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Narratives around sexual behaviour and decisions regarding treatment-seeking of adolescent females who contracted a sexually transmitted infection: Birth to Twenty cohort.

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Degree of Masters in Public Health by coursework and research report

Maternal and Child

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Table of Contents

Abstract 5

Acknowledgements 6

List of Figures 7

Chapter 1 8

1.1. Introduction 8

1.2. Literature review 9

1.2.1. The Macro Context: Proximate Determinants 12

1.2.1.1. Adolescents and Sexual Behaviour 12

1.2.1.1.1. School-leaving and Pregnancy 15

1.2.1.1.2. Adolescents Knowledge, Attitudes and Perceptions of STIs 16

1.2.1.2. Adolescent Treatment-seeking Behaviour 16

1.2.2. Structural Capacity 20

1.2.2.1. Health Care Workers' Knowledge 20

1.2.2.2. Processes: Adolescent Services 21

1.2.2.3. Resources 22

1.2.3. Outcomes: Intervention Programmes for Change in Sexual Behaviour and Treatment-seeking Behaviour 23

1.2.4. Summary 24

2. Chapter 2

2.1. Problem Statement and Study Population 26

2.1.1. Study Population 27

2.2. Purpose of Study 29

2.3. Justification of Problem 30

2.4. Study Objectives 31

3. Chapter 3

3.1. Materials and Methods 32

3.1.1. Definition of Terms 32

3.1.2. Selection of Study Sample 33

3.1.3. Training in Qualitative Studies 33
3.1.4. Pilot 34
3.1.5. Procedure 35
3.1.6. Data Analysis 36
3.1.7. Ethics 37
4. Chapter 4: Results and Discussion
4.1. Perceptions of STI/HIV and Personal Risk 38
4.1.1. Life Orientation Skills and the Prevention of STI/HIV 40
4.2. Sexual Behaviour 42
4.2.1. Circumstances Around First Sexual Experience 44
4.2.2. Faithfulness within Relationships 46
4.2.3. Peer Pressure and Trust 49
4.2.4. Sexual Behaviour Modification and Condom use 51
4.2.5. Pregnancy, Contraception and School-leaving 52
4.2.6. Transactional Sex with Older Men (“Sugar Daddies”) 54
4.3. Treatment-seeking Behaviour in Relation to STIs 56
4.3.1. Clinical Follow-up 56
4.3.2. Clinic Experiences 58
5. Chapter 5: Conclusions
5.1. Perceptions and Stigma 62
5.2. Sexual Behaviour 63
5.3. Treatment-seeking Behaviour 64
5.4. Relevance to the Conceptual Framework Used 64
5.5. Relevance to Society 65
5.6. Research Gaps 66
5.7. Next Research Steps Following This Study 67
5.8. Researchers Observations 68
5.9. Limitations 69
5.10. References 71
6. Appendices end

Declaration

I, Vanessa Cecilia Quan, declare that this is research report is my own work. It is being submitted for the degree of Masters in Public Heatlh in the University of the Witwatersrand, Johannesburg. It has not been previously submitted for any degree or examination at this or any other University.

 (signature)

…15th…...day of ……March……(month), 2012

Abstract

Adolescent sexual behaviour related to low condom-use and early sexual debut has been a concern in the transmission of sexually transmitted infections (STIs) and HIV. Treatment-seeking behaviour is a problem in adolescents due to embarrassment and unfriendly health care services. The Birth to Twenty study group (Bt20) is a cohort of singletons born in 1990 with approximately 10% having tested positive for STIs at an early age. Their sexually activity and unprotected sex practices have increased their risk for HIV infection. The objectives of this study were to explore the perceptions, sexual behaviour and treatment-seeking behaviour of a sample of girls who had a previous STI, through their narratives.

One-on-one narrative interviews were done on 19 girls with the aid of an interview schedule. A life history of their sexual encounters was documented. The interviews were taped and transcribed. Thematic analysis was performed.

The majority of the girls had no knowledge of STIs before they were counselled by the Bt20 nurses yet 50% of the girls used condoms in their first sexual experiences. Once counselled, almost all the girls went on to seek treatment for their STI. A third of the girls reported poor service at the clinic and would prefer to be treated either privately or at Bt20 if possible. Information regarding the role of STIs in the transmission of HIV seems to be unclear. Improving the life orientation programme at schools with a focus on STIs and pregnancy would positively impact on HIV transmission. One-on-one counselling is effective but may not be feasible in under-resourced communities and the continued education of nurses in clinics, whilst increasing the number of adolescent friendly clinics, must be prioritised.

Acknowledgements

Professor Shane Norris and Dr Khin San Tint for their invaluable supervision, the staff of Birth to Twenty especially Sr Thokozile Lephoto in assisting me with the interviews and Daniel for the assistance with qualitative research methodologies, Mr Stuart Miller for his ongoing support and editing skills and to the participants for volunteering their information so openly.

List of Figures

1. Figure 1: Proximate-determinants conceptual framework for factors affecting the risk of sexual transmission of HIV. (Boerma and Weir, 2005)

2. Figure 2: Conceptual framework of the Public Health System (PHS) as a basis for measuring system performance (Handler 2001)

3. Figure 3: Summarised total costs for the low cost and high cost scenarios. Source: NSP 2007-2011

Chapter 1

1.1 Introduction

Sexually transmitted infections (STIs) are an important cause of HIV transmission and acquiring an STI is synonymous with unprotected sex. Young women are at a higher risk of contracting STIs than young men by virtue of biological factors as well as proximate determinant factors including the inability to negotiate safe sex. Children from the Birth to Twenty (Bt20) cohort, a cohort of singleton babies born in 1990 in the greater Johannesburg area and monitored annually, were tested for an STI when they were 17 or 18 years old. Some of these adolescent girls had been sexually active from a very young age and tested positive for STIs. Early sexual debut and risky adolescent behaviour, like unprotected sex, makes adolescent girls a very high-risk group in the transmission of STIs and HIV. Pettifor et al (2004a), and others, have published irregular reports on HIV and sexual behaviour amongst the youth in South Africa. Whilst there are plans for these reports to be published every two years, the last one available was from 2004. Along with this, there are few studies done on treatment-seeking behaviour with a focus on adolescents and even fewer within South Africa. My study serves to explore the perceptions and practice of young girls from the Bt20 cohort around sexual behaviour and treatment-seeking behaviour.

1.2 Literature Review

Sub-Saharan Africa is the global epicenter of the AIDS epidemic with transmission of HIV predominantly through heterosexual intercourse and the majority of new infections in young women (Shisana et al, 2008 and UNAIDS, 2008). The United Nations General Assembly Special Session on HIV and AIDS (UNGASS) identified young people, aged 15-24 years, as a priority group in reducing new HIV infections and set a global target of reducing the incidence of HIV in this group by 20% by 2015 (Department of Health, 2007).

There are approximately 1.5 billion people aged between 12 years and 24 years old globally (Kleinert, 2007) and it is thought that this is the age group with the highest burden of STIs (Bearinger et al, 2007). STIs are closely related to the transmission of HIV and are rife in South Africa; the HPTN 055 study done in South Africa (SA), Tanzania and Zambia found that the incidence of STIs was highest in the SA site: chlamydial infection in SA was 19.5/100 person-years at risk (PYAR) vs Tanzania and Zambia at 4.9/100 PYAR; gonorrhea in SA was 16.5/100 PYAR vs Tanzania and Zambia at 5.3/100 PYAR (Kapiga et al, 2009). The prevention and protection efforts of both STIs and HIV are continually being researched and interventions tested. By changing key sexual behaviours in Uganda, Zimbabwe, Kenya and urban areas of Burkina Faso, the HIV prevalence has declined and appears to be leveling off, although at high levels. UNAIDS data on the experience of several countries, including South Africa, confirm that

positive behaviour change is more likely in the young adult age group than in older age groups, (DoH, 2007) indicating that young people represent the main focus for altering the course of this epidemic. However, HIV prevention programmes in South Africa that have invested significantly in the young adult age group, have yet to demonstrate the desired impact in reducing the HIV burden. It therefore remains critical to continue investing and expanding carefully targeted evidence-based programmes and services focusing on this age group.

The underlying determinant of education for knowledge and changing attitudes feeds into the proximate determinants of HIV transmission (Figure 1). The DoH's (2007) suggestions of reducing sexual transmission of STI and HIV by developing behaviour-change curricula specifically related to the youth include promoting improved health-seeking behaviour and adoption of safe sex practices through Life Skills education in all primary and secondary schools. The Life Orientation skills programme was initiated in the early 2000s and seeks to address amongst many others: sex education, STIs, HIV and the improvement of self esteem and confidence (Department of Education and Western Cape Education Department). The programme starts as early as Grade R and goes on to Grade 12 now.

Another DoH suggestion was that of improving access to and use of male and female condoms, especially amongst 15–24 year olds to create and outcome of increased acceptance of condoms and to change attitudes, perceptions, and thereby increase the efficacy and use of condoms as a form of contraception among the youth.

The proximate determinants of HIV transmission (Figure 1) intertwine with the macro context of the public health framework (Figure 2) to affect the health outcome. They are therefore appropriate tools for investigating adolescent outlook and behaviour regarding sex such as unprotected sexual intercourse and multiple sexual partners; knowledge, perception, attitudes and stigma toward STIs/HIV; and treatment-seeking for STIs. Performance and capacity of service provision also affect the health outcome and these two factors fit within the structural capacity and processes in the public health framework. The outcomes of the public health framework would be to identify intervention methods for improving treatment-seeking for STIs and changing sexual behaviour which would impact on reducing the number of STIs and hence the HIV burden.

