members were more likely to be women. These findings differ to Campbell et al (2002). Their research in a township outside Carletonville found that both men and women were equally likely to be members of church associations although there was no significant association with age.

Men had more exposure to media than women, the most accessible medium of communication being the radio. Exposure to media has also been measured elsewhere to investigate sources of information about HIV. Findings from a township setting revealed that young men aged 15-24 years had more access to information than women of the same age (Williams et al, 2003). There is also consistency with Shisana et al's (2005) study where most rural youth were found to have more access to the radio a few days in a

week compared to other mass communication media such as television, and newspapers or magazines (Shisana et al, 2005). Shisana et al, 2005, also found that women read less frequently than men.

5.3. Sexual behaviour of youth

Men had their coital debut earlier than women. This was also observed in a prospective study of 3096 youth in KwaZulu-Natal (Rutenberg et al, 2001). The average reported age of first sexual intercourse for men and younger youth was 14,4 for men compared to 15,7 for women. In Pettifor et al (2005) young men in the 15-24 age group were 2 times more likely to have had first sexual intercourse at the age of 14 years compared to young women. The reported mean age at first sexual intercourse in this study was two years younger than has been illustrated in other South African literature on youth sexuality (Shisana et al, (2005); Simbayi et al, 2004; Pettifor et al, 2005). The explanation for the difference could be the sampling method. The study sample was a volunteer sample of school-going youth, and was thus not randomly selected. Therefore, these findings are not generalisable to the entire population of youth of South Africa while the other household cross-sectional surveys' respondents were selected randomly, making them representative of other youth in the country.

Young women's coital debut was particularly characterized by unwillingness to have sex. This was consistent with other studies that have shown that women were often pressurized into having sex by their partners (Wood et al, 1998; MacPhail & Campbell, 2001; Rutenberg et al, 2001, Dunkle 2004a). About three-quarters of reported circumstances of first sexual intercourse involved a measure of coercion ranging from

persuasion, trickery, force and rape. When analysed by age group, older youth (both men and women) reported having been more willing to have sex compared to younger youth. This may be due to recall bias, as younger youth may be better able to remember earlier events in their lives compared to their older counterparts. Secondly, in their older age, older youth's perception of their earlier sexual intercourse may be distorted by their beliefs that sexual coercion by a male partner is normal, and part of sexual initiation (Wood et al, 1998). This study also shows much fewer women having had sexual debut willingly, compared to Rutenberg et al (2001).

The reported median time since last sexual intercourse was 35 days for women and 17.5 days for men and 28 days for younger 15-19 years olds and 14 days for 20-24 year olds. This suggests that men may have more opportunities to have sex than women. Means are not good measures when data is skewed. The median days since last sex show that men had sex in the last 3 weeks or less. These findings are less than reported in Shisana et al, (2005) and Pettifor et al, (2004a)

5.4. Differences in condom attitudes by gender and by age group

Results showed evidence of statistically significant gender differences in attitudes, knowledge and self-efficacy of condom use. None of the differences by age group were significant.

Women had markedly more negative attitudes towards condoms compared to men. In this study, quite a number of young people found condom use embarrassing and significantly more women did so than men. This is consistent with James et al (2004) who found that more men than women disagreed that using condoms is embarrassing. Rutenberg et al,

(2001) also found that youth in South Africa reported that condom procurement is embarrassing. Overall, less than a third of youth said they would not use condoms because they wanted flesh-to-flesh sex. The study found that significantly more women 'strongly agree' or 'agree' with the statement, which contrasts with Campbell's (1997) finding that the notion of flesh-to-flesh sexual preference is more associated with men.

More young women in the study equated a partner's request of condom use with being unfaithful, compared to men. The proportion of women who held this belief was twice as high as that of KwaZulu-Natal youth aged 14-22 years, (Rutenberg et al, 2001), and distinctly different to the view expressed by younger girls also in KwaZulu Natal, who saw condom use as a gesture of love and protection from their partner (Harrison et al, 2001). Other studies have also found evidence of youth equating condom use to lack of trust or respect for one's partner (Prata et al, 2005; MacPhail & Campbell, 2001).

Questions on knowledge of condom use revealed that there was a gap in condom use knowledge for women and men alike. Almost half of both gender and age groups knew that condoms must be used even if they had been forgotten previously. Two-thirds of both genders and age groups knew that condoms can slip off but not disappear inside the vagina. These proportions are much lower than those found in Angola (Prata et al, 2005) and other parts of South Africa (Williams et al, 2003; Magnani et al, 2005).

Youth in the study expressed high levels of perceived self-efficacy of condom use. As in the lifeskills intervention study conducted in KwaZulu Natal province (Magnani et al, 2005), men were significantly more likely to know how to use condoms compared to women. This may be explained by the fact that most available condoms to rural youth are

male condoms. Therefore, male condom users would be most likely to know how to put on a condom than their female partners. It is likely that during sexual intercourse young women are often self-conscious and not ready for the act, and would not have many opportunities to put a condom on their partner.

5.5. Condom use, correct use and consistency of use by gender and by age group

Two-thirds of youth in the study reported having ever used a condom. These figures were similar to those reported by youth living in Khutsong township, Carletonville, (Williams et al, 2003 and Simbayi et al, 2004) and in the national HIV survey. There was a 1-3 year gap between mean age at first sexual intercourse and mean age at first condom use, indicating that very few youth had used condoms at sexual debut.

Nearly half of all youth reported condom use at most recent sexual intercourse, with a majority of them reporting condom use in all rounds of last sex. These findings were similar to other youth surveys. In Pettifor et al (2004a), men also reported more condom use at last sex than women, although there was variation in the proportion of use by age group, the younger age group reporting more condom use than the older youth. An even higher proportion of condom use at last sex was reported in Shisana et al's (2005) study, where men were also significantly more likely to report condom use at last sex than women. The lower proportion of youth reporting condom use at last sex may also be related to location as Pettifor et al (2004a) found that fewer sexually active youth living in rural informal (43%) and farming (36%) areas reported condom use at last sex compared to youth living in urban formal (63%) and informal (52%) areas.

Women and the younger age group were less likely to report having brought the condoms used at last sex. Being male has been associated with more consistent condom use by Civic et al (2002). A majority of young women report less relationship power, which is in turn associated with inconsistent condom use (Pettifor et al, 2004b). Being younger may imply that one is not as confident in their sexual activity as youth who have been sexually active for more years.

The results presented here indicate that very few young people experienced problems when using condoms the last time they had sex. There is evidence that young people are familiar with condoms. However, condom use is practiced inconsistently by many sexually active young people. These findings highlights a similar problem found in a nationally representative youth survey on young women aged 15-24 years (Pettifor et al, 2004b), as well as among youth in KwaZulu Natal where only a third had used condoms consistently (MacIntyre et al 2004). Women in this study emerged as having less consistent condom use compared to men. These inconsistent condom users may be at a similar risk of HIV and other STD infection as found in Pettifor et al (2004b). The proportion of reported consistent condom use in the study is even lower than reported for high school pupils in KwaZulu Natal (Taylor et al, 2003).

5.6. Differences in use of condoms with current sexual partners by gender and by age group

Youth reported having had sexual intercourse with both regular and casual partners. Overall men and older youth reported more lifetime sexual partners than women and youth aged 15-19. Men reported more partners in the past year than women. The range

for men extended up to a maximum of 25 partners compared to a maximum of 10 for women. Evidence of young people having concurrent multiple sexual partnerships, at a similar scale as reported in the study, has also been shown in both rural and urban settings in South Africa with men being more likely to report this than women (Rutenberg et al, 2001; Eaton et al, 2003; Williams et al, 2003; Pettifor et al, 2004, Harrison et al, 2005; Shisana et al, 2005, Pettifor et al, 2005). It is also possible that men may have over-reported on the number of partners perhaps to show off their masculinity. On the other hand, women may have under-reported so that they may be perceived as more respectable young women, which may explain the gap between the range of partner reported by both genders.

Although Reddy et al (2000) found that patients at an STD clinic reported more condom use with a main partner and less with other partners, the findings of this study found the opposite. Reported consistent condom use with a casual partner was higher than that with a main partner, with more men reporting this than women. This is similar to the association found between women's condom use at last sex and their being more likely with a casual partner or partners other than the main partner/spouse (Camlin & Chimbwete, 2003). In relation to Table 4.5a a majority of women had their last sexual intercourse with a main partner compared to men. This may be the possible explanation for men reporting more consistent condom use with casual partners than women. Men reported more casual partners, and reported more opportunities for casual sex than women. Myer et al (2002) found that increased condom use was observed mostly among men who procured condoms from the clinics in KwaZulu-Natal compared to women; and also found that condom use was associated with having sex with a casual /irregular

partner rather than with a regular partner. In the National Youth Survey consistently more men than women used condoms with their recent partners (Pettifor et al, 2005). In an Angolan study of youth sexuality similar findings were observed (Prata et al, 2005).

