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Contraceptive Study: An Assessment of Contraceptive Use in Patients Requesting Termination of Pregnancy at Chris Hani Baragwanath Hospital.

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A research report submitted to the Faculty of Health Sciences,
University of the Witwatersrand, Johannesburg,
In partial fulfilment of the requirements for the degree of
Master of Medicine in the branch of,
Obstetrics and Gynaecology.

Johannesburg 2008.

Declaration

I, Roberts Barasa Nyakoe declare that this research report is my own work. It is being submitted as partial fulfilment for the degree of Master of Medicine in the branch of Obstetrics and Gynaecology in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree at this or any other University.

Signed _____

_____ day of _____2008.

This research report is dedicated to my wife Jane Jerotich, my daughter Ashley Nyamusi and my son Joshua Onentia.

Presentations

Presented at the 18th annual research day. Organised by the Department of Obstetrics and Gynaecology; University of the Witwatersrand. On the 28th September 2002, Quatermain Hotel, Johannesburg.

Abbreviations

- AIDS – Acquired Immune Deficiency Syndrome.
- CHBH – Chris Hani Baragwanath Hospital.
- CTOP Act – Choice on Termination of Pregnancy act of 1996.
- HIV – Human Immunodeficiency Virus.
- IUCD – Intra-Uterine Contraceptive Device.
- MRC – Medical Research Council.
- NYRBS – South African National Youth Risk Behaviour Survey 2002
- SADHS – South Africa Demographic and Health Survey
- SAHR – South African Health Review.
- STDs – Sexually Transmitted Diseases.
- STI – Sexually Transmitted Infections.
- TFR – Total Fertility Rate.
- TOP – Termination of Pregnancy.
- UNAIDS – United Nations programme on HIV and AIDS.

Abstract

The aim of this study was to assess the demographic characteristics and contraceptive practices of women requesting termination of pregnancy (TOP) at Chris Hani Baragwanath Hospital (CHBH). The study will provide insight into the reasons for contraceptive 'failure' or non-use.

Methods

This is a cross sectional questionnaire survey. Subjects for the study were recruited from clients requesting TOP at the Gynaecology clinic (ward 54), CHBH. They included women between 13 to 49 years, who were referred from their local clinic or General practitioner with a positive pregnancy test or a pregnancy confirmed on sonar, and were less than 20 weeks pregnant. Consenting women completed a self-administered questionnaire which assessed their demographic details, current contraceptive use, past contraceptive experience, future contraceptive plans, knowledge of emergency contraceptive pill, and the current status of the relationship, initial intention with regard to the pregnancy, and the number of sexual partners they had in the last year. The data was analysed using the Epi Info 6 software programme.

Results

There were 780 requests for TOP during the study period. Two hundred and twenty nine women were approached to participate in the study and 203 questionnaires were analysed, i.e. an 89% analysable response rate. The mean age of the respondents was 25 years (range 13 - 42 years), the mean parity was 1.3 (range 0 to 9), 35% were still in school, 28% were unemployed and 70% were financially dependent on their parents, partners, or other

relatives. A total of 56% of the respondents reported that they were using contraception when they conceived. Only 11% of the respondents knew of the emergency contraception pill. Eighty two percent of the respondents knew where to obtain contraceptives and only 7% had experienced actual difficulty in obtaining contraception. However, 46% thought they received 'too little' information about contraception at their local clinic and 26% said that the contraceptive method they received was the healthcare provider's choice. Up to 47% of the respondents were either unsure of the contraceptive method they would use or would not use any contraception following the TOP. However, 43% would use a highly reliable contraceptive method (the oral contraceptive pill, injectable contraceptive, or sterilisation). Regarding the status of the relationship which resulted in the pregnancy, 44% were no longer in a permanent relationship (41% were and 11% never were). Twenty two percent of the respondents initially wanted the pregnancy.