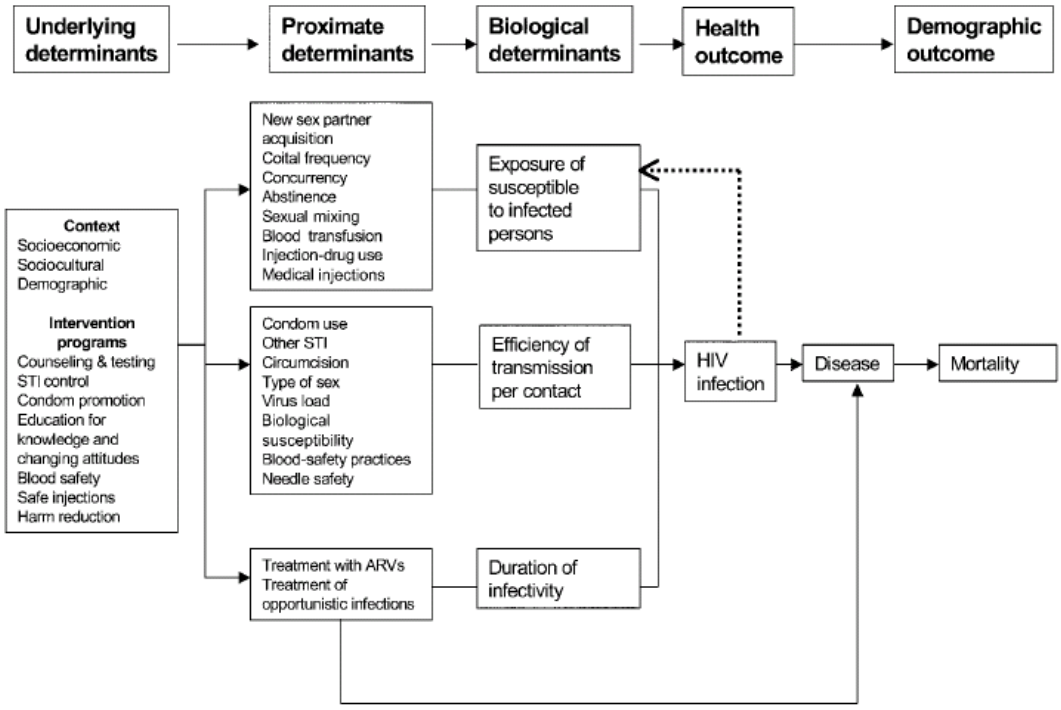


Figure 1. Proximate-determinants conceptual framework for factors affecting the risk of sexual transmission of HIV (Boerma and Weir, 2005).

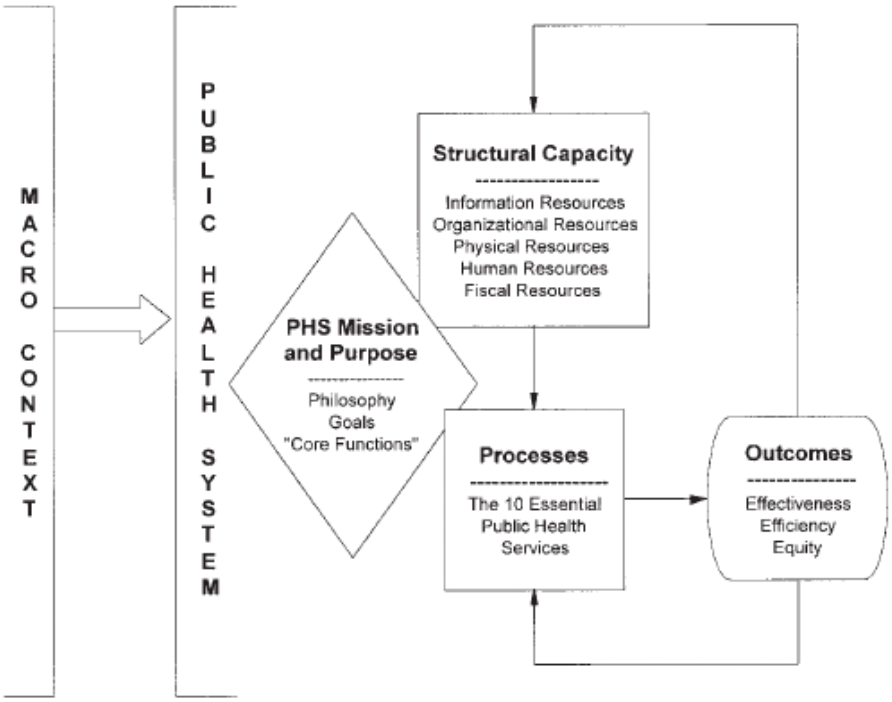


Figure 2. Conceptual framework of the Public Health System (PHS) as a basis for measuring system performance (Handler et al, 2001).

1.2.1 The Macro Context: Proximate Determinants

1.2.1.1 Adolescents and sexual behaviour

There are many risk factors for acquiring STIs and HIV which are promoted by the family, environment and socio-economic circumstances. They include early

sexual debut, intergenerational sex and multiple sexual partners (Fatusi and Blum, 2008). A comparison of data by Shisana et al (2008) from 2002 and 2008 for early sexual debut in 15 year old to 24 year old women in SA indicated that in 2002, 8.9% had had sex before the age of 15 years as compared to and 8.5% in 2008. Lammers et al (2000) and Santelli et al (2004) identified a number of factors which influence the timing of sexual debut. They include socioeconomic circumstances, family and parenting practices, self-efficacy, education, peer-influences, religiosity, media and health inequalities. Varga (2003) talks about gender roles and their relation to timing of sexual debut as a demonstration of sexuality, reproduction and fertility.

In conjunction with these circumstances, adolescents undergo immense cognitive and emotional changes. They become increasingly autonomous with a need for privacy and confidentiality whilst feeling that everyone is interested in them. Combined with these conflicting emotions and the thought that nothing can happen to them, they engage in higher risk-taking behaviour (Lan et al, 2008 and Bearinger et al, 2007). There are also many factors influencing adolescents having unprotected sex, including alcohol use, illicit drugs and low family monitoring (Esere, 2008 and Yen et al, 2009). These contribute to adolescents being at a higher risk for STIs because of unplanned sexual experiences and sexual experimentation (Bearinger et al, 2007 and Esere, 2008). Mellanby et al (1993) noted that girls under 16 years of age are more likely to display high-risk behaviour such as sex without condom use and sex within a short relationship. It seems though, in developing countries, risk factors significantly important to

adolescent reproductive health is primarily related to the adolescents themselves and their associated behaviour (Mmari and Blum, 2009).

It is frequently claimed that adolescent girls engage sexually with older men where gifts which include money, clothing, cell phones, jewellery and school fees are exchanged for sexual favours (Richter et al, 2006 and Hattori and DeRose, 2008). Young women with partners who were 5-or-more years older than themselves, has increased from 18.5% in 2005 to 27.6% in 2008 (Shisana et al, 2008) and whilst condom-use is known to protect against certain STIs like gonorrhoea and HIV (Ahmed et al, 2001) young women often do not have the power to negotiate the use of condoms (Pettifor et al, 2004a). However a Nigerian study showed that adolescent girls who received social support from non-parental figures and peers were more likely to use condoms (Adedimeji et al 2008). Supporting these findings, the recent HSRC 2008 report found that condom use in youth 15 year olds to 24 year olds increased to 73.1% of women reporting condom use at last sex (Shisana et al, 2008). However Shisana et al (2004) noted that 24.2% of respondents used condoms to prevent STIs whilst 71.2% used it to prevent HIV. For me this may be an indication that there may be a lack of understanding or knowledge of the consequence of STIs and the relationship between STIs and HIV.

1.2.1.1.1 School-leaving and pregnancy

Following on from the research of Bearinger et al (2007) and Esere (2008) into adolescent sexual experiences and experimentation, the DoH (2007) have found that a major cause of young women leaving school is an unplanned pregnancy. Some are able or motivated to return to finish school but others do not. With the high rate of unemployment in SA, and the restrictions on university entrance, leaving school is a time of insecurity for young people. Often the aspirations that existed in school of getting a job and earning an income are not realised hence the personal motivation to achieve good grades and the psychological rewards of this achievement are no longer there. Compounding these factors, family pressures to contribute to household income or to leave home make this a difficult time for adolescents. In the absence of career opportunities, many young women find fulfillment and affirmation in being a mother – by definition requiring unprotected sex. The DoH (2007) has found that the greatest increase in pregnancy and HIV infection is associated with school leaving.

1.2.1.1.2 Adolescents' knowledge, attitudes and perceptions of STIs

The Department of Education has incorporated programmes like Life Orientation skills into the school curriculum, however information on acquiring STIs, HIV and falling pregnant may be lacking. In a study done in 2007 on knowledge, attitudes and perceptions of STIs in patients 15 years and older, attending primary health

care (PHC) clinics in Gauteng, little was known about STIs in terms of what it is, the signs and symptoms and the prevention thereof, granted many STIs may be silent especially in women. This was especially poor in the 15 year old to 20 year old age group (Molapo et al, 2007). However according to the HSRC 2008 study, there has been an increase in exposure to one or more HIV/AIDS communication programmes from 2005 to 2008, with 90.2% of youth reached (Shisana et al, 2008). This contrary evidence suggests that there is a poor transmission of STI knowledge. Impacting adolescent knowledge, attitude and perception, the National Strategic Plan (NSP) has noted that stigma and discrimination continue to present challenges in the management of STI, HIV and AIDS (DoH, 2007). As part of the NSP, this priority area seeks to mainstream these management challenges in order to ensure the conscious implementation of programmes to address them.