5.7. Potential barriers to condom use by gender and by age group

Among youth who had not used a condom with either a main or a casual partner in the past year, significantly more women suggested condom use than men. For a majority of youth, the main partner agreed to use condoms, indicating a willingness to consider condom use. Interestingly men said their female partners did not like condoms, contrary to the discourse about condom use where male partners are said to be the ones who often do not like condoms and women being the ones whose lack of condom use is said to be dictated by their male partners. Other studies in South Africa and the US have shown that men are more likely to use condoms (Hartung et al 2002; Katz 2000). Men's reports of women's dislike and refusal to use condoms refute other research findings. For instance, many women attributed non-condom use or intermittent condom use to their male partners' refusal (Williams et al, 2003; James et al, 2004). Secondly, relationship power differentials have been found to negatively affect their female partners' ability to negotiate consistent condom use with them, although these studies have proven women's HIV risk through lack of sexual power (Pulerwitz et al, 2002; Pettifor et al, 2004b). Gender power issues are evident in the findings showing that female partners of men suggesting condom use were more likely to agree to use condoms than male partners of women suggesting condom use.

Interestingly fewer respondents whether in terms of gender and age group mentioned that the main partner became angry with the suggestion of condom use compared to the casual partner. Despite very few respondents who answered these questions, more men indicated that the female partner became offended at the suggestion, compared to women. One of the reasons given in other studies had been equating condom use to lack of trust or respect (MacPhail & Campbell, 2001;, and sometimes resulting in women being assaulted by the male partner (Kalichman & Simbayi, 2004). Overall, quite a number of respondents gave other responses which were not analysed in this study. These would probably have provided better knowledge on the partner's response to suggested condom use.

A majority of respondents referred to 'trusting each other' as one of the main reasons for not suggesting condom use to a main or a casual partner which were affected by both gender and age. Trust featured significantly for male non-condom users in reference to a main partner. Trust of one's partner has been linked with non-condom use in other studies in South Africa as well (Williams et al, 2003; Harrison et al, 2001). It is unfortunate that many young people with casual partners responded that they had never considered condom use with a casual partner. The partner's dislike of condoms was reported similarly by more men and by older youth. Respondents rarely mentioned trying to get pregnant as one of the reasons for not suggesting condom use.

It is very important to note that access to condoms in the community was said to be very easy for a majority of both genders and age groups, which suggests that there no longer are structural difficulties in condom procurement. Also consistent with Shisana et al

(2005) is that clinics were the main suppliers of condoms for young people. Both men and older youth seemed to be less aware of the option of obtaining condoms from the shops, suggesting that they were more comfortable to obtain condoms from the clinics. One of the significant findings was that more 15-19 year olds procured their condoms from shops than 20-26 year olds. This suggests that older youth are poorer than 15-19 year olds (refer Table 4.2), and therefore can not afford to buy condoms from the shops. Secondly, older youth are only in this study because they had slower school progression. It is also likely that younger youth find shops more accessible as they have more confidence. However, there is a need to improve access to condom use, as public clinics are not open 24 hours a day to sustain the emergency needs of young people. Myer et al (2001) emphasized that active condom procurement by youth improves their safer sexual behaviour.

5.8. Conclusions

The levels of reported condom use were good, but could be improved. Consistent condom use was not that much lower than having ever used a condom and less with main partners than with casual partners. Age and gender differences were not observed in these measures. Ineffective condom use was not a significant problem.

Youth still have gaps in knowledge and have negative attitudes, with women more likely to have negative attitudes than men. Self-efficacy was high and equal between men and women. It is not clear to what extent lack of knowledge and negative attitudes are

absolute barriers to condom use as women and men equally practiced condom use (and many people with negative attitudes are condom-users). Access to condoms was not a barrier because almost all respondents said it was very easy to find condoms in the village.

Men were more likely than women to perceive that they were not at risk for HIV and did not need to use a condom as they trusted their partners not to have HIV.

Although condom use in women and men was similar, more female non-users had suggested condom use to their partners than male non-users. Fewer of the women's partners agreed to use one. This suggests that women's lesser power in their sexual relationships is a barrier to condom use.

5.9. Recommendations

The recommendations are as follows:

- Educational interventions are needed to increase consistent condom use by youth living in the Eastern Cape to change young people's attitudes towards, and to improve their knowledge of, condoms and.elevate ideas of personal HIV risk and address the notion of 'trust'
- the provision of condoms on school premises should be expanded through free condom dispensers

- There is a need for interventions which address HIV prevention and gender equity such as Stepping Stones or Men As Partners.

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Tables for Literature Review

Table 2.2 Condom use in developing countries					
Country	**Author/s**	**Design**	**Study Objective**	**Data Source & Sample**	**Findings**
USA	DeLamater et al 2000	Randomized intervention trial	To evaluate impact of STD/AIDS intervention on condom use behaviour	N=562 African American men aged 15-19 years recruited at STD clinics. 1992-3.	Baseline: the mean age at first sex - 12.9; the mean lifetime number of steady partners - 24.2 & the mean lifetime number of casual partner - 8.6. 96% had used condoms; 29% used them at first sex; & 32% had used them at previous intercourse.
USA	Crosby et al 2005	Cross-sectional survey	To assess the prevalence and correlates of condom failure (breakage/slippage in past 90 days)	N=481 men aged 15-21 years living in 3 US cities in 2000-2001.	Mean age at first sex = 14.0 years 60.7% reported multiple sex partner in past 90 days 34.1% reported condom failure in past 90 days Younger men were less likely to report condom failure than older men (AOR: 0.66, 95% CI: 0.44-0.98) Men having sex with multiple sex partners in past 90 days reported more condom failure than those with 1sex partner (AOR: 1.84, 95% CI: 1.16-2.91) Men who reported having sex with someone on same day they met were more likely to experience condom failure (AOR: 1.77, 95% CI: 1.09-2.88) Men reporting problems obtaining condoms were more likely to report condom failure (AOR: 1.69, 95% CI: 1.12-2.54)
USA	Crosby et al 2003	Prospective cohort study	To determine the association between women's condom use and their acquisition of biologically confirmed STDs	N=360 African American females aged 14-18 recruited from clinics and high schools and followed up for 6 months in	51% reported consistent condom use at baseline and at 6 months & 42% did not consistently use condoms. **At 6 months follow-up:** 17.8% tested positive for at least 1 STD among the consistent condom-users compared to 30% among non-consistent condom-users (Relative Risk Ratio= 1.69, 95% CI: 1.2-2.5). After adjusting for positive tests at baseline and having more than 1 sexual partner in past 6 months, AOR= 1.85, 95% CI: 1.1-3.0.

				1996.	
USA	Crosby et al 2002a	Purposeful sample	To investigate associations between condom use and infrequently communicating with sex partners about STDs and pregnancy prevention	N=522 African American females aged 14-18 years. 1996-1999.	81.8% had sex only with a steady partner in past 6 months; 8.2% only with casual partner; & 10% with both steady and casual partner. **Three correlates were associated with increased odds of infrequently communicating with sexual partners:** Recent sex with casual partners - OR: 1.73, 95% CI: 1.01-1.17; Lower perceived ability to negotiate condom use – OR: 1.70, 95% CI: 1.13-2.56; Fear of negotiating condom use - OR: 1.59, 95% CI: 1.01-2.49 Low motivation to use condom was associated with infrequent communication: OR: 1.10, 95% CI: 1.04-1.16
USA	Crosby et al 2002b	Cross-sectional survey	To compare HIV-associated sexual health history, risk perceptions and sexual risk behaviours of low-income rural and non-rural African American women	N=571women attending a nutrition program in 1998.	**Multivariate associations on sexual health history of rural vs. non-rural women:** Less likely to have ever been diagnosed with syphilis/gonorrhoea (AOR: 0.5- 95% CI: 0.3-0.9); More likely for past/current partner to have ever been tested for HIV (AOR: 2.1- 95% CI: 1.2-3.5) **Multivariate associations on sexual risk behaviours of rural vs. non-rural women:** More likely to have never used condoms in past 2 months (AOR: 1.8- 95% CI: 1.2-2.8) More likely to have not used condoms because they believed partner is HIV negative (AOR: 1.8- 95% CI: 1.0-3.2) Less likely to have not used condoms because partner tested HIV negative (36 vs. 49%; PR: 0.6- 95% CI: 0.4-0.95)
USA	Blake et al 2003	Cluster sampling design	To assess relationships between condom availability programs and adolescent sexual practices	N=4166 respondents in grade 9-12 at 59 randomly selected high schools. 1995.	**Youth in schools where condom were made available were more likely than those which did not to report having:** Used condoms during most recent sex (72 vs. 56%; OR: 2.1- 95% CI: 1.5-2.9); Used condom to prevent pregnancy during most recent sex (66 vs. 49%; OR: 2.1- 95% CI: 1.5-2.8); Used 'other' pregnancy protection during most recent sex (26 vs. 17%; OR: 0.5- 95% CI: 0.4-0.8) **Youth in schools where condoms were made available were less likely than those which did not to report having:** Lifetime sexual intercourse (OR: 0.7- 95% CI: 0.6-0.9); Recent sexual intercourse (OR: 0.8- 95% CI: 0.6-0.96);