Conclusions

Twenty two percent of the respondents initially wanted the pregnancy and would not have been helped by better provision of contraception. A large number of respondents reported contraceptive failure. Knowledge of emergency contraception was poor, and its use should be better promoted for cases of contraceptive failure. It is alarming that up to 47% of the clients could not use contraception in the future. Perhaps more time should be spent on contraceptive counselling and initiation of a method on site, with referral and follow-up at primary health clinics to improve uptake of contraception. Only 2.5% of the respondents were having a repeat TOP.

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Introduction and Literature Review

The Choice on Termination of Pregnancy Act No. 92 of 1996 [1] (CTOP Act) was implemented in February 1997. The act determines the circumstances in which and conditions under which a pregnancy of a woman may be terminated. While the act recognises the right of the woman to have access to safe, effective, affordable and acceptable fertility regulation of her choice, it also emphasises the belief that termination of pregnancy (TOP) is not a form of contraception or population control.

Up to November 2005, 524377 pregnancies had been terminated countrywide under this Act, [2] including 39.8% in Gauteng province. The number of TOPs appears to be increasing annually. The reason for this might be inadequate contraceptive education, difficulties obtaining contraception, [3] negligence with contraception on the part of the woman, [4] or increased accessibility of TOP services. [5, 6]

The mortality from abortion has progressively decreased as reported by the confidential enquiries into maternal deaths. As a proportion of all maternal deaths, deaths due to abortion made up 5.7% in 1998, 4.9% in 1999- 2001, and 3.5% in 2002 – 2004. [7, 8, 9.] Thus the change in legislation has been successful in reducing mortality due to incomplete abortion, and in advancing women's rights. [10] A study in the west of Pretoria has shown that the introduction of the CTOP Act was associated with a reduction in the number of women with incomplete abortion and also in mortality due to incomplete abortions, but not in severe morbidity. [11]

An assessment of the implementation of the CTOP Act in 1997 [12] identified various problems. These included lack of post-abortion counselling and to some extent pre-abortion counselling, lack of adequate facilities such as counselling rooms, the reluctance of some practitioners to refer patients for termination of pregnancy due to moral and religious concerns, and lack of emotional support for healthcare staff. Other problems as reported in the South African Medical Journal [13] include lack of trained staff, victimisation and intimidation of staff performing abortions, the fact that not all designated facilities are providing the service, and difficulty in accessing the service especially in rural areas, leading to the need for second trimester terminations of pregnancy. Only 61.8% of the facilities authorized to provide TOP services nationally are doing so. This varies from 30.4% in KwaZulu-Natal to 100% in the North West province. [5] The first South African National Youth Risk Behaviour Survey 2002 (NYRBS) found that of the youth who had abortions, 62.5% were performed in a hospital or clinic, while 16.3% used a (potentially unsafe) traditional doctor or healer. [14]

Half of sexually experienced 15 – 24 year old South African women interviewed in a national survey reported having ever been pregnant, and 65% of them indicated that the pregnancy was unwanted but only 2.6% accessed TOP services. Failure to use TOP services might be due to lack of knowledge or social stigma attached to TOP. [15]

The total fertility rate (TFR) in South Africa is 2.7 children per woman. [5] The TFR in South Africa follows a bimodal pattern, with a premarital (18-20 years) and marital (28 – 30 years) fertility peaks. This is thought to be due to low

contraceptive uptake before the first pregnancy, with increased uptake after young women receive adequate contraceptive advice at antenatal services or after giving birth. [16] Thus contraceptive needs should be met before the first pregnancy. It has been consistently shown that the youth are initiating sex at an early age, and that they are not equipped to deal with the responsibilities that come with it, with regard to condom use, pregnancy, abortion, and contraception. [14]

The SADH 2003 [17] looked at fertility preferences (these allow us to estimate the demand for family planning services) of women and found widespread desire to control the timing and number of pregnancies. Among currently married women, 61% did not want another child or had been sterilised, while another 9% wanted to wait for at least two years before having another child. Only 12% wanted another child soon, i.e. in less than two years.