1.2.1.2 Adolescent treatment-seeking behaviour

Treatment-seeking behaviour is informed by expectations, knowledge, education, information, stigma, accessibility to the clinic, acceptability of the service and the care previously received there as well as the negative attitudes of health care workers (HCW) (Kazibwe and Struthers, 2009; Dube and Nkosi, 2008; Selman et al, 2009; Mugweni et al, 2008 and Naidoo et al, 2009). There are also financial cost implications as there are for adults. In South Africa the National Department of Health has seen fit to charge a fixed rate for attendance at a public facility and

this includes the cost of medication. Health care is free for pregnant women and children under 5 years of age. Besides the direct cost though are indirect costs related to transport, time out of work or school. In making any decisions, individuals weigh up the costs and benefits of the action being contemplated. In behavioural change, individuals cognitively assess the pros and cons of behaviour and the reasons to change or not to change that behaviour (Chacko et al, 2008). Behaviour will more likely change if the pros are higher than the cons. Studies done on young women and adolescents on STI screening have revealed that the main barriers to seeking STI screening were the perception that STIs were not a serious medical problem; the lack of knowledge regarding STIs; comfort with and gender of the physician; social stigma and the negative consequences around testing eg what others would think; embarrassment and the fear of a positive result; and negative provider attitudes (Blake et al, 2003 and Barth et al, 2002).

The culture of not talking about sexuality may be a contributing factor to misconceptions and limited knowledge. A study on perceptions, attitudes and health-seeking patterns in men and women in Vietnam revealed that most participants obtained their information from peer networks but that many female participants, especially unmarried women, said that they were embarrassed to talk about STIs with others (Lan et al, 2008). The available media that was easily accessible at the time eg books, magazines and newspapers were poor sources of information. In addition, health facilities were considered the last choice

because the women were ashamed of the disease and because of the negative attitudes of the HCWs: they were often scolded and told that they were unclean and promiscuous. Among unmarried women, the sex of the HCW was said to be more important than their attitudes so they did not want to be seen by male doctors. Consequently participants said they either self-medicated or received treatment from drug-sellers. It is difficult to extrapolate these data between contintents and within Africa because of the vast differences in cultures.

An exploratory study done on young women's perspectives on the pros and cons to STI-screening revealed that barriers to seeking STI screening for some respondents included taking treatment and the side-effects of the treatment. Confidentiality issues were considered to be important especially in settings where the individual may be known to the community; a situation that can interfere with privacy and foster stigma. Respondents were concerned about the clinic violating their confidentiality. Other barriers involved the health care system: long queues and clinic efficiency (Chacko et al, 2008).

Treatment-seeking behaviour seems to focus on the extent and cause of discomfort and regardless of a rich or poor setting or sexually active girls or sex workers, there is reluctance in seeking treatment for STis as evidenced here. In a study done in Hlabisa district, rural KwaZulu Natal, South Africa in 1999, of 13 943 women aged between 15 and 49 years, 50% of them who were symptomatic

for STI did not seek treatment (Wilkinson et al, 1999). Further, Adanu et al (2008) found in Ghana, that of 246 women with STI symptoms, 65% did not seek treatment or advice for their symptoms. The main reason for not seeking care was that the symptoms were not considered to be serious (40.2%) and even women with a higher wealth index, only sought care because of the offensive vaginal odour. A study on female sex workers and consultation profiles in Quebec, Canada reported that 40% of their respondents consulted a health professional because of musculo-skeletal and respiratory problems whilst only 25% with respect to STIs or mental health problems or stress, with a further 10% on alcohol and drug consumption (Nguyen et al, 2008). Studies done in the developed world have shown that 70%-90% of young people seek care at least once a year but these are mostly for respiratory and dermatological disorders. Also, for more sensitive issues regarding sexual matters they tend to turn to trusted friends or family for advice (Tylee et al, 2007).

Treatment-seeking is different for young males and females, and where they seek treatment differs too. A study done in Nigeria found that a greater proportion of males than of females had sought treatment for their STIs (64% vs. 48%). However, among those who had sought treatment, 54% of males had sought care from informal sources, most commonly a traditional healer whilst 60% of females had gone to formal sources, most commonly a government clinic. Among females, 22 to 24 year olds were more likely than those aged 15 to 18 years to have sought treatment from a formal source (Mmari et al, 2010).

From the previous readings cited, addressing the issues of negative attitudes from health care workers (HCW), embarrassment about talking about their condition to a HCW, preference to seeing female doctors (especially if they are unmarried women), confidentiality at the clinic, clinic efficiency, the perception of STIs not being a serious problem, are aspects that would improve treatment-seeking for STIs at health care facilities. Supporting this, South African research by Dickson, Ashton et al (2006), found that services offered by adolescent-friendly clinics were better than standard clinics offering similar services.

1.2.2 Structural Capacity: resources

1.2.2.1 Health care workers knowledge

According to the USA Centers for Disease and Prevention, the 10 essential public health services include assurances of a competent public and personal health care workforce which could inform and empower people about health issues (CDC, 1994). Although this is a US quality of care point, it should be something all countries would want to emulate. However, this is not always the case as evidenced here. A qualitative study done by Reddy et al (1998) showed a lack of knowledge and skills of health care workers required for effective health education practice in STI clinics in South Africa. In SA the treatment of STIs is by syndromic management ie. treatment based on the presenting syndrome of discharge or ulcer. Clinic sisters are trained in this type of management but are

not always knowledgeable to treat the patient if he/she presents outside of these symptoms.

1.2.2.2 Processes: adolescent services

Findings from Lan et al (2008) and Bearinger et al (2007) indicate that adolescents are less likely to see the need for care even when they are worried about a health problem and may be less likely to seek care because of a fear of stigma, chastisement or punishment for being sexually active and promiscuous. Studies done on the barriers to the provision of health care for adolescents, regard availability, accessibility, acceptability and equity of health care services to be the important aspects to health-seeking behaviour. Even though health care services are accessible and available, many adolescents do not find them acceptable and the fear of a lack of confidentiality or being scolded by the HCW impacts on adolescents not seeking care (Tylee et al, 2007).

Accessibility includes direct and indirect financial costs. These include the price of getting to the clinic (eg taxi fare) and the cost of the clinic and medication. In South Africa clinics are placed mostly in areas of highest density of population with fewer clinics in the more rural areas. A one-fee structure for those older than 5 years old exists and costs around R32 per visit including medication. (DoH)

The National Adolescent Friendly Clinic Iniative (NAFCI) started planning adolescent-friendly clinics in South Africa from the early 2000s because a gap was identified in that adolescents, being at high risk for STI/HIV were not

accessing the normal primary health care clinics for all the reasons mentioned previously (unfriendly clinic sisters, long queues, embarrassment to be assessed for STI etc). Adolescent friendly clinics are essential because adolescents require being treated differently to children and adults. Seeking treatment for STIs, especially if one is young and unmarried, is considerably different to seeking treatment for eg flu-like illness or ongoing diarrhoea. In 2006 Dickson reported that NAFCI clinics performed significantly better than the control clinics on criteria specific to the provision of adolescent-friendly services including knowledge of adolescent rights and non-judgmental attitudes of staff (Dickson et al, 2006).

Increased access to youth-friendly reproductive health services including STI management, VCT and rapid HIV testing facilities, and family-planning by making clinics and HCWs youth-friendly is another of the NSP strategies in reducing HIV transmission (DoH, 2007).

1.2.2.3 Resources

Within the South African context, the limitation of financial and human resources is problematic, without which interventions like effective health-care promotion and behavioural change cannot be effected. According to the NSP (DoH, 2007) the provision of health services is labour intensive, and in order for quality health services to be delivered in an affordable and equitable manner, a range of both clinical and management skills are required. Figure 3 summarises the total costs

for the low cost scenarios: the assumption of only 60% of new AIDS patients receiving ART by 2011, for the prevention of HIV and STI management. Approximately 12% (R1, 247 billion) of the total budget has been set aside for reducing sexual transmission, the rest for care, support and health system strengthening.

Table 1: Summarized total costs for the low cost scenarios (million Rands, 2005/06 prices)

			Year					
Priority area	Goal	intervention	2007	2008	2009	2010	2011	% T
Prevention			643	792	951	1,098	1,247	
	Reduce sexual transmission		642	790	949	1,097	1,245	
		Behavioural change interventions	300	400	500	600	700	
		Condom provision	145	152	172	180	188	
		Life skills	158	168	177	186	195	
		PEP for sexual assault	10	10	11	11	12	
		STI management	30	60	90	120	150	
	Reduce transmission through occupational exposure		1	1	1	1	1	
		PEP for occupational exposure	1	1	1	1	1	
Care, support and health system strengthening			4,042	5,612	6,960	8,474	10,012	
	Scale-up access to VCT		260	420	423	426	428	
		HIV testing	260	420	423	426	428	
	Maintain health of HIV-infected adults		2,495	3,365	4,250	5,301	6,360	
		Antiretroviral treatment for adults	1,588	2,296	3,115	4,036	5,014	
		Food support for adults	521	586	652	782	912	
		Home and Community Based Care	386	483	483	483	435	
	Address the special needs of mothers and children		1,007	1,267	1,447	1,627	1,823	
		Antiretroviral treatment for children	245	359	488	635	791	
		OVC	452	561	589	618	649	
		PMTCT dual therapy and infant testing	310	348	370	374	383	
	Strengthen the health system		280	560	840	1,120	1,400	
		Strengthen TB programme management	30	60	90	120	150	
		Increase CHC coverage	250	500	750	1,000	1,250	
Grand Total			4,685	6,404	7,910	9,572	11,259	1

Figure 3: Summarised total costs for the low cost scenarios. (DoH 2007)

1.2.3 Outcomes: intervention programmes for change in sexual behaviour and treatment-seeking behaviour

A study by Jemmot et al (2010) done with adolescents in the Eastern Cape has shown that risk-behavior intervention studies are being engaged by adolescents.

In this study a more intense HIV/STD risk reduction intervention was compared with routine health promotion. From 1118 eligible 6th grade students (mean age, 12.4 years), 1057 (94.5%) participated in the risk-reduction intervention study. Of the 1057, 96.7% were retained at the 12-month follow-up. After 3 follow-ups, those participants who had received HIV/STD risk-reduction intervention were 2 times less likely (statistically significant) to have unprotected vaginal intercourse, vaginal intercourse and multiple sexual partners in comparison with health-promotion control participants (Jemmot et al, 2010). Kalichman (unpublished) has recently completed (2010) an HSRC comparative study on an intervention of 60 minute behavioural HIV/STI risk-reduction counselling with a 20 minute education session for STI/HIV information with a follow up of patients within a year for further STIs. The outcome of this type of intervention study may be important in terms of education and behavioural change.