					Youth in schools where condoms were made available were more likely than those which did not to report having: Used a condom at most recent sex (OR: 2.0- 95% CI: 1.5-2.8); Used a condom to prevent pregnancy (OR: 2.1- 95% CI: 1.5-2.8)
USA	Hubbard McCree et al 2001	Cross-sectional survey	To examine the association between male partner influences and women's condom use	N=432 African American females adolescents	**Adolescent who reported never using condoms in the past 6 months were more likely to report** Older partners (>5years, OR=3.3, p=0.001); Partners who wanted them to get pregnant (OR=3.0, p=0.0001); Fear of negotiating condom use (OR=2.0, p=0.02); Partners were not supporting of using condoms during sex (OR=2.0, p=0.02)
USA	Upchurch & Kusunoki 2004	Longitudinal study	To understand the associations between forced sex history and history of STD infection	N=3,579 sexually active women from grades7-12 of US high schools interviewed in 1994-1995.	21.3% reported age at first sex at age younger than 14 years 49.7% reported use of condoms at last sex 20.3% reported ever forced to have sex 11.2% reported ever having an STD Girls with more lifetime number of sexual partners had higher odds of having STDs than those with fewer (AOR: 2.2, 95% CI: 1.9-2.5); Girls with younger ages at first sex had higher odds of positive STD history than those with older ages (AOR: 2.3, 95% CI: 1.6-3.3); Girls who used a condom at last sex had lower odds of positive STD history (AOR: 0.7, 95% CI: 0.5-0.9); Girls with history of forced sex had higher odds of having STDs than those with no history of forced sex (AOR: 1.99, 95% CI: 1.57-2.52)
USA	DiClemente et al 2004	Pilot study of randomized controlled trial	To assess prevalence of STDs among adolescent women at the time of their first prenatal visit; to assess key characteristics of those testing positive against those who did not	N=170 pregnant African American aged 14-20 years recruited in prenatal clinic in 1999-2000	23.5% tested positive for at least 1 STD. Mean age at first sex = 14.6 years 24.1% used condoms in past 30 days 31.2% used condoms in past 6 months 14% reported consistent condom use in past 30days 6% reported consistent condom use in past 6 months

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USA	DiClemente et al 2005	Randomized assessor-blind controlled trial	To evaluate the efficacy of an intervention to reduce the risk of HIV infection in African American girls	N=522 sexually active girls aged 14-18 recruited in 4 community health agencies	**Baseline:** 46% reported using condoms consistently. **12 months follow-up:** Consistent condom use in past 30 days - 73% in intervention vs. 57% in control group (OR: 2.0, 95% CI: 1.3-3.2); Consistent condom use in past 6 months – 58% in intervention vs. 45% in control group (OR: 2.3, 95% CI: 1.5-3.5) Girls in intervention group than in control reported: Fewer episodes of unprotected sex (p=0.001); Less likely to report new sex partner (p=0.01); More likely to use condom with partner (p=0.001).
USA	Sayegh et al 2005	Cohort study	To explore associations of relationship quality, coital frequency, unprotected coitus and Chlamydia infection over time	N=142 females aged 14-21 years recruited in 1 adolescent health and 1STD clinics	Chlamydia infection at 3 months was directly influenced by unprotected coitus at previous 2 months (p=0.05) and partner cgange at 1 month follow up Unprotected coitus was directly associated with coital frequency both cross-sectionally and longitudinally.
USA	Tschann et al 2002	Random sample	To examine how the relative power of adolescent sexual partners in the domain of emotional intimacy is related to condom use	N=228 adolescents attending a STD clinic, all aged 14-29 years. 69% females	More young women (76%) than young men (55%) had a greater desire to use condoms than their partners (p=0.03). 47% of young men than 35% of young women had their condom use desired enacted. Young men had nearly more intimacy power than young women (p=0.04) Young men had more decision-making power than young women (p=0.001)
USA	Fortenberry et al 2002	Random sample	To establish the length of time required for adolescent women to fail to use condoms on	N=106 women recruited from STD clinics	Participants reported 3,248 coital events, of which 1,368 (42%) involved the use of condoms. 66% of first coital events with new partners used a condom 54% of first coital events with established partners used a condom Of sex with new partners, 27% were once-offs **Protected coital events decreased in new relationships:**

			a consistent basis		By 21 days – condom use in new relationships was not different from that in established relationships (43 vs. 41%). Time to first unprotected sex was significantly longer in new than inn established relationships (p<0.03).
USA	Civic et al 2002	Baseline survey of randomised trial	To estimate prevalence and identify predictors of ineffective condom use among women at risk of STDs	N=779 young women were interviewed in 1999-2000 Age: 18-24 years	44% reported delayed condom use 19% reported condom slippage and/or breakage **Predictors of delayed condom use:** Being younger than 21 years (OR = 1.65), having a primary partner (OR = 1.55), using condoms as primary contraceptive (OR = 1.42) and using condoms more than 15 times in three months – (OR = 2.1). Having a partner who thinks condom use is very important was protective by at least 56% (OR = 0.56). **Predictors of condom slippage or breakage**: Having a history of any STD and using condoms more than 15 times in three months
USA	Friedman et al 2001	A population-based study of a randomly selected sample	To determine the predictors of condom use	N=279 youth; 43% male and 57% female in Age: 18-24 years.	Analysis based on 337 heterosexual and non-commercial relationships 32% reported consistent condom use: 37% of men and 26% of women 60% relationships were 'very close' **Consistent condom use was more likely:** If relationships that were not 'very close' (OR = 3.9); if peer norms supported condoms use (OR = 1.9); if not a problem drinker (OR = 8.7) and if respondents were male (OR = 1.9).
USA	Pulerwitz et al 2002	Cross-sectional survey in clinic setting	To explore the degree to which power in sexual relationships influences women's safer sex negotiations	N=369 women aged 18-45 years were interviewed using a structure questionnaire	39% of women were 18 – 24 years old & 88% were Latino. 8% reported **consistent condom use,** and 13% were women with high level of relationship power. Women with high relationship power were 5.96 times more likely (p <0.01) to report consistent condom use than women with a low level of relationship power. 52% of lack of consistent condom use was attributed to low sexual relationship power.
USA	Katz2000	Random sample	To assess associations of a variety of partner-specific relationship characteristics with consistent condom use among young	N= 297 young people attending STD clinics were interviewed in 1999 using a structured questionnaire	74.4% were women & 75.1% African American Mean age: 17.4 years.36% reported consistent condom use. 30% reported intermittent condom use and 34% reported never used condoms. **Increased odds of reporting consistent condom use were:** With men - OR = 1.9; p= 0.003 and with a new partner – OR= 2.04; p= <0.001 **Reduced odds of reporting consistent condom use were:** By age – OR = 0.85; p= 0.007 and with increased number of coital events – OR= 0.85; p= <0.001

			people		
Australia	De Visser 2004	Qualitative study	To examine delayed application of condoms and withdrawal among heterosexual young adults	N=35 men and women. 4 focus group discussion with 21 women & 3 FGDs with 14 men. In 2004. Age: 18-25 years	Both withdrawal and delayed application of condoms were more likely in regular than casual partnerships, to be negotiated and to occur if there was no perceived risk of STIs. **Withdrawal** was more likely to occur with casual partners if there was no condom available, and was systematically used with regular partners as a form of contraception. **Delayed application of condoms** was more likely if condoms are used only for contraception and less likely if there was perceived risk of STI transmission
Australia	De Visser & Smith.2000	Qualitative prospective study using diaries	To assess prevalence of 'condom cheats' – instances of condom use in which the condom is put on after initial penetration	Convenient sample of n=103 university students (37 men & 66 women) completed a 10-paged condom diary in 2000 Age: 18-29 years	A condom was used in 464 (50%) of sexual encounters. In 13% of these episodes condom was applied late. Late application of condom was related to less concern about partners' HIV status ($p< 0.01$); and less concern about pregnancy; with 20% of condoms used only as contraceptives. 70% used condom in the period of up to 6 months. 36% men and 39% women reported late application of a condom. 55% sometimes used condoms and 12.3% always used condoms ($p< 0.01$).