South Africa has a high contraceptive use compared with other African countries, although this masks a wide variation by characteristics such as age, education, area of residence and marital status. [16] The role of contraception is thus 'to prevent pregnancy that is too early, too close, and too many'. [16]

Although the women accessing TOP services make up a small proportion of women with unwanted pregnancies, they form an important group as they either have not used contraception or they have failure of contraception. A study of these women will allow us to explore potential problems to accessing

and using contraception and thus make recommendations to improve the service.

Various studies [4, 18, 19, 20, 21, 22, 23] have attempted to characterise women requesting termination of pregnancy. Women requesting TOP tended to be young with a large percentage being teenagers, still in school, with good knowledge of contraception. However, usage of contraception was poor with a reported high failure rate.

Age, sexual behaviour and TOP

South African studies show that teenagers constitute 20 - 24% of the clients who have TOP (Cape Town public sector clinics, [22] Pelonomi and National hospitals in Bloemfontein 1998-1999 [19]). A study of legal termination of pregnancy among teenagers and older women in Soweto 1999 – 2001 [18] found that termination of pregnancy rates are highest in younger teenagers 13 – 16 years (23%) and in women 35 years or older (16.2%). Elsewhere in the world an even higher proportion of teenagers have been reported. In a 1985 study of women seeking TOP in Zaria, Northern Nigeria [20] 36.5% were teenagers. A 1994 – 1995 national survey of abortions in the United States [21] shows that 21.5% of clients who had an abortion were teenagers

There is evidence that South African youth are becoming sexually active at a young age. In a study of sexual behaviour of Cape Town high school students in 1990, [24] 23.4% of boys and 5.5% of girls in had had sex by the age of 14 years, and there was a substantial increase in students who had experienced sex between grades 8 and 11. A South African national male sexual and

reproductive survey [25] found that the mean age of sexual initiation was 15 years in 20 year old males and that 93% of them had had sexual experience. A study of risk factors for teenage pregnancy among sexually active black adolescents in Cape Town in 1995 [26] also found that the mean age at first sexual intercourse was 14 years in both pregnant and non pregnant teenagers.

In a survey of sexual behaviour among Anglican youth in the Western Cape, [27] youths who had engaged in sex said that it was due to peer pressure, the need to give and receive love, seeing other people engage in sex, threats, material gain, positive media images about sex, and boredom.

More recent South African data shows similar findings. The preliminary report of the SADHS 2003 [17] found that the TFR is highest for the 20 – 24 year group. The proportion of teenagers who had ever been pregnant was 12% and 9% had given birth. This is a decrease from 16% and 13% respectively in the SADH 1998. [28] A national survey of HIV and sexual behaviour in 15 -24 year olds in 2003 [29] found that 67% of them have had sexual intercourse, and that the median age of sexual initiation was 17 years while 8% had sexual initiation at 14 years or less. A separate analysis of sexually experienced women [15] from this study shows that 50% have been pregnant and 52.2% used contraception, but there was no correlation between early sexual debut and contraceptive use. Contraceptive use was associated with having been pregnant but not with having had an unwanted pregnancy. The NYRBS [14] shows that 41.1% of learners had had sex, with 14.4% having sexual debut at

the age of 14 years or less, 16.4% having been pregnant or made someone pregnant and 8.1% having had an abortion or their partners had one.

Parity and termination of pregnancy

South African studies [19, 22] found that most of the women requesting TOP had had a previous live birth, 59.5% in Bloemfontein, [19] and 68% in Cape Town. [22] However, in some countries clients with previous live births were in the minority: Finland [4] (32%), Sweden [30] (16-30%), and Nigeria [20] (24%).