1.2.4 Summary

Using the proximate determinants of HIV transmission within the macro context of the public health framework, this current research fits in well with the NSP objectives for STI and HIV prevention. The DoH's (2007) suggestions of reducing sexual transmission of STI and HIV by developing behaviour-change curricula specifically related to the youth (and related to this research) include promoting improved health-seeking behaviour and adoption of safe sex practices through

Life Skills education in all primary and secondary schools; and improving access to and use of male and female condoms, especially amongst 15–24 year olds by increased acceptance, attitudes, perceptions, and efficacy and use of condoms as a form of contraception among the youth fit within the underlying determinants in the framework used (Figure1). These topics (life-orientation and attitudes towards condom-use) are addressed in my report. Whilst studies have been conducted on treatment-seeking behaviour, few have been done on adolescents and particularly few in Southern Africa. There is a further gap in information relating to adolescent clinic experiences which this study will address.

Chapter 2

2.1 Problem statement and study population

The Bt20 is a cohort of singleton children who were born in 1990 to women who were resident in the greater Johannesburg area, South Africa during the seven week enrolment period in 1990. This cohort, also known as Mandela's Children, were at the time of the study, in their 20th year. It has tracked the health, growth, education and well-being of these children over two decades. 3273 births met the entry criterion of continued residence in the Soweto area and at age 16 years, >70% of this cohort was still contactable (Richter et al, 2007). One of the Bt20 themes is "Emergence of sexual and life-style risk factors during adolescence, in particular teenage pregnancy, exposure to sexually transmitted infection, peer-relationships at school. It is within this theme that my research fits.

Comment [v1]: Ex 2 (47) mention that Bt20 is free to this cohort. Check whether they have to pay to go to a clinic if they have a letter.

The cohort is interviewed once or twice a year. Screening for STIs was done in year 13 for those who admitted to having had sexual intercourse. By year 16 of the Bt20 study, sexual intercourse was reported among 5% of 13-year-old girls, 6% of 14-year-old girls and 11% of 15-year-old girls (personal communication with Shane Norris). Several adolescents were treated for STIs. In year 17, voluntary counseling and testing (VCT), pregnancy tests and testing for STIs were offered. Adolescents who tested positive for an STI were given a letter to the clinic for STI treatment; approximately 100 girls tested positive. There has not been any follow up done to see whether these girls with STIs and a referral letter

attended the clinics for treatment or not. For the Bt20 cohort treatment at all Soweto clinics to which they are referred is free. This research intends to look into whether these girls went on to get treatment, what their experience was like at the clinic and whether they modified their sexual behaviour after they found out about their STIs.

2.1.1 Study population

My study was done as part of a follow up clinical study to assess whether the girls who had an STI and been given a letter to seek treatment at the clinic and whether they did so. The inclusion criteria were girls from the Bt20 cohort who had a previous STI at screening in their 17th year and who were available to come to Bt20 to be interviewed. Exclusion criteria were boys from Bt20. Since the girls are from a birth cohort they were all in year 20 at the time this study was performed.

Of the 19 young women interviewed 18 were African and 1 Coloured. 8 had matriculated at the time of interview of which only 4 were working, 3 at call centres and 1 as a receptionist at a dental practice. Of the 11 who had not yet matriculated, 4 were re-writing some matric subjects in the hope of improving their grades so they could further their studies; one of the girls dropped out of school at an early age but is currently doing fashion design; 3 girls were still at school and not yet reached matric year. young women were also unemployed and not studying; 3 girls were at home looking after their babies.

Thirteen of the girls live with their mothers, 4 live with other family members because their mothers have passed away. Two (both working) have mothers who are alive but do not live with them: one lives with her sister and the other with her partner and child. The four girls who are working contribute to their household income, otherwise they depend on the family to support them.

Qualitative methodology was chosen as a tool to identify the different views of girls from the Bt20 cohort, who had an STI. Some of the key questions explored whether they had sought treatment for their STIs, knowing that this is not such an easy task for adolescents especially with the stigma of STIs; identifying what their sexual behaviours were like to cause them to have an STI; and to describe whether their sexual behaviours had changed and what those changes were after finding out about their STIs. This research was framed within the clinic follow up assessment of adolescent girls from the Bt20 cohort who had an STI. The methodology was structured within the framework of HIV transmission and the macro context of the public health framework. With this information, feeding into the outcomes of the public health framework, I hope to then make recommendations on how and at which point in the process interventions would be most effective in improving services related to STI and HIV/AIDs, in order to curb this epidemic by targeting the youth in particular.

2.2 Purpose of study

The age-group of 12 years to 24 years is thought to be the grouping with the highest burden of STIs. Early sexual debut is common in most developed countries and in Sub Saharan Africa (except Rwanda and Nigeria) where approximately one third of unmarried adolescent girls have had sexual intercourse (DoH, 2007)_. Young people who have had several sexual partners are at risk of contracting STIs including HIV and it is especially difficult to control STIs in adolescents as many individuals remain asymptomatic until serious complications and the negative outcomes of STIs occur.

The terminology of adolescent, young people and youth is confusing where adolescents are those aged from 10 years old to 19 years old, young people from 10 years old to 24 years old and youth defined as 15 years old to 24 years old. The terminology is really not helpful because the age bands are so wide and the experiences of 10 and 24 year olds so vast. MacPhail and Campbell (2008) report on Aggleton (2007)'s criticism of the literature failing to take into account the wide variations of sexuality of young people. Partly this is due to the wide age range and different experiences within these age groups.

Nevertheless adolescents are more prone to higher risk-taking behaviour but are less likely to seek care, especially when it is for a more sensitive issue like STIs, because of a fear of stigma, fear of non-confidentiality and scolding by the health care givers. Health services in South Africa have been slow to include

adolescents' health needs but there is a move to improve adolescent and youth health services. The focus of this research will be to look at treatment-seeking behaviour and whether sexual behaviour is modified after having an STI. Through interviews I will try to explore the perceptions of adolescent girls on STIs; their treatment-seeking behaviour; if they knew they had an STI; and whether having had an STI changed their sexual behaviour.

2.3 Justification of problem

Girls with a history of STIs in adolescence suggests that they were engaging in unprotected sexual intercourse possibly placing them at a higher risk of acquiring HIV. Having a diagnosed STI may influence subsequent sexual behaviour and an exploration of treatment-seeking behaviour for STIs in adolescent girls may give us important information on individual determinants as well as their perceptions of the health care system. Recruiting adolescents through the Bt20 cohort provides a unique opportunity to understand these determinants. Using the proximate determinants of HIV transmission which feeds into the macro context of the public health framework, outputs from this qualitative research could provide an improved methodology and suggest interventions for the prevention of STIs. These will be aligned with the NSP objectives for the prevention of HIV in youth and potentially identify where these interventions would be placed.

2.4 Study objectives

1. To explore the perceptions of STI, HIV and personal risk among adolescent girls who have had an STI

2. To explore sexual behaviour among adolescent girls who have had a clinically diagnosed STI and whether there was any modification of sexual behaviour after knowing about the STI

    2.1. To explore the circumstances surrounding all sexual encounters among adolescents girls

    2.2. To explore how sexual behaviour changed after they had an STI, and if not why not

    2.3. To describe condom use with each sexual encounter

3. To explore treatment-seeking behaviour in relation to STIs

    3.1. To describe whether the girls sought treatment or not for their STIs

    3.2. To describe the experiences at the clinic of those girls who did seek treatment

Chapter 3

3.1 Materials and methods

Qualitative methodology was selected to better understand the reasons prompting treatment-seeking behaviour and sexual behaviour in adolescents and what might prompt not using condoms, having sex at a relatively early age and the perceived risk associated with HIV. It is a useful method to gain new perspectives on ideas which are already known and to gain in-depth information from narrative speech which in itself is able to provide rich information (Strauss and Corbin, 1990).

3.1.1 Definition of terms

As part of the clinic screening in the Bt20 study, STIs that were tested for included *Chlamydia trachomatis*, *Trichomonas vaginalis*, *Neisseria gonorrhea*, syphilis (*Treponema pallidum*) and herpes simplex virus 2 (HSV2). Screening was performed by blood test: PCR for HSV2 and serology for the others. Screening was not done for HPV in year 17. HIV screening was done but I chose not to focus on the HIV positive patients for this study. If the girls were HIV positive though they were not excluded from this study. Sexual behaviour was defined as practicing penetrative sex.

3.1.2 Selection of study sample

As part of a routine clinical follow up of girls who had tested positive for an STI in 2008/2009 and given a letter for treatment at the local clinic, a list was generated for the study nurse to contact. She started with a few girls from each group of STI pathogen, contacting them telephonically or via home visits asking them to participate as part of their clinical follow up. If the girls did not attend on the scheduled day, they were called to attend another day or another participant was selected if she did not arrive. The sample size was expanded until the findings were saturated and no new information was collected.

3.1.3 Training in qualitative studies, interviewing technique and montitoring

Training for the researcher and the study nurse was done together prior to the study by qualitative researchers. The training included aspects on interviewing techniques and how to take a life history ie starting from the first sexual experience and documenting and prompting on the following sexual partners chronologically. Life histories are oral, autobiographical narratives (Bertaux, 1984) and were used in this research to organize the researchers documentation and act as prompts during the narrative (Haglund, 2004). The questionnaires were framed in English but we expected the participants to respond in the vernacular consequently the study nurse was trained to interpret the questionnaires. The researcher and study nurse were both present at each interview. After each interview they met and discussed the interview procedure,

the participant and the thoughts on how that interview went and what could be done better. At the end of each day they discussed the procedures for the next day of interviews and the study nurse wrote up field notes which were used as her interpretation of the participants.