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Table 2.3 Condom use beyond South Africa					
Country	**Author/s**	**Design**	**Study Objective**	**Data Source & Sample**	**Findings**
DEMOGRAPHIC HEALTH SURVEYS/SEXUAL BEHAVIOUR SURVEYS					
Zambia		Sexual Behaviour household survey	To assess changes in knowledge, attitudes and sexual practices	N=3, 832, with 2,034 women aged 15-49 years and 1,798 men aged 15-59 in the 2000. Higher risk sex = sex with non-marital/non-cohabiting partner	**Knowledge about HIV/AIDS:** Heard of AIDS - 92% of women vs. 93% of men aged 15-19 & 96% of women vs. 95% of men aged 20-24; Knew that using condoms protect from HIV infection – 57% of women vs. 64% of men aged 15-19 & 71% of women vs. 76% of men aged 20-24; Knew that having only one sexual partner protects from HIV - 73% of women vs. 75% of men aged 15-19 & 83% of women vs. 81% of men aged 20-24; **Sexual behaviour among 15-24 age group:** Mean age at first sex – 17.1 for women vs. 18.0 for men; Having premarital sex in past year – 31% women vs. 36% men; Condom use at last sex – 36% women vs. 38% men; Condom use at last sex higher risk sex -38% for women vs. 41% for men
Mozambique		Demographic Health Survey-using a stratified probability-based sampling design	To provide current information on knowledge and attitudes about HIV/AIDS and sexual behaviour	N=12,087, with 12,193 women aged 15-59 and 2, 849aged 15-59 in 2003	**Knowledge about HIV/AIDS among 15-24 age group:** Heard of AIDS - 95% of women vs. 98% of men; Knew that using condoms protect from HIV infection – 56% women vs. 74% men; Knew that having only one sexual partner protects from HIV - 53% women vs. 66% men **Sexual behaviour among 15-24 age group:** Mean age at first sex – 16.1 for women vs. 16.2 for men; Sex before 15 years – 28% women vs. 26% men; Sex before 18 years – 79% women vs. 64% men (20-24 years) Having premarital sex in past year –54% women vs. 67% men; Condom use at first sex – 8% of both women and men; Condom use at last sex – 35% of both women and men; Condom use at last sex higher risk sex - 29% women vs. 33% men; Multiple partners in past year – 8% women vs. 39% men.
Botswana		Household survey	To assess knowledge, attitudes and sexual	N=4,267, with 2,304 women and 1,963 men interviewed in	**Knowledge about HIV/AIDS among 15-24 age group:** Heard of AIDS - 99% of women vs. 96% of men; Knew that using condoms protect from HIV infection – 93% women vs. 90% men;

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			behaviour known to be associated with HIV/AIDS/STD epidemic	the Botswana AIDS Impact survey (BAIS 9001)	Knew that having only one sexual partner protects from HIV - 84% of both women and men **Sexual behaviour among 15-24 age group:** Having premarital sex in past year –42% women vs. 39% men; Condom use at last sex – 76% women vs. 89% men; Condom use at last sex higher risk sex - 29% women vs. 34% men; Multiple partners in past year – 7% women vs. 15% men.
Namibia		Demographic Health Survey- using a stratified probability-based sampling design	To provide current information on knowledge and attitudes about HIV/AIDS and sexual behaviour	N= 9,709, with 6,755 women aged 15-49 and 2,954 men aged 15-59 in 2000	**Knowledge about HIV/AIDS among 15-24 age group:** Heard of AIDS - 98% of women vs. 100% of men; Knew that using condoms protect from HIV infection – 73% women vs. 86% men; Knew that having only one sexual partner protects from HIV - 75% women vs. 87% men **Sexual behaviour among 15-24 age group:** Mean age at first sex – 17.5 for women vs. 15.9 for men; Sex before 15 years – 9% women vs. 27% men; Sex before 18 years – 46% women vs. 69% men (20-24 years) Having premarital sex in past year – 46% women vs. 59% men; Condom use at last sex – 50% women vs. 70% men; Condom use at last sex higher risk sex - 48% women vs. 69% men; Multiple partners in past year – 4% women vs. 24% men.
Zimbabwe		Demographic Health Survey- using a stratified probability-based sampling design	To provide current information on knowledge and attitudes about HIV/AIDS and sexual behaviour	N= 8,516, with 5,907 women aged 15-49 and 2,609 men aged 15-59 in 1999	**Knowledge about HIV/AIDS among 15-24 age group:** Heard of AIDS - 96% of women vs. 99% of men; Knew that using condoms protect from HIV infection – 73% women vs. 82% men; Knew that having only one sexual partner protects from HIV - 73% women vs. 78% men **Sexual behaviour among 15-24 age group:** Mean age at first sex – 18.8 for women vs. 19.0 for men; Sex before 15 years – 9% women vs. 27% men; Sex before 18 years – 46% women vs. 69% men (20-24 years) Having premarital sex in past year – 15% women vs. 34% men; Condom use at last sex – 39% women vs. 69% men; Condom use at last sex higher risk sex - 42% women vs. 69% men; Multiple partners in past year – 4% women vs. 26% men.
Uganda	Tumwesigye Ingham &	Cluster and systematic	To establish level of	N = 445 youth aged 15-24.	47.2% were women, 64.7% aged 15-19 59.1% women used condom at first sex, 55% at most recent sex.

	Holmes 2005	sampling	condom use at first and most recent sex, identify factors associated with condom use, determine predictors of consistent condom use	Primary data from Ugandan DHS, WHO & modified pilot (in 2004).	43% men used condom at first sex, 57% at most recent sex. Condom use is common in steady relationships, among school-going women, Alcohol use in women significantly predicted inconsistent (34%) and no (28%) condom use. Among men consistent condom use was more common with younger youth than 20-24 year olds (p< 0.001), and predicted by location/residence.
OTHER STUDIES					
Zimbabwe	Meekers 2003.	Prospective cohort	To obtain detailed information on dynamics of condom use with various partner types, including consistency of use	N= 222 urban male workers (Oct-Nov 1999) Aged 20-35 years	35.6% of men were aged 20-24, 43.7% 25-29 and 20.7% 30 years and older Overall, 92.3% had ever used condoms and 52.7% used a condom at last sexual intercourse. **Men aged 20-24 years reported condom use:** 94.5% with someone just met, 86.4% with a casual partner, 79.5% with a regular partner and 11.8% with a spouse. 28% always used condoms with regular partners Consistent condom use was the highest for men aged 20-24 (p = 0.014) and those who were single
Zimbabwe	Pettifor, et al 2004c	Cross-sectional analysis of data from a cohort study	To explore the relationship between early age of coital debut (15 years or younger) and risk of HIV infection among sexually active urbanized women	N= 4,393 women completed questionnaire on sexual behaviour and tested for HIV (1999-2002). Aged 18-35 years	HIV prevalence was 40.1%. Median age at coital debut was 18 years (range 10-32 years). 11.8% reported coital debut at age of 15 or younger. **Multivariate analysis of early coital debut and behavioural factors:** Having more than one lifetime sexual partner (OR= 2.25); not completed high school (OR = 8.83); engaged in commercial sex work (OR = 2.23) after adjusting for age, education, living with partner, hormonal contraceptive use, condom use and ever engaging in commercial sex work. **Having coital debut at 15 or younger was significantly associated with HIV infection (p < 0.01):** 54.6% women with coital debut at 15 years or younger had HIV compared to 38.2% of women with coital debut older than 15 years. **Other factors associated with HIV infection were**: Being older (aged 25-35 years), over 9 years since sexual debut, not completing high school, no hormonal contraceptive use, ever using condom and ever engaging in commercial sex work.