3.1.4 Pilot

I set the main domains of sexual behaviour and treatment-seeking behaviour within the context of the conceptual framework used in the introduction and the literature review. The interview schedule was set up and the questionnaire was piloted on two study nurses and one participant; clarification of the questions was identified at this point and the following questions/ suggestions were added: feedback from the participants on how they felt the interview went and what improvements could be made to the questionnaire (added to field notes), not to make suggestions in the interview while the tape is on – do that at the end with the counseling session. Questions on follow up of the participant; advice given and where she was referred; and a question on whether the partner received treatment were added to clinical questionnaire. The question on circumstances around sex was changed from too many specific questions to prompts so that the participant could talk through those in a narrative form. The questions on STI perceptions, stigma were separated from the treatment-seeking question. The questions were re-ordered and questions which would make the participant relax were added to the beginning of the questionnaire. Closed ended questions were

rephrased to make it more conducive to a narrative. The final questionnaire is appended (Appendix 1).The results of the pilot are not included in this study.

3.1.5 Procedure

The participants were interviewed over ten consecutive days in February 2010. Interviews were conducted in the participants' preferred language. However, all except one preferred English, in which instance the study nurse conducted the interview in the vernacular and interpreted the response. Informed consent was signed by all the participants and the interviews were audio taped. Face-to-face interviews were carried out as part of the clinical follow up, using an interview guideline. A life history approach was used to document all the sexual partners the girls had and time reference points were used to assist the participants in organizing their life history. This approach was useful to document the sexual history of the girls so that each partner/event could be discussed in a chronological sequence. After the first six participants additional questions were added to explore the idea of friendship, since it appeared that very few participants had "friends they could trust". More questions were added in the last seven interviews to explore the participants' thoughts on how to improve the life orientation programme at schools as well as ideas around the term "sugar daddies".

If the researcher or study nurse felt that the girls needed referral for eg. treatment for symptoms of STIs they were referred to the local clinic, social workers or for further counseling. All participants were given time for counseling after the interview which was not recorded; this was done by the researcher and study nurse and covered aspects of risk-behaviour awareness and modification as well as facts on STI/HIV and contraception that needed clarification.

3.1.6 Data analysis

The audio-taped interviews were transcribed by the researcher. The transcription for the interview done in the vernacular was done from the interpretation by the study nurse and themes were identified with the use of Max QDA. For patient confidentiality, names were not used and each patient was assigned a unique identifying number. From the transcripts thematic analysis was performed and patterns found; subcategories related to the broader themes were identified (Aronson, 1994). Themes were identified according to broad ideas of treatment seeking, sexuality and drilled down to subcategories of eg condom use, clinic sister attitudes. Open coding was used where all transcripts were examined line-by-line for a potential code. Ongoing comparisons across interviews and within and across categories were used to refine the categories. To promote rigour only the researcher did the interviews (if it was a matter of language then the interpretation of the questions was done by the study nurse with the researcher present) – almost all interviews were done in English (the preferred language of

the majority of the participants), the researcher did all the transcriptions and coded the transcripts. Themes were checked so that they were coherent, consistent and distinctive (Braun and Clarke, 2006).

3.1.7 Ethics

Ethics approval for consent to participate and consent to be audio-taped was obtained through Wits HREC. Wits HREC number is M091015 and a copy of the approval is appended.

Chapter 4

Results and Discussion

4.1 Perceptions of STI/ HIV and personal risk

Prior to being informed of their STIs (pre-2008/2009) and counselled by the Bt20 nursing sisters, only a few of the girls knew what an STI was and that they should use a condom. Some used condoms because it was what they were taught at school or because their partner suggested it. Other respondents still had unprotected sex, even though they knew the risks of STI/HIV and pregnancy because they felt they would not get an STI. Respondent 14 (24/02/2010) who fell pregnant once and had an abortion, had this to say, "*I always thought it was always other people who get pregnant*". After counselling in 2008/2009, 18 of the 19 girls were now aware that STIs were transmitted through unprotected sex with someone who had an STI although one respondent still thought that STIs were from condoms "….*you get it (STIs) from male condoms, especially the cheap ones, the ones you get for free."* (Respondent 7, 21/02/2010).

Even though the girls were aware that treatment is available, almost all of them still thought that HIV was a death knell. The majority were aware that STIs and HIV are related except one who said, *"No, otherwise I would be infected now".* (Respondent 2, 19/02/2010). Unprotected sex out of a *"steady relationship"* (Respondent 3, 20/02/2010) was considered risky behaviour whilst respondent 19 (28/2/2010) alluded to the fact that she and her partner had stopped using

condoms after they both tested negative for HIV. When the girls were told of their STI result, most were shocked because they couldn't believe that they would get it (adolescent thinking that it would never happen to them and that it is characterized as a disease of "others") (MacPhail and Campbell, 2008) or that their partners had been disloyal or angry that it could happen to them and afraid of the social and health consequences. An important consideration related to perceptions and stigma are what the broader community thinks about STI/HIV: about a third of the respondents indicated that HIV was negatively stigmatised and people were treated badly as a consequence; a third said that people they know do not talk about it and just carry on like it does not exist and the rest said that with education people realise that there is treatment and that to protect yourself one needs to use a condom or abstain.

After counselling in 2008/2009 by the Bt20 nursing sisters, most understood that STIs were from unprotected sex with someone who had an STI; that it was related to HIV; and that HIV is a serious condition which is treatable. They all agreed that unprotected sex demonstrated high-risk behaviour if it was with someone out of a "*steady relationship*".

The majority of the girls went to seek treatment and this is either because the Bt20 sisters were effective in communicating the good reasons to be treated or because the girls were from the background of Bt20 where they had good adherence from a lifetime of referrals to clinics. Only one girl did not seek treatment and that is because her sister (who had had some training as a nurse) had given her information that Herpes is common so there is no need to worry

about it. This may have aided her in making the decision of taking the easier option of not going to the clinic / treatment.

The link between STI and HIV may not yet be clear for many members of society. Although the HSRC 2008 study states that HIV/AIDS education has reached 90.2% of youth (Shisana, 2008), it may still not be relaying the message of the importance of STI in the transmission of HIV. This is also brought out in Molapo's study (2007) where the 15-20 year old age group had little knowledge on the signs, symptoms and prevention of STIs. Contributing to this may be that many STIs are not visible especially for women. MacPhail and Campbell (2008) critiques the use of KAPB survey models which do not enable developers of intervention programmes to consider the contexts of sexuality and information and that it is far more complex than what these surveys find.

4.1.1 Life-orientation skills and the prevention of STI/HIV

Talking about sex and sex education should be taught in the home environment as well as at schools. Life-orientation has been part of the school curriculum since the mid 2000s and although agreed that it is an important part of the curriculum, implementation has been problematic (Rooth, 2005). The current programme structure from Grade R to Grade 12 (Department of Education) is good but perhaps too generic and only in grade 10 do they start to talk about STI or pregnancy in particular. The impact of life-orientation skills on the respondents became an important point that required some understanding. I explored a little

around what some girls thought about how they were educated about sex, STI/HIV and pregnancy at school and it seemed that a few of these topics were discussed at only some of the schools. When it was discussed it was contextualised within a biology lesson rather than as a directed discourse with no opportunity to ask questions consequently it was not taken seriously and viewed as an opportunity to skip class. The fact that knowledge seemed to be lacking regarding STI/HIV as well as pregnancy may be a reflection of the poor life orientation curriculum's presentation of STI/HIV during their schooling in the early 2000's.

A few girls indicated that life-orientation skills should help to increase the potential of the individual, through the building of self-esteem and opportunities for their future. The newer curriculum has set out to address these challenges (Western Cape Education Department)

The respondents indicated that family support was inadequate because sexual behaviour and its consequences are not subjects for discussion. Respondent 19 (28.02.2010) indicated that *"Parents should sit children down and explain everything straight to you, like if you sleep with a boy you will fall pregnant. Not just 'Don't go with boys', so you never understand what will happen."*

A few of the girls thought that government were doing quite a lot in terms of promotion of safe sex and it was up to the individual to educate themselves about HIV because *"there's lots of information out there."* (Respondent 10, 22/02/2010).

4.2 Sexual behaviour

The STI testing was done in 2008/2009 when the girls were already about 17 or 18 years old and sexually active. In a few cases, due to multiple partners, it was a guess as to which partner they possibly contracted their STI from. The majority (68%) of the respondents have had two partners or less and were still with that same partner. The two girls with the most partners had been raped as their first experience, 1 of them had been raped on 2 separate occasions. Tables 1 and 2 gives a breakdown of the respondents and the number of sexual partners. It is interesting to note that 74% (14) of the respondents potentially contracted their STI with their first partner with 71% (10) of those girls still in the same relationship with the partner they contracted their STI with. All the respondents (except for the 2 who had been raped) stated that they had not been forced or coerced into sex with their first partners. They were in a relationship with their partners and had consensual sex.