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Uganda	Koenig et al 2004	Cross-sectional survey	To explore the linkages between coerced first sex and reproductive health behaviour	N = 575 women aged 15-19 years in 2001-2002.	13% said their first sex was before the age of 14, 46% at age 14 or 15 and 41% at age 16 or older. 14% reported coerced first sex. 26% whose first sex was before 14 years said they were coerced, 15% among first sex at 14/15 years and 10% among first sex at 16 or older. Young women who reported having been coerced at first sex more likely compared to those not coerced: to not be currently using contraceptives (18% vs. 34%); to have ever been pregnant (81% vs. 65%); to report two or more sexual partners (66% vs. 51%). **Condom use**: They were also less likely to report condom use at last sex (13% vs. 33% and OR = 0.3) and consistent condom use in the last 6 months (7% vs. 25% and OR = 0.2); and more likely to not have used condoms (75% vs. 59%).
Angola	Prata, Vahidnia & Fraser 2005	Stratified random sample	To identify determinants of condom use among Angolan youth	N = 1 995 sexually active youth, aged 15-24 in 2001.	58.3% of men in the 15-19 age group, and 58.8% of women in the 20-24 age group. 83-90% of men and women were single at the time of the interview. **Men were significantly more likely to consistently use condoms than women ($p < 0.05$) :** 17% vs. 11.5% in last three months; 18.7% vs. 13.3% if aged 15-19; 14.7% vs. 8.8% if aged 20-24; 25.5% vs. 18.5% if living in urban area and 13.9% vs. 8.7% if living in peri-urban areas; all years of education except beyond year grade 10; 18.6% vs. 13.5% if single; 22.3% vs. 16.7% if student and 11% vs. 4.1% if employed. Condom use at last sex was more significantly likely with casual and regular partners than spousal partner, but most with casual partners by both genders and age groups, by both types of residence, by years of education except years 6-7, by employment status except unemployed, and higher proportions with marital status though not significant. **The odds of consistent condom use were increased:** For men: if 8-9 years of education (1.7), having two or more partners in the last 3 months (1.7), agreeing that condoms are safe (1.6) and disagreeing that condoms diminish pleasure (1.8). The odds were reduced if married or cohabiting (0.5). For women: if 8-9 and 10 or more years of education, disagreeing that condoms diminish pleasure. The odds were reduced if married or cohabiting (0.1), equated condom use with lack of trust (0.5). **The odds of condom use at last sex were increased for youth;** Regular partner: if had 10 or more years of education (2.0), were married or cohabiting (2.3) or agreed that condoms prevent pregnancy (2.4). The odds were reduced if living in peri-urban areas (0.6), and equated condom use with lack of

					trust (0.5). Casual partner: if had 8-9 (2.8) and 10 or more (3.7) years of education, and thought condoms were affordable (1.7). The odds were reduced among casual partner in peri-urban areas, employed (0.6), embarrassed when buying condoms (0.5) or equated condom use with lack of trust (0.7).
Zambia	Benefo 2004	Analysis based on the Zambian Sexual Behaviour Survey	To understand if and how partner and relationship characteristics are independently associated with condom use within non-marital and non-cohabiting relationships	N=657 male and female reported relationships in 2000.	37% of male and 33% of female-reported relationships included condom use at last sexual. 64% of male and 23% of female-reported relationships had multiple partners in the last year. 35.7% of male and 37.5% of female-reported relationships reported casual sexual relationships 37% of male and 33% of female-reported relationships included condom use at last sexual. **Condom use at last sex was significantly more associated with: for instance,** For men: not having other partners in the last year and secondary schooling (OR= 2.1-2.7), being 5 or more years older than partner. The odd were reduced for each additional sexual partner in the last 12 months. For women: being younger, secondary schooling, having sex only once in a relationship, older age at first sex. Odd were reduced with increased age.

APPENDIX I

CONSENT TO PARTICIPATE IN RESEARCH EVALUATING *'STEPPING STONES'*

Introduction

HIV touches the lives of all of us in South Africa. The Government estimates that over three million people are infected with the virus. Unless we radically change our sexual practices, within ten years we will find that out of every four people, one will have the virus. HIV affects men and women of all ages, occupations and races living in all provinces. Many of us already have family members who have died from HIV, some of us may have it ourselves and most of the rest of us will soon find that some body close to us is infected. Unless we take the necessary precautions we could all contract HIV.

The problem is great and can seem terrifying and overwhelming, and yet the greatest tragedy of HIV is that we know how to prevent the infection. Other countries in Africa, most notably Uganda, have been able to harness the energies of all sectors of their society to fight the epidemic and have managed to turn back the tide of the disease. This has been done by achieving substantial changes in sexual behaviour. This can be done in South Africa too, but if it is to happen we all need to play our part.

1.1 Why do we need to undertake research on HIV prevention?

Health workers have known for many years what behaviour changes are needed to prevent HIV infection, but we do not have a good understanding of how to persuade people to change their behaviour. We have found that just telling people the facts about AIDS is not enough, we have to develop better approaches which help people overcome the barriers to changing their behaviour. One such approach is called "Stepping Stones".

1.2 What is "Stepping Stones"?

It is a participatory training programme which is designed to be educational and also fun, and a person does not have to be well educated to learn and take part. It is used with both

men and women, but in separate groups. The programme is made up of 14 separate sessions which look at gender roles, what is love?, sexual problems, sexual health, HIV, safer sexual practices, gender violence, why we behave in the ways that we do, loss and dying and provides training in communication and relationship skills. There are also five broader meetings in the programme. Three of these are just for people who are participating in Stepping Stones training and enable the single sex peer groups to present their work to each other and communicate with each other. The other two are held at the start and end of the programme and are designed to involve the broader community. In the final meeting participants from Stepping Stones workshops make special requests to the broader community. These are requests concerning their own lives, HIV and gender violence, which they would like the broader community to accept in order to improve life in the community.

This long version of Stepping Stones has been used in South Africa for some years and people have been very enthusiastic about it. However we want to test for sure whether it can change sexual and reproductive health practices. If it is successful Stepping Stones could make a big difference to our communities and prevent many people from becoming infected with HIV and provide a much more supportive environment for people who have it. In order to see how good it is we have prepared a short version of Stepping Stones, lets call that 'Stepping Stones Short', which takes three hours and addresses HIV, sexually transmitted diseases and safer sexual practices. We want to compare the two versions of Stepping Stones.

1.3 The research

I am being asked to participate in a scientific study to see which of the two versions of Stepping Stones is better at preventing HIV infections and changing sexual practices. I understand that one group of people will receive the long version of Stepping Stones now and another group will receive the short version. I understand that the group which will get Stepping Stones Short now will be offered the long version after two years if they want it.

1.4 Which intervention group?

I understand that I will not find out whether I will get Stepping Stones long or short until after have agreed to participate in the study. I understand that the process will be at random or like tossing a coin and I agree to abide by this.

1.5

In addition to agreeing to participate in the health promotion programme, I agree to participate in the research by completing a questionnaire and giving a small sample of blood from my arm.

1.6 The questionnaire

I understand that the questionnaire will be completed by an interviewer. I understand that this will include questions about my home, my health, sexual and reproductive health matters, my attitudes towards condoms and relationships between men and women and some questions about my relationships. I understand that there will be some questions about things which are often thought of as secrets but which can often influence whether or not a person is at risk of HIV. I understand that everything which I tell the interviewer will be kept secret. I understand that even the person who is conducting the group will not know what I say. I understand that I have the right not to answer any questions that I do not wish to answer. I understand that the questionnaire will take about 30 minutes to complete.

1.7 Blood test

I agree to give a small amount of blood. I understand that this will be tested for HIV now. I understand that this will involve a small amount of discomfort. I understand that the nurse will know whether I have HIV within 10-20 minutes of doing the test.

Many people are very worried about HIV infection and are very keen to know whether they have it or not. I understand that before having the test I will receive counselling and if I opt to have the result I will receive counselling again afterwards. I understand that I may choose whether to get the result and will not be told it, even if it is positive if I opt not to hear it. I understand that the result will be kept secret. The information will only be communicated to a study leader in Pretoria and she will not know my name. The information will not be given to anyone else who may come to learn that we have it. I understand that if I am found to have HIV that it is a very serious illness which cannot be cured. I will not be excluded from the study.

I understand that after the blood test the blood specimen will be stored and I agree that it can be tested in future, but only for research purposes. I understand that it will not be sold or used for any commercial purposes. I understand that any results which arise from future testing will also be kept confidential.

1.8 If I agree to hear my HIV result

I understand that I will be told the result if I agree to this. I understand that if the result is negative it means that I most probably do not have HIV, although there is a small chance that I could have it and it not be revealed if I only recently caught it. I understand that if the result is positive, it will be likely that I have been infected with the virus but to be completely sure I will need another test. I understand that the study team will help me go to a clinic run by PHASO in Mthatha for another test, counselling and basic care. They will pay for the costs of this.

1.9 How often will the questionnaire be completed and the blood test taken?

In agreeing to participate in this research, I agree to work with the study team over a period of two years. As well as completing a questionnaire and giving blood now, I agree to give an interview again in six months time. I understand that there will be no blood test then. I understand that I will be asked to complete the questionnaire again and give blood again in a year and then for the last time one year after that. I agree to the study team taking my photograph and making me and ID card for the study which I will bring every time I am interviewed. I understand that every time I give blood I will be asked whether I wish to hear my HIV results or not. I agree that if I move I will leave an address and that the study team may contact me at my new address.

What will be the benefits of participation?