Table 1. Respondent characteristics related to sexual history

Respondent	**Age at first sex (years)**	**Number of sexual partners**	**With partner**	**Any Pregnancy**	**Sexual behaviour changed after STI or pregnancy**	**Contraception**
1	13	6 (includes 2 rape episodes with different men)	Not currently	1, abortion	After STI - condoms	IMI and condoms
2	15	2	With partner 2	2 children, different fathers	After STI - condoms	condoms
3	17	5	With partner 5	No	After STI - condoms	condoms
4	17	1	With partner 1	1 child	No- sometimes condoms	IMI

5	17	1	With partner 1	1 child	No	Thinking about using condoms now
6	14	3	No partner now	1 child	After STI - condoms	condoms
7	17	4	With partner 4	2nd pregnancy (1st child died, ? birth asphyxia); now almost due to deliver. Different fathers	After STI	No condoms. More open to discussion with partner about other relationships
8	16	1	With partner 1	2 children – same father	After pregnancy – abstinence	IMI and will use condoms too
9	18	2	With partner 2	1 child	After STI - condoms	condoms
10	16	2	With partner 2	No	No	IMI
11	15	4	No partner now	1 child	After STI - abstinence	Abstaining
12	17	1	With partner 1	No	After STI - condoms	condoms
13 (apparently not told of STI)	15	2	With partner 2	1 child	After pregnancy	IMI
14	15	2	With partner 2	1, abortion	After pregnancy	IMI
15	15	1	With partner 1	1 child	After pregnancy	condoms
16	17	2	With partner 2	1, pregnant at time of interview	After STI –faithful	No – wanted to fall pregnant
17	17	1	With partner 1	No	After STI - condoms	IMI and condoms
18	12	6 (includes 1 rape episode)	With partner 3 (others were sexual partners within the relationship)	1 child	After pregnancy – dumped boyfriend because he cheated	No
19	16	1	With partner 1	1 child	After STI - condoms	IMI and condoms

Table 2. Number of respondents and number of partners

Number of respondents	Number of partners	Comment
7	1	68% of participants with <3 partners

6	2	
4	3-5	
2	6	Both raped as first experience

4.2.1 Circumstances around 1st sexual experience

The age of first sex ranged from 12 to 18 years old; the 2 youngest (12 and 13 years) were both raped. Respondent 18 was raped by a total stranger in the street when she was 12 whilst Respondent 1 was raped by a neighbour when she was 13 years old. The neighbour called her over to collect something for her mother and when she went to his house he raped her. She was raped again at 16 years by an older family friend or distant relative. In this case very few of her family believed her and thought that it was her fault for enticing him. Two out of 19 girls from this cohort were raped. This may seem surprisingly low given the publicity of the South African rape statistics but the statistics in South Africa state that "over 40% of women will be raped in their lifetime" (Middleton, TIMEWorld, 2011) and in the 1999 report from to Community Information, Empowerment and Transparency (BBC news, 1999) Africa , In 1998, one in three of the 4,000 women questioned in Johannesburg had been raped (BBC news, 1999). My numbers are lower because of the age when these girls were interviewed.

The first sexual experience occurred in 11 (58%) of the girls when they were 16 years or older, in most cases with a boyfriend they had been dating from between 2 weeks to a few years. 3 of the 19 (15%) girls had an early sexual debut (<15 years of age) and this is higher than the South Africa Demographic and Health

Survey (2003) in which 6% of Gauteng girls aged 15-24 years had had first sex by age 15 (ref DOH, MRC).

Peer pressure, planned and unplanned occasions were the three dominant discourses around first sexual experiences. In one instance, Respondent 4 (20/02/2010) indicated that she had planned it for her birthday. None of the girls said that they felt pushed by their boyfriend into having sex but a few mentioned that their female peers said they should do it. Respondent 3 (20/02/2010) best described the attitude of some of the girls when she noted: *"Ja it was a planned thing, I wanted to know what other people know. I was just curious."* The girls had an early sexual debut because they were in a *"steady relationship*" and in many cases were just curious to know about sex.

Respondent 14 (24/02/2010) regretted having sex at such an early age (16 years old, she had hoped to remain a virgin until 21 years old), "*There's people, like your friends, who say that if you don't do sex then you're stupid, but I say it's not about being stupid, it's because you trust someone. Don't just do it because your friends say you should do it."* Only one girl (she lost her viriginity at age 16) had sex with a non-boyfriend because *"it was a bit of peer-pressure - my friends lost their virginity when they were about 15 or 14 and I also wanted to be popular."* (Respondent 16, 26/02/2010). Unplanned experiences were the 2 rape cases and instances in which the girls indicated that it just happened.

Pettifor (2004b), suggests that sexual activity in girls around the age of 15 years is strongly associated with coercion, transactional sex and low condom use and where more than 30% of the WHO settings signify women, with first sexual intercourse before the age of 15 years, were being forced into it (Wellings et al, 2006). This is the case with the Bt20 girls where 2 of 3 girls were under 15 when they had their first sexual experience and 2 of them were raped. Whilst the media has been blamed for promoting sex and sexuality, more in-depth qualitative studies need to be done in order to understand reasons behind early sexual debut.

4.2.2 Faithfulness within relationships

40% of the girls were still with their first partner which is in keeping with Jewkes, Vundule et al (2001) where their group of Cape Town teenagers had been dating for a mean of two and half years and 50% of them were still with their first sexual partner. In my study the majority (84%) of respondents were faithful to their partner and in a steady, and for them, monogamous and trusting relationship. The three respondents who had sexual liaisons outside of their relationship had been in the highest number of relationships and includes the two girls who had been raped as children. One had this to say when questioned about other sexual partners outside of her relationship, *"…there were one or two. I used condoms with other partners but with my partner we stopped using them. I had sex with*

them 'cause I liked them, you know." (Respondent 6, 21/02/2010) Despite the majority of girls being faithful to their partners, a few were aware that their partners were not, *"…my partner, when I wasn't around, he was proposing to some of my friends."* (Respondent 12, 23/02/2010).

Respondent 1 (who had been raped on two separate occasions) is an interesting case and the following is a chronological breakdown of her relationships with unfaithful partners:

With boyfriend 1 - *"The time we broke up, breaking up was frightening, other girls in the picture."*

With boyfriend 2 - *"…and he had the whole history, he was married….he said that he wanted to spend his whole life with me and ok so finally we didn't use it (condoms) until I had a phone call from the wife asking what I was doing with her husband. …He had a partner before the wife and that partner has a baby …"*

With boyfriend 3 - *"… I got an sms and I don't know who it was so I called the number and the girl said no I'm L…. I'm S….'s girlfriend, you're going out with my boyfriend blah di blah di blah…. and he said no this girl was pregnant with my baby, she had a miscarriage and now she wants to come back into my life…"*

With partner 4 (during relationship with Boyfriend 3*) - "there's this guy I met, he's a big fat liar ... He's half Zambian and half American…We dated for a couple of months so this guy used to lie to me… so I told him if I find out that you are*

married and have children, I'm gonna leave you. And he said no I'm not married, I don't have kids and a few days later I found out that he was married, he's got twins and they're 4 months old! ….They've been married for over 4 years now and these aren't the only kids he has, he has kids in Zambia and kids in New York where he used to live and this is his new family."

In Respondent 1's case the family have been unsupportive of her relationships and even gone so far as to condone the behaviour of men and their multiple partners by trying to push her into making it work with her Zambian partner rather than her current boyfriend, seemingly because of his potential prospects. The respondents don't trust men, accepting that they are not monogamous. However, they expect that their girlfriends should respect one another's relationships. What is apparent is that this is not the case; hence many of the respondents have few close girlfriends for support.

Whilst the theme of whether rape survivors go on to have more sexual partners and higher-risk behaviour was not explored with other members of the Bt20 group, the two girls who were raped had the most sexual partners and were two of the three girls who were or had been unfaithful to their partners. Conversely, at least half of the partners, according to the respondents, did not appear to be monogamous. In a large proportion of cases their partners had already had many episodes of unprotected sex, resulting in a number of children from different mothers. It is expected that men will have multiple partners and all forms of

communication about sexual behavioural modification are directed at women who are expected to remain faithful and monogamous. At the same time the research indicated that girlfriends were expected not to engage with respondents' partner's proposals of sex, as Respondent 1 (19/02/2010) narrates about her partner and supposed girlfriend's interaction in her partner's bathroom, *"…so you say that my man was making moves on you, so ok fine if he was but couldn't you get out of (the bathroom) not that I'm saying I trust him more than you but you're my friend, you're a girl, you know what girls go through, your men can make moves on me but I can choose to ignore it or I can choose to carry on and in this case I think you chose to carry on…."*. This expectation contrasts with respondents' experiences resulting in a poor peer-group network of support. Studies done show that males are expected and allowed to have more than one partner at a time (MacPhail and Campbell, 2000; Varga 2003; Pettifor et al 2004)

4.2.3 Peer pressure and trust

Playing into this is the disconcerting notion of a 'gossip-culture' which came out quite early in the interviews when I realized that most of the participants admitted to not having friends. They attribute this reason to not being able to trust their girlfriends, as Respondent 12 (23/02/2010) noted, *"I had a friend, we had a long relationship. She knew my secrets, I knew her secrets and then she betrayed me. She went around telling people my secrets, about my sexual life and everything, so I decided to leave her alone so I don't have friends anymore.."* This 'gossip-

culture' has further reaching socio-economic implications as evidenced by Respondent 17 (27/02/2010), from a low-income bracket background, *"I did have some friends who didn't accept my lifestyle and they used to make a joke out of me."* The 'gossip-culture' also extends to teenage-pregnancy where girls related that they were teased for falling pregnant so they chose not to return to that school, rather opting to go to night school where there were many other teenage mothers. The gossip culture was also mentioned by MacPhail and Campbell (2008) but this was more related to girls carrying condoms and being labelled promiscuous.

Compounding the lack of support further is the lack of trust amongst girls within their peer group due to competition and jealousy. In the literature from Vietnam (Lan et al, 2008) participants in the study exchanged information with their peer networks, although women were more embarrassed to speak about sexuality which may lead to misconceptions and limited knowledge. In a paper by Tylee et al (2007) more sensitive issues regarding sexual matters are discussed with trusted friends or family. Within the South African context, this lack of trust impacts on girls not talking about sexuality because they have no peers to trust; there is a poor family-support structure; and partners they cannot discuss these issues with. An environment that is not conducive to openness and communication around issues of sexual behaviour will fuel the stigma and enhance the misconceptions of STI/HIV. However, misinformation also impacts negatively, for example the sister Respondent 3 (20/02/2010) who told her that

Herpes is common and not to worry about it resulting in her not seeking treatment.