1.9.1 Benefits for me

HIV/AIDS is a major problem in South Africa; it is believed that as many as one out of every ten people has the infection. The interventions will provide me with information, attitudes and skills which will help protect you against HIV. If I decide to hear my HIV test results I will also benefit from knowing my status. It has been explained to me that if I am negative this can help me make decisions to protect myself to make sure I remain negative. If I am positive it is important to know this so I can try and look after myself and make sure that I stay well for as long as possible and can plan for the future. It has been explained to me that I will be given R20 to compensate me for time spent completing the questionnaire and giving blood every time I am interviewed.

Benefits for society

It has been explained to me that overcoming HIV/AIDS is one of the most important challenges facing South Africa this century. In order to do this effectively it is necessary to know whether particular tools to have to use to do this are effective, before they are made them widely available. By participating in this study, I will be playing your part in the broader struggle against HIV and AIDS.

What are the risks?

I understand that there are no major medical risks involved with participating in this study. I understand that some of the questions may cause emotional distress when responding to them, but that the study staff will provide me with support to minimise these risks. I understand that there is a small risk that certain information could become known. The study staff have taken precautions to protect my information. They will identify me only by ID number, not by my name. Only the nurses and the study leader in Pretoria will know my HIV result. I understand that all the staff involved in this study have been give special training on the importance of confidentiality. I understand that there is a small risk that information I disclose in the intervention workshops could become known. I understand that I do not have to share information with a group that I do not want to and that all group members will also discuss the importance of confidentiality.

APPENDIX II

Can we change our mind about participating after we agree?
I understand that at any stage I can change my mind and no longer participate. I can then stop participating and I will not be punished in any way for this.

Having read and understood the above explanation,

I, _____ Of _____, agree

to participate in the *Stepping Stones* evaluation study.

Signed _____Date_____

Witness_____ Date _____

APPENDIX III

THE STEPPING STONES STUDY

(ENGLISH)

WOMEN'S QUESTIONNAIRE

BASELINE

COVER

Study ID number: _____

Field Edit _____(initial) Study ID Checked: _____ (initial)

MRC
SOUTH AFRICA

APPENDIX III

STEPPING STONES STUDY
WOMEN'S (ENGLISH) QUESTIONNAIRE

Study identification number	[ ] [ ] [ ] [ ]
Visit Number	[1]
Interviewer name	1 = Sanele 5 = Andiswa 2 = Bongwekazi 6 = Nocawe 3 = Nwabisa 7 = Sandisiwe 4 = Nelisiwe 8 = Veliswa
Date of interview	__ __ / __ __ / 200 __ D D M M Y
Interview Site	Specify:
Cluster number:	[ ] [ ]
Start Time of Interview	_____h_____

Data Entry:

First Entry: __ __ / __ __ / 200 __ _____ Initials
Second Entry: __ __ / __ __ / 200__ _____ Initials
D D M M Y

Notes and Queries:

APPENDIX III

SECTION ONE: BACKGROUND

The first questions I want to ask you are about yourself and your home. Please try and relax, there are no right or wrong answers. Remember that everything you tell me will be kept secret. If there is a question you do not want to answer please tell me and we will skip to the next question.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is your date of birth?	[ ] [ ] [ ] [ ] 19 [ ] [ ] D D M M Y Y	
102	What is the highest standard or grade you have completed at school?	SUBA/GRADE 1 ……..……1 SUB B/GRADE 2……...2 STD 1/GRADE 3……3 STD 2/GRADE 4……4 STD 3/GRADE 5……5 STD 4/GRADE 6……6 STD 5/GRADE 7……..….7 STD 6/GRADE 8……..….8 STD 7/GRADE 9……..….9 STD 8/GRADE 10……10 STD 9/GRADE 11……11 STD 10/GRADE 12…….12 INCOMPLETE FURTHER DEGREE OR QUALIFICATION……..…..13 COMPLETED FURTHER DEGREE OR QUALIFICATION……..….14 NO SCHOOL…….15	
103	Are you currently studying?	YES .....1 NO 0	
104	Apart from your involvement in this project, are you a member of any clubs or groups or societies?	YES .....1 NO……0	→106
105	How many other clubs or groups or societies are you a member of?	[ ] [ ] number	
106	Would you describe yourself as active in your church?	YES……1 NO ……0	
107	Have you read a newspaper or magazine in the last week?	YES .....1 NO 0	
108	Do you listen to the radio at least once a week?	YES .....1 NO 0	
109	Do you watch TV at least once a week?	YES .....1 NO 0	
110	Would you say that the people in your home often, sometimes, seldom or never go without food?	OFTEN……..……..……1 SOMETIMES……2 SELDOM……..……..……..3 NEVER……..……..…..4	
111	Would you say that people in your home often, sometimes, seldom or never have a day when they do not eat meat?	OFTEN HAS NO MEAT……..…..……1 SOMETIMES……2 SELDOM……..……..……..3 ALWAYS HAS MEAT……..……..….4 VEGETARIAN……5	
112	If a person became ill in your home and R100 was needed for treatment or medicines, would you say it would be very easy, easy, quite difficult or very difficult to find the money?	VERY DIFFICULT……..……..……1 QUITE DIFFICULT……..2 EASY……..……..3 VERY EASY……..……..….4	

APPENDIX III

SECTION TWO: IDEAS ABOUT CONDOM USE

Now I would like to ask you some questions about using condoms can you tell me if you strongly agree, agree, disagree or strongly disagree with the following statements:

		SA	A	D	SD	
201	Using a condom for sex would be embarrassing	1	2	3	4	
202	If I was going to have sex, I would not use a condom because I want it 'flesh to flesh'	1	2	3	4	
203	I know how to use a condom	1	2	3	4	
204	If you have been using condoms but miss them one or two times there is no point using them any more with that partner	1	2	3	4	
205	A condom may come off in a woman's vagina but it is impossible to lose one there	1	2	3	4	
206	If a man and woman trust each other they do not need to use a condom	1	2	3	4	
207	If a person wants to use a condom you know they probably have HIV	1	2	3	4	
208	If my partner suggested we used a condom I would think she was having sex with other people	1	2	3	4	
209	If I asked my partner to use a condom, she would think I am having sex with other people.	1	2	3	4	
210	I could definitely ask my current boyfriend to use a condom	1	2	3	4	

SECTION THREE: WOMEN'S SEXUAL HEALTH

The next set of questions are about different aspects of your health.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
301	Have you ever had sex?	YES ..... 1 NO……0	→END
302	When did you first have sexual intercourse with a man or a boy?	15 [ ] [ ] [ ][ ] [ ] [ ] M M Y Y Y Y	
303	Which of the following statements most closely describes your experiences the first time you had sexual intercourse? I was willing; I was persuaded; I was tricked; I was forced; I was raped.	I was willing……1 I was persuaded……2 I was tricked ……3 I was forced ……4 I was raped ….……5	
304	Who was this with?	BOYFRIEND……..1 FAMILY MEMBER……..……2 TEACHER…….3 BOY FROM SCHOOL/AREA……4 MAN FROM AREA……5 STRANGER/UNKNOWN PERSON…….6 FRIEND OF THE FAMILY……..7 OTHER……8	
305	Have you ever used a condom?	YES ..... 1 NO……0	→401
306	Can you remember the month and year when you first had sex with a condom?	15 [ ] [ ] [ ][ ] [ ] [ ] M M Y Y Y Y	