4.2.4 Sexual behaviour modification and condom-use

In most instances (16), respondents changed their behaviour either post-STI (11) or post-pregnancy (5) and are now using condoms and/or intramuscular contraception. Knowledge of the STI effected change in some relationships: *"I told my partner that I didn't have STI before but then since I'm with him I have complicated and so I went to the clinic to take my treatment, then I told him he must go and he said no I'm not going so I broke up with him"* (Respondent 11, 22/02/2010). Other respondents used condoms more regularly, possibly because they were uncertain as to whether their partner was being faithful. Three of the respondents have not changed their sexual practice with regard to preventing further STIs of which two girls now have children with the same partner while the third is in a different relationship and whose partner says that they do not need to use condoms because STIs are treatable.

Condom-use was not new to the girls with almost half (8 girls) of the cohort having used condoms with their first sexual experience. When asked who's idea it was to use a condom Respondent 14 (24/02/2010) said, *"Both our ideas because that's what we learned at school because we were told about HIV"*. The majority of the girls indicated that they used condoms especially for their first time but that it became a more irregular thing once they were in a "stable" relationship

and trust had been built. In three instances the girls thought that the *"condom blasted* (ie burst)*, that's why I got a STI/ got pregnant".* Another respondent (Respondent 7, 21/02/2010) had this to say, *"I really hate male condoms, I don't use female's but I really hate male condoms because I don't know about the oil on them. If I might use the condom I might get the STI from the oil that's there, especially from the condoms that are for free*." This is an important idea about condom-use, the role of public programmes and the roll-out of free condoms, suggesting why current programme objectives are failing.

Sexual behaviour modification is fostered within an environment of support. The Bt20 study has provided this platform for counseling and support within an environment of poort peer-group and family networks which do not talk much about sexuality and the consequences around sex. The effectiveness of the Bt20 support structure is evidenced by the fact that the majority of the girls changed their sexual behaviour after they knew about their STI, whereas within community clinics, only one of the respondents received counseling regarding her STI. It was through the Bt20 counseling process that respondents realised that they had acquired their STI through their partner. The girls who were unfaithful within a relationship all used condoms after finding out about their STI.

4.2.5 Pregnancy, contraception and school-leaving

Feeding into the failing of condom-use as a broader preventative method, pregnancy is something that was not thought of when the girls had sex. A large

proportion, 15 of the 19 girls, have been pregnant, two have aborted. One girl was pregnant at the time of the interview, 9 girls had one child, 3 girls had had 2 pregnancies. Teenage pregnancies in South Africa are on the decline according to Shisana et al (2008). The burden is in the 17-19 year old age group and varies according to population group: African 71/1000, Coloured 61/1000, Indian 22/1000 and White 14/1000. This variation amongst population groups may well be related to social conditions, access to education and health care. International research, however, has also shown strong cultural differences related to pregnancy when socio-economic factors are controlled for. In certain cultures, pregnancy out of wedlock is severely frowned upon resulting in the mother having to have an abortion or giving her child up for adoption (Sang-Hun, 2009). In South Africa, it seems that there is a lot more leniency surrounding pregnancy out of wedlock and inquiries around attitudes may help to better inform sexual behaviour practice findings from this research.

At the time of interview, eight of the girls were using contraception (all intramuscular, with or without condoms); 7 were using condoms only because intramuscular contraception doesn't agree with them; and 4 were not using anything (See Table 1 for more specifics). The effects of teenage pregnancy and keeping the child have implications that impact on education and career prospects. In many instances keeping the child delayed the girls matriculating and only eight girls matriculated of whom four had no children (either did not fall pregnant or aborted). By changing the perspective of the youth regarding their future and opportunities, young girls may be encouraged to use contraception

and delay having a family, thereby reducing the risk of HIV (Shisana et al, 2008), so that they can achieve career aspirations. Harrison (1999) suggests, in his three steps to preventing teenage pregnancies, that the focus of behaviour change for older adolescents needs to "shift from 'safe sex messaging' or 'safe sex negotiation' aimed at changing perception of risk to: fostering personal initiative; developing the means to better negotiate day-to-day pressures and expectations; and providing links to new opportunities." Even though the majority of respondents will matriculate, there is little opportunity for them to further their studies and the jobs that will be available to them are mostly unskilled, low income jobs. This feeds in well with improving the life-orientation skills programme where developing self-esteem and career opportunities are key goals.

4.2.6 Transactional sex with older men ("sugar daddies")

As a mechanism for financial security, the notion of "sugar daddies" is a well established one: these are generally older men who will give young girls tangible things for sex, like cell phones or airtime, jewellery and clothing or even pay for schooling. The girls refer to these men as "my minister of finance" or "my minister of transport". This notion of transactional sex usually with older men was well known to the girls and MacPhail and Campbell (2008) related their study participants engaging in "sexual relationships in exchange for lifts home from school, gifts and subsistence cash". In Dunkle, Jewkes et al's 2004 study of

women seeking antenatal care at Soweto clinics, 21% of women interviewed reported having had transactional sex. In my study only one girl had been with an older married man but not only for transactional sex. She described him as being more conversant with different ideas to what she was used to. He was able to provide her with things like a matric dance dress, however, she did not take him as her partner to the dance saying that he was too old and that she did not want to be disgraced and the topic of conversation. When asked whether she would do it again she said, *"No. most of the time they have wives and a family. What would happen if I fell pregnant, I couldn't go into their house with their children being about my age."* (Respondent 18, 27/02/2010).

All the other girls were very against transactional sex, "*I don't think that's right, some men date young children the same age as their own children. They buy them fancy things in exchange for sex or something else but they can get diseases out there like AIDS, STIs and other things."* (Respondent 19, 28/02/2010). The majority of respondents did not agree with, or engage in, transactional sex and thought it better for young girls to finish school, get a job and make it in the world themselves since most of these men were unreliable; already married with children the same age as the respondents; and a potential risk in transmitting STI/HIV.

The power and authority behind transactional sex makes it more difficult for young girls to negotiate safe sex practices, hence increasing the risk of transmission of STI/ HIV.

4.3 Treatment-seeking behaviour in relation to STIs

Improving treatment-seeking of STI/HIV is key to keeping the population healthy, whilst a cornerstone in fighting the STI/HIV epidemic is the provision and prioritization of a public health system that is easier for the youth to access.

4.3.1 Clinical follow up

From the literature, it appears that girls will tend to seek treatment for STI less than boys do especially when asymptomatic which is not unsusual (Mmari et al, 2010). After counseling by the Bt20 nursing sisters, 17 of the 19 girls sought treatment for their STI. Only one respondent had signs of an STI when she was told of the STI diagnosis; all the others sought treatment because they were counseled to go. One participant denied knowledge of her STI and the counseling process although both were documented in her records; the other participant did not go because she had no worrying signs and symptoms and didn't see the need to go. She stated, *"You know my sister did some nursing but she didn't finish it. She told me that herpes is common, so it's just that, it's common, so I never went to the clinic for treatment"* (Respondent 3, 20/02/2010).

This suggests that respected community/family members, used as important sources of information, may be underplaying the importance of STIs and Herpes in particular allowing the easier choice (of not seeking care at the clinic) to be the chosen option.

Of the 17 girls who did seek treatment, one girl went to a Private General Practitioner; all the others went to their local clinic. Many of the respondents indicated that they were "… *scared to go but I was more scared that there would be complications if I didn't go."* (Respondent 17, 27/02/2010). They all went for the required number of treatments at the health care centre indicating an adherence to post-counselling advice. One girl did not receive any treatment at the clinic: she went three times and each time there was a different excuse from the nurses (she was told to come back twice and the third time was told it was a clinic for children only) demonstrating a *laissez-faire* attitude by the HCW(s), which may be indicative of poor service delivery within the public health care sector.

Of the respondents who accepted that they had an STI (17), 14 girls told their partners of the diagnosis and suggested that they seek treatment too; only 7 partners went for testing and 6 were treated. This lower proportion of treatment-seeking by the boys may result from not having adequate counseling themselves. A study done by Jemmott et al (2010) showed that an intervention of intense one-to one counseling had a favourable outcome for less sexual intercourse, less

unprotected sexual intercourse and fewer partners. This treatment-seeking behaviour by the respondents is probably a reflection on the intervention of one-on-one counseling at Bt20. What it does bring out is that with good one-to-one counseling, where an individual's health is the priority, the individual will seek treatment even though she has had previously bad experiences at the clinic.

4.3.2 Clinic experiences

I asked 13 girls about their previous clinic visits which were not related to STI treatment; two had not previously attended a clinic, and one would only ever go if she was severely ill. Six of the girls described their experiences as being "*Okay" and "Fine"*, whilst four of the girls had poor experiences previously. All the girls went to their clinic to seek treatment for their STI despite the fact that they had mixed feelings about the service and attitudes of the HCWs: *"They didn't shout at me but they're not nice. They're cold and so cheeky, they have no patience for a patient."* (Respondent 18, 27/02/2010)

Of the 16 girls who went to the clinic for STI treatment, 10 had a good experience, one was *"not a great experience"* and five had bad experiences. Four out of five girls who had a bad experience said they would not go back; they would prefer going to the GP or to Bt20. It did not seem to matter which health facility the girls attended, some girls had good service and others poor service. The service delivery rested with the Health Care professionals and their attitudes

to patients. Respondent 17 (27/02/2010) described her experience as unsatisfactory when they *"…scolded me because I was having sex so young. I showed them the letter and they scolded me because I had only come a week after I got the letter, I was at school and couldn't attend so I went on a Saturday and they took long to attend to me."*

For at least one of the girls, the health care workers at a particular clinic did not know how to treat Herpes Simplex virus and she was passed on from one sister to the next: "*I've been to Z…. too but they couldn't tell me much so I don't think they're very well trained. They can't answer my questions on why I feel the way I do. They also make you feel like a fool."* (Respondent 18: 27/02/2010). These attitudes of the HCWs impact on the trust and respect that the profession has developed over time to the extent that respondents feel that: "*They must just do something about the service … they don't care about the people in the line. They will talk until half past eight and from then they will be able to attend you. If they're not done they will just sit and chat, I will never go back to that clinic ever."* (Respondent 14, 24/02/2010). However not all experiences were bad and in a few instances, the Bt20 letter seemed to facilitate their process at the clinic: *"The staff were nice, they even counseled me. I took my Bt20 letter with me and they had so many questions. I was like the popular one."* (Respondent 10, 22/02/2010)

Warenius et al (2006) found that nurse-midwives disapproved of adolescent sexual activity but that nurses who had received more continuing education showed a tendency towards more youth-friendly attitudes. Adolescent services of the NAFCI clinics are have been shown to be better than the control clinics according to Dickson et al (2006). An expedited roll-out of these services; the training of staff to improve their knowledge; and a change in HCW attitudes will transform adolescent perceptions of user unfriendly clinics and promote treatment-seeking behaviour.