APPENDIX III

SECTION FOUR: SEXUAL BEHAVIOUR The next questions are about your sexual relationships. Please remember that everything you say will be kept secret and your name will not appear anywhere on the questionnaire.			
401	When was the last time you had sex?	[ ] [ ]DAYS (IF LESS THAN 14 DAYS) [ ] WEEKS (IF 2-8 WEEKS) [ ] [ ] MONTHS (IF OVER 8 WEEKS)	
402	The last time you had sex did you use a condom?	YES .....1 NO……..0	→ 406
403	Did you use a condom for every round?	YES .....1 NO……..0	
404	Who brought the condom, was it you or your partner?	SELF.....1 PARTNER……..2 BOTH…….3	
405	Did you experience: a) condom breaking b) condom slipped off c) condom only put on half way d) condom was removed	a) CONDOM BROKE……..YES =1 NO=0 b) SLIPPED OFF ……..…YES=1 NO=0 c) ONLY PUT IT ON HALF WAY….YES =1 NO=0 d) CONDOM REMOVED WHEN LOVE MAKING CONTINUED…..YES =1 NO=0	
	We know that people have different types of affairs. We have our 5-60s or main partners, our khwapheni and sometimes we have sex with a person who we never see again or never have sex with again, lets call these once-off partners		
406	The last time you had sex was it with a 5-60/main partner, or khwapeni, or once off partner or ex-partner?	MAIN PARTNER……..1 KHWAPENI……..2 ONE OFF……..3 EX-PARTNER……..4	→ 407
CHK13	CHECK Q. 406 IF SHE HAS HAD SEX WITH HER MAIN PARTNER? YES → 607 NO→ 611		
407	Have you used condoms with your 5-60 in the past year? Would you say you used them always, often or sometimes?	NO USE.....1 ALWAYS .....2 OFTEN .....3 SOMETIMES…….4	→ 411 → 411 → 411
408	Have you ever suggested to your 5-60 that you use a condom to protect you from HIV?	YES .....1 NO 0	→ 410
409	How did she respond? RECORD ALL MENTIONED	AGREE TO USE ONE…… YES =1 NO=0 BECAME ANGRY ……..YES =1 NO=0 SAID HE DID NOT LIKE THEM… YES =1 NO=0 HE WAS OFFENDED…… YES =1 NO=0 OTHER……YES =1 NO=0 SPECIFY_____	ALL TO → 411
410	What is the main reason why you have not suggested condom use? RECORD ALL MENTIONED	NEVER THOUGHT OF ASKING….YES =1 NO=0 TRUST EACH OTHER … ……..YES =1 NO=0 DOES NOT KNOW HOW TO ASK…YES =1 NO=0 FEAR HE WOULD LEAVE……. YES =1 NO=0 HE DOES NOT LIKE THEM……. YES =1 NO=0 TRYING TO GET PREGNANT…… YES =1 NO=0 OTHER…… YES =1 NO=0 SPECIFY_____	
411	Where can you get condoms in this area? RECORD ALL MENTIONED	CLINIC…… YES =1 NO=0 SHOP…… YES =1 NO=0 SHEBEEN…… YES =1 NO=0 SCHOOL……..…… YES =1 NO=0 CHIEF/COUNSELOR…… YES =1 NO=0 OTHER……. YES =1 NO=0	
412	Would you say that getting a condom in this area is very easy, easy, quite difficult or very difficult?	VERY EASY……..1 EASY……2 QUITE DIFFICULT……..…3 VERY DIFFICULT…….4	
413	How many 5-60s have you had sex with in the last year?	[ ] [ ] NUMBER (IF NONE ENTER 00)	
414	How many khwapeni have had sex with during the past year?	[ ] [ ] NUMBER (IF NONE ENTER 00)	

415	How many men have you had sex with just once during the past year?	[ ] [ ] NUMBER (IF NONE ENTER 00)	
CHK 14	ANY KHWAPHENI OR ONE OFF PARTNERS MENTIONED? IF YES go to Q. 416 OTHERWISE go to CHK 15		
416	Over the last year have you used condoms with khwapeni and one off partners? Would you say you used them always, often or sometimes?	NO USE.....1 ALWAYS.....2 OFTEN.....3 SOMETIMES.....4	ALL USERS → 421
417	Have you ever suggested to khwapeni or once off partner that you use a condom to protect you from HIV?	YES.....1 NO.....0	→ 420
418	How many times have you suggested condom use to khwapheni or once off partners?	[ ] [ ] NUMBER	
419	What responses did you get? RECORD ALL MENTIONED	AGREE TO USE ONE…… YES =1 NO=0 BECAME ANGRY ……..YES =1 NO=0 SAID HE DID NOT LIKE THEM… YES =1 NO=0 HE WAS OFFENDED…… YES =1 NO=0 OTHER……YES =1 NO=0 SPECIFY_____	ALL TO → CHK15
420	What is the main reason why you have not suggested condom use? RECORD ALL MENTIONED	NEVER THOUGHT OF ASKING….YES =1 NO=0 TRUST EACH OTHER … ……..YES =1 NO=0 DOES NOT KNOW HOW TO ASK…YES =1 NO=0 FEAR HE WOULD LEAVE……. YES =1 NO=0 HE DOES NOT LIKE THEM……. YES =1 NO=0 TRYING TO GET PREGNANT…… YES =1 NO=0 OTHER…… YES =1 NO=0 SPECIFY_____	
CHK 15	CHECK Q.s 407 AND 416 - HAS SHE USED CONDOMS IN THE PAST YEAR? YES GO TO 421 - NO GO TO 422		
621	Over the last year how often have you experienced the condom breaking or slipping off or only put it on half way through or have you taken it off and continued love making?	EVERY TIME USED.....1 OFTEN.....2 SOMETIMES.....3 NEVER……4 NO USE……..5	
	I would like to ask you about the number of sexual partners you have had in your whole life including this year. I want to know about the number of different partners.		
622	How many 5-60s have you had sex with in your life?	[ ] [ ] NUMBER ENTER 00 IF NONE	
623	How many khwapeni have you had sex with in your life?	[ ] [ ] NUMBER ENTER 00 IF NONE	
624	How many men have you had sex with just once in your life?	[ ] [ ] NUMBER ENTER 00 IF NONE	

FINISH

I would like to thank you very much for helping us. We have talked about some very difficult things today. I appreciate the time you have taken. I realise that some of these questions may have been difficult for you to answer, but we have to ask them if we are to really understand men's lives. We really appreciate your participation in this study. By sharing this personal information with us and attending the Stepping Stones group you are helping us with our research and that will ultimately help many other people in the country.

End Time of Interview: _____ h _____

THE STEPPING STONES STUDY

(ENGLISH)

MEN'S QUESTIONNAIRE

BASELINE

COVER

Study ID number: _____

Field Edit _____(initial) Study ID Checked: _____ (initial)

MRC
SOUTH AFRICA

APPENDIX IV

STEPPING STONES STUDY
MEN'S (ENGLISH) QUESTIONNAIRE

Study identification number	[ ] [ ] [ ] [ ]
Visit Number	[1]
Interviewer name	1 = Yandisa 4= Ayanda 2 = Nkululeko 5= Mvuyo 5 = Mthokozisi 6= Lungelo
Date of interview	__ __ / __ __ / 200 __ D D M M Y
Interview Site	Specify:
Cluster number:	[ ] [ ]
Start Time of Interview	_____h_____

Data Entry:

First Entry: __ __ / __ __ / 200 __ _____ Initials
Second Entry: __ __ / __ __ / 200__ _____ Initials
D D M M Y

Notes and Queries:

APPENDIX IV

SECTION ONE: BACKGROUND

The first questions I want to ask you are about yourself and your home. Please try and relax, there are no right or wrong answers. Remember that everything you tell me will be kept secret. If there is a question you do not want to answer please tell me and we will skip to the next question.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is your date of birth?	[ ] [ ] [ ] [ ] 19 [ ] [ ] D D M M Y Y	
102	What is the highest standard or grade you have completed at school?	SUBA/GRADE 1 ……..…….1 SUB B/GRADE 2……...2 STD 1/GRADE 3……3 STD 2/GRADE 4……4 STD 3/GRADE 5……5 STD 4/GRADE 6……6 STD 5/GRADE 7……..….7 STD 6/GRADE 8……..….8 STD 7/GRADE 9……..….9 STD 8/GRADE 10……10 STD 9/GRADE 11……11 STD 10/GRADE 12…….12 INCOMPLETE FURTHER DEGREE OR QUALIFICATION…….…..13 COMPLETED FURTHER DEGREE OR QUALIFICATION……..….14 NO SCHOOL…….15	
103	Are you currently studying?	YES .....1 NO 0	
104	Apart from your involvement in this project, are you a member of any clubs or groups or societies?	YES .....1 NO……0	→106
105	How many other clubs or groups or societies are you a member of?	[ ] [ ] number	
106	Would you describe yourself as active in your church?	YES……1 NO …….0	
107	Have you read a newspaper or magazine in the last week?	YES .....1 NO 0	
108	Do you listen to the radio at least once a week?	YES .....1 NO 0	
109	Do you watch TV at least once a week?	YES .....1 NO 0	
110	Would you say that the people in your home often, sometimes, seldom or never go without food?	OFTEN……..……..……1 SOMETIMES……2 SELDOM……..……..……..3 NEVER……..……..…..4	
111	Would you say that people in your home often, sometimes, seldom or never have a day when they do not eat meat?	OFTEN HAS NO MEAT……..…..……1 SOMETIMES……2 SELDOM……..……..……..3 ALWAYS HAS MEAT……..……..…4 VEGETARIAN……5	
112	If a person became ill in your home and R100 was needed for treatment or medicines, would you say it would be very easy, easy, quite difficult or very difficult to find the money?	VERY DIFFICULT……..……..…..……1 QUITE DIFFICULT……..…2 EASY……..…..……..3 VERY EASY……..……..….4	

APPENDIX IV

SECTION TWO: IDEAS ABOUT CONDOM USE

Now I would like to ask you some questions about using condoms can you tell me if you strongly agree, agree, disagree or strongly disagree with the following statements:

		SA	A	D	SD	
201	Using a condom for sex would be embarrassing	1	2	3	4	
202	If I was going to have sex, I would not use a condom because I want it 'flesh to flesh'	1	2	3	4	
203	I know how to use a condom	1	2	3	4	
204	If you have been using condoms but miss them one or two times there is no point using them any more with that partner	1	2	3	4	
205	A condom may come off in a woman's vagina but it is impossible to lose one there	1	2	3	4	
206	If a man and woman trust each other they do not need to use a condom	1	2	3	4	
207	If a person wants to use a condom you know they probably have HIV	1	2	3	4	
208	If my partner suggested we used a condom I would think she was having sex with other people	1	2	3	4	
209	If I asked my partner to use a condom, she would think I am having sex with other people.	1	2	3	4	
210	I could definitely ask my current girlfriend to use a condom	1	2	3	4	

SECTION THREE: MEN'S SEXUAL HEALTH

The next set of questions are about different aspects of your health.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
301	Have you ever had sex?	YES .....1 NO……0	→END
302	When did you first have sexual intercourse with a woman or girl?	15 [ ] [ ] [ ][ ] [ ] [ ] M M Y Y Y Y	
303	Which of the following statements most closely describes your experiences the first time you had sexual intercourse? I was willing; I was persuaded; I was tricked; I was forced; I was raped.	I was willing…….1 I was persuaded……2 I was tricked ……3 I was forced …….4 I was raped ….……5	
304	Who was this with?	GIRLFRIEND……..1 FAMILY MEMBER……..……2 TEACHER…….3 GIRL FROM SCHOOL/AREA……4 WOMAN FROM AREA……5 STRANGER/UNKNOWN PERSON…….6 FRIEND OF THE FAMILY……..7 OTHER……8	
305	Have you ever used a condom?	YES .....1 NO……0	→401
306	Can you remember the month and year when you first had sex with a condom?	15 [ ] [ ] [ ][ ] [ ] [ ] M M Y Y Y Y	

APPENDIX IV

SECTION FOUR: SEXUAL BEHAVIOUR The next questions are about your sexual relationships. Please remember that everything you say will be kept secret and your name will not appear anywhere on the questionnaire.			
401	When was the last time you had sex?	[ ] [ ]DAYS (IF LESS THAN 14 DAYS) [ ] WEEKS (IF 2-8 WEEKS) [ ] [ ] MONTHS (IF OVER 8 WEEKS)	
402	The last time you had sex did you use a condom?	YES .....1 NO……..0	→ 406
403	Did you use a condom for every round?	YES .....1 NO……..0	
404	Who brought the condom, was it you or your partner?	SELF.....1 PARTNER……..2 BOTH……..3	
405	Did you experience: a) condom breaking b) condom slipped off c) condom only put on half way d) condom was removed	a) CONDOM BROKE……..YES =1 NO=0 b) SLIPPED OFF ……..…YES=1 NO=0 c) ONLY PUT IT ON HALF WAY….YES =1 NO=0 d) CONDOM REMOVED WHEN LOVE MAKING CONTINUED…..YES =1 NO=0	
	We know that people have different types of affairs. We have our 5-60s or main partners, our khwapheni and sometimes we have sex with a person who we never see again or never have sex with again, lets call these once-off partners		
406	The last time you had sex was it with a 5-60/main partner, or khwapeni, or once off partner or ex-partner?	MAIN PARTNER……..1 KWAPENI……..2 ONCE OFF……..3 EX-PARTNER……..4	→ 407
CHK13	CHECK Q. 406 IF HE HAS HAD SEX WITH HIS MAIN PARTNER? YES → 607 NO→ 611		
407	Have you used condoms with your 5-60 in the past year? Would you say you used them always, often or sometimes?	NO USE.....1 ALWAYS.....2 OFTEN.....3 SOMETIMES……..4	 → 411 → 411 → 411
408	Have you ever suggested to your 5-60 that you use a condom to protect you from HIV?	YES .....1 NO.....0	 → 410
409	How did she respond? RECORD ALL MENTIONED	AGREE TO USE ONE…… YES =1 NO=0 BECAME ANGRY ……..YES =1 NO=0 SAID SHE DID NOT LIKE THEM… YES =1 NO=0 SHE WAS OFFENDED…… YES =1 NO=0 OTHER……YES =1 NO=0 SPECIFY_____	 ALL TO → 411
410	What is the main reason why you have not suggested condom use? RECORD ALL MENTIONED	NEVER THOUGHT OF ASKING….YES =1 NO=0 TRUST EACH OTHER … ……..YES =1 NO=0 DOES NOT KNOW HOW TO ASK…YES =1 NO=0 FEAR SHE WOULD LEAVE……. YES =1 NO=0 SHE DOES NOT LIKE THEM……. YES =1 NO=0 TRYING TO GET PREGNANT…… YES =1 NO=0 OTHER…… YES =1 NO=0 SPECIFY_____	
411	Where can you get condoms in this area? RECORD ALL MENTIONED	CLINIC…… YES =1 NO=0 SHOP…… YES =1 NO=0 SHEBEEN…… YES =1 NO=0 SCHOOL…….…… YES =1 NO=0 CHIEF/COUNSELOR…… YES =1 NO=0 OTHER…… YES =1 NO=0	
412	Would you say that getting a condom in this area is very easy, easy, quite difficult or very difficult?	VERY EASY……..1 EASY……2 QUITE DIFFICULT……..…3 VERY DIFFICULT……4	
413	How many 5-60s have you had sex with in the last year?	[ ] [ ] NUMBER (IF NONE ENTER 00)	
414	How many khwapeni have had sex with during the past year?	[ ] [ ] NUMBER (IF NONE ENTER 00)	

415	How many women have you had sex with just once during the past year?	[ ] [ ] NUMBER (IF NONE ENTER 00)	
CHK 14	ANY KHWAPHENI OR ONCE OFF PARTNERS MENTIONED? IF YES go to Q. 416 OTHERWISE go to CHK 15		
416	Over the last year have you used condoms with khwapeni and one off partners? Would you say you used them always, often or sometimes?	NO USE.....1 ALWAYS.....2 OFTEN.....3 SOMETIMES.....4	ALL USERS → 421
417	Have you ever suggested to khwapeni or once off partner that you use a condom to protect you from HIV?	YES.....1 NO.....0	→ 420
418	How many times have you suggested condom use to khwapeni or once off partners?	[ ] [ ] NUMBER	
419	What responses did you get? RECORD ALL MENTIONED	AGREE TO USE ONE…… YES =1 NO=0 BECAME ANGRY ……..YES =1 NO=0 SAID SHE DID NOT LIKE THEM… YES =1 NO=0 SHE WAS OFFENDED…… YES =1 NO=0 OTHER……YES =1 NO=0 SPECIFY_____	ALL TO → CHK15
420	What is the main reason why you have not suggested condom use? RECORD ALL MENTIONED	NEVER THOUGHT OF ASKING….YES =1 NO=0 TRUST EACH OTHER … ……..YES =1 NO=0 DOES NOT KNOW HOW TO ASK…YES =1 NO=0 FEAR SHE WOULD LEAVE……. YES =1 NO=0 HE DOES NOT LIKE THEM……. YES =1 NO=0 TRYING TO GET PREGNANT…… YES =1 NO=0 OTHER…… YES =1 NO=0 SPECIFY_____	
CHK 15	CHECK Q.s 407 AND 416 - HAS HE USED CONDOMS IN THE PAST YEAR? YES GO TO 421 - NO GO TO 422		
621	Over the last year how often have you experienced the condom breaking or slipping off or only put it on half way through or have you taken it off and continued love making?	EVERY TIME USED.....1 OFTEN.....2 SOMETIMES.....3 NEVER……4 NO USE……..5	
	I would like to ask you about the number of sexual partners you have had in your whole life including this year. I want to know about the number of different partners.		
622	How many 5-60s have you had sex with in your life?	[ ] [ ] NUMBER ENTER 00 IF NONE	
623	How many khwapeni have you had sex with in your life?	[ ] [ ] NUMBER ENTER 00 IF NONE	
624	How many women have you had sex with just once in your life?	[ ] [ ] NUMBER ENTER 00 IF NONE	

FINISH

I would like to thank you very much for helping us. We have talked about some very difficult things today. I appreciate the time you have taken. I realise that some of these questions may have been difficult for you to answer, but we have to ask them if we are to really understand men's lives. We really appreciate your participation in this study. By sharing this personal information with us and attending the Stepping Stones group you are helping us with our research and that will ultimately help many other people in the country.

End Time of Interview: _____ h _____