The three overarching themes from this qualitative research are (1) Perceptions on STI/HIV and personal risk; (2) Sexual behaviour; and (3) Treatment-seeking behaviour. The proximate determinants of STI/HIV transmission fit well within the macro context of the public health framework and is related to themes 1 and 2 of this research. The processes and structural capacity of the public health framework are described in theme 3. These, together, help to inform the outcomes of the public health framework within this research, to find intervention methods to change sexual behaviour and to improve treatment-seeking. The results and discussion will be arranged in accordance with the 2 frameworks I have chosen and described along the themes emerging from the results.

The narrative approach enabled the girls to feel comfortable about talking about their sexuality in a safe setting. When asked to comment on how they felt the interview went, 17 of the 19 girls said they felt it went well and were comfortable answering these questions. One girl giggled nervously and said it was different talking to “old people about these things but it wasn’t so bad” and the other said

she was very pleased with the interview because she felt that we really cared about her. A focus group approach may have been as good a method although there were a few girls who would have dominated the conversation and a few who may not have opened up feeling that they were being judged by the others. Overall I gained a tremendous amount from this method of research although it was more time consuming than a focus group would have been.

Chapter 5

Conclusions

5.1 Perceptions and stigma

The research has revealed that although information on HIV may be prominent and available, the relationship and role of STIs in HIV transmission may not be so obvious to the general community. The life-orientation skills programme presented in the early 2000's has inadequately equipped the Bt20 youth generation on knowledge regarding sexual behaviour. Further complicating the dissemination of relevant knowledge are their family's unwillingness to talk about sex and sexuality with them. Without the support of peers and a lack of *confidantes,* in a society of broken families and unstable relationships, young girls have no one to discuss sexuality and share information with which fuels misconceptions and stigma related to STI and HIV. From my research sample, there was a definite difference in education, family constructs, social circumstances and personalities which may have important influences on their choices. Improving knowledge on STI's role in HIV transmission through an earlier and more structured life-orientation programme at school; the media; and formal education from HCWs will help get the message across sooner and have a positive impact on HIV transmission.

5.2 Sexual behaviour

Early sexual debut whether planned, unplanned or due to peer-pressure is a priority problem that requires further investigation. The respondents in this research thought they were in a monogamous relationship but they were uncertain whether or not their partners were faithful. Condom-use has been said to be on the increase but this is for preventing HIV. I unfortunately did not explore the respondents thoughts related to condoms and STIs in particular, rather than to both HIV and STIs. Once a couple is in, what they perceive to be a *"steady relationship"* where they have tested negative for HIV, they tend to stop using condoms. This is all very well as long as they are in a monogamous relationship. The study group was in agreement that transactional sex was not a viable option for their financial security.

5.3 Treatment-seeking behaviour

One-on-one counseling by the Bt20 nurses has had a positive impact on the girls by educating them on the cause and consequences of STIs related to HIV and increased their treatment-seeking. It has also modified their sexual behaviour and increased condom use by the participants. Almost all the girls went on to seek treatment after they were counseled, even if they had previous bad experiences at the clinic. Poor service delivery, uncaring treatment of patients and a lack of knowledge of the health care practitioners made a third of the study respondents not want to go back to the clinic. Better educated nursing sisters and a 'continued medical education' programme regarding adolescent sexual activity should be a prime focus of Government alongside improved health care facilities/adolescent clinics. I did not go into the cost of seeking medical care because for the Bt20 cohort they receive free care at all the Soweto clinics. Cost would be another factor coming into the equation of accessibility of treatment for the greater population.

5.4 Relevance to the conceptual framework used

The findings of this research fit well within the conceptual framework of the proximate determinants within the macro context eg stigma, perception and trust and their role in STI/ HIV transmission. The Bt20 group's clinic experiences of health care workers attitudes and insufficient knowledge are a failure of the public health system. Those girls did however say that they would rather go to a private

practitioner or get treated at Bt20 (if it was possible) and were not refusing treatment. The respondents had good one-on-one counselling by the Bt20 nurses and realised the necessity of getting treatment for a serious illness. In the face of these interventions, making inroads to change the poor public health service is a main concern.

5.5 Relevance to society

Changing perceptions and dealing with stigma is one of the NSP priorities. Information on HIV is available: the HSRC study states that there is increased uptake of information and my research group also thought that information was available but that some people are still not willing to hear. It appears that although there is information on HIV, the connection between STI and HIV may not be clear to many people. Improving this information may help to change perceptions. Intensive counselling on a one-to-one level works but is time consuming and expensive and may not be feasible in under-resourced communities. Many clinics run a general group counselling session in the mornings while patients are waiting to see the HCW. These counselling sessions are arranged internally and cover issues that the HCWs deem pertinent. Tapping into these sessions by arranging for accredited training may be the way to go so that the same message is disseminated throughout the country.

To effectively combat STIs amongst the youth within the public health care system, a screen and treat programme for STIs would be ideal, however, this may not be feasible given the resource limitations. Any interventions cannot exist in a system that does not put the patient first, treating them with dignity and respect. It is therefore imperative to changing the attitudes of HCWs through training and the roll-out of NAFCI clinics.

5.6 Research gaps

Additional themes, requiring further study, which may enhance the findings of youth-focused research include:

a) Unwillingness of families to talk about sex and sexuality may be from a lack of family support. The idea of a gossip-culture by peers leading to a lack of trust and friendships with girls suggests a lack of peer support. A well planned study on social networks and friendships would be useful to identify

b) Cost of care for the youth, both direct and indirect (including disclosure because of skipping school to go to the clinic). How young women access and use health services, how they get money for things they wish to keep private (eg abortion) and how accessible these services are, would be interesting

c) Normalisation of STIs. It may be interesting to look at treatment of STIs, the fact that so many people have these, how effective or ineffective treatment is and why.

d) Explore the use of condoms to prevent STIs and not HIV. It may not be as obvious to the population that STIs and HIV are associated

e) Evaluating and improving the life-orientation skills programme to ensure that they reach their set goals

f) Explore the differences in gender and treatment –seeking behaviour in South Africa, rural and urban related to STIs and other illnesses. Males are more likely to seek treatment for STIs because they are obvious rather than in females but may not seek treatment for other illnesses.

5.7 Next research steps following this study

I think the important steps following this study would be to assess the life-orientation skills programmes that have been rolled out at schools. Already the Life orientation curriculum (Department of Education and Western Cape Education Department) seems to better address the gaps, that were mentioned by the respondents, a few years ago. Monitoring and Evaluation of the programme and its learning outcomes should already be in place. However further research could include looking at certain aspects of the programme (eg related to sexual behaviour, STIs and pregnancy). Included in what would be

useful to know are whether or not the life-orientation skills programme is implemented as per policy; who is assigned to teach it; and how the classes are structured. It would also be useful to know what proportion of those classes is already sexually active to find out whether the programme is aimed at the correct age group. The "Health promotion" or even just the sexuality part of the programme may need to be outsourced but it could bring training of many young people and offer them a career path as educators. Intensive counseling has been shown to work and using the structure of a good life-orientation skills programme may be the cornerstone of changing perceptions and stigma.

Looking into the attitudes of HCWs regarding early sexual behaviour and the dissemination of relevant information might be a useful evaluation. Caring attitudes and correct information by people in authority is necessary to bring about change.

5.8 Researchers observations

At the end of respondent 17 (27/02/2010) interview, when asked how she felt the interview went, she commented that she didn't mind *"talking about this (sexual behaviour and clinical follow up) because I know you care about me".* For me this became an important theme that I identified as being paramount to the success of STI/HIV treatment and prevention programmes.

An interesting point that came out in the narrative was that the respondents often referred to the clinic staff as “doctors” and only when I challenged them on this did they in fact not know whether it was a nurse or doctor who was attending to them at the clinic.

5.9 Limitations

The number of participants was both small and controlled, being part of the Bt20 study group, although no new themes emerged for most of the questions explored. This cohort may not be representative of the greater Gauteng province as they may be more conditioned with respect to the attention, counseling and information they have received from the nurses since birth. Some of the respondents are known to the Bt20 study nurse and may not have responded truthfully if they had something to hide from her. Further, self reporting may be subject to error with the tendency of participants to respond in a socially acceptable manner and behaviour modification was not fully explored for those few girls who did not change behaviour. Cost implications did not affect this Bt20 cohort and so would be a bias.

Sexual frequency would have added to the quality of data alongside sexual behaviour and treatment-seeking data from boys of the Bt20 cohort. My interview questions did not delve into the sexual history of the partners, so for girls who were in a monogamous relationship, it would have been interesting to gather data

on their partner's sexual behaviour, related to STI contraction and their views on monogamy or multiple partner activity.

From the research gaps identified it is obvious that a multidisciplinary focus is needed for this research and that although a public health framework is appropriate, it is not exhaustive. Combining it with a more sociological framework could add value to this research.

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