Religion and sexual behaviour

Socio-cultural issues play an important role in the decision to have an abortion or to use contraception [31]. An Anglican Church based youth survey of sexual behaviour in the Western Cape [27] showed that 72% of youth had received teaching about sex at Church but that this did not impact on their sexual behaviour. However, their reported pregnancy rate was lower than reports elsewhere. This might be due to the youths who fell pregnant dropping out of the Church community. It was postulated that their sexual behaviour was not different from the broader community because the Church's message on sex was ineffective as it was delivered by elders, had a negative content, and upheld marriage as the ultimate goal, to which many youth did not aspire. A 1994 - 1995 survey of abortion in the United States of America [21] found a four times greater likelihood for termination of pregnancy in people who did not identify with any religion. However, the abortion rate in that study was similar in Catholics, Protestants and Jews. Affiliation to a religious group may discourage sexual activity outside marriage and abortion. In a study of women seeking abortion in Zaria, Northern Nigeria, [20] where 99% of the general

population was Muslim, only 26% of the clients were Muslim whereas 74% were Christians.

Education

Sexual activity is starting at a young age. A study of sexual behaviour in Cape Town high school students [24] recommended that interventions to prevent unwanted pregnancies should start at primary school level. These interventions should continue into tertiary level as shown by a study at the University of the Free State on perceptions of female university students regarding STDs and HIV, [32] which noted the problem of a high prevalence of unwanted pregnancies on the campus. Parental level of education is also important in preventing teenage pregnancy, as shown by a study of risk factors for teenage pregnancy among sexually active black adolescents in Cape Town. [26] A higher level of parental education, especially of the mothers, was protective against teenage pregnancy. However, poor school performance was not found to be a risk factor.

The NYRBS [14] comprised of 10,699 public school learners from grades 8, 9, 10, and 11 from all nine provinces. The survey found that 41.1% of learners had had sex and in 14.4% the first sexual encounter was at the age of 14 years or younger. There was a significantly large percentage of sexually experienced learners who were 13 years or younger who reported having ever been pregnant, indicating that younger learners were inadequately prepared for responsibilities that go with sex. [14]

Contraceptive use is also influenced by education. A subanalysis of sexually active women from a national survey of South African youth [15] found that students or employed youth were more likely to use contraception than unemployed youth, and that those who had completed high school or were still in school were more likely to be using contraception compared to those no longer in school or those who had not completed high school. The SADH 2003 [17] also showed that education had the strongest influence on contraceptive use, with use increasing with increasing level of education of the woman.

The most common contraceptive method used by learners was the condom (44.8%) followed by injectable contraceptives (10.6%) then oral contraceptive the pill (7.3%). [14]

Socio-economic factors

According to the 2001 census, 57.5% of South Africa's population is urban, and 33.4% is living in poverty. Unemployment averaged 79.1% in the rural and 62.6% in the urban areas. Government grants are a mainstay of many households and 50.4% of households are female headed. [5]

The study of risk factors for teenage pregnancy among sexually active black adolescents in Cape Town in 1995 [26] found that teenage pregnancy was associated with not owning a television set, larger households, and not living in a brick house (all indicators of a lower socio-economic status). It also found that pregnant teenagers dated older working men, which may be associated with the teenager's lower socioeconomic status and the expectation that older

working men will be more likely to provide for them financially. Also pregnant teenagers were less likely to live with biological parents, especially the father, thus they had less supervision and discipline. A national survey of 15 – 24 year old youth reported that transactional sex was low (3%) among those who were sexually experienced. [29] The Child Support Grant has also been mentioned as motivation to fall pregnant but there is no evidence to support this claim. [6, 33] On the other hand, the study in Zaria, Northern Nigeria speculates that improvement of the standards of living and education have resulted in the postponement of marriage, and that this, coupled with a decrease in the age of menarche (an increased biosocial gap) has resulted in increased sexual activity outside of marriage and thus an increase in unwanted pregnancies. [20]

Repeat termination of pregnancy

South African studies show a low figure of repeat abortion i.e. 3.4% in Bloemfontein (1998 to 1999), [19] 3% in Cape Town, [22] and 6.9% at Kalafong Hospital, Pretoria (July to October 1998). [34] This is encouraging as it suggests that TOP is not being used in place of contraception and that post-abortion counselling might be effective in preventing repeat TOP. Studies elsewhere in the world show higher rates of clients having repeat terminations of pregnancy, such as Nigeria (52.7%), [20] Sweden (32%), [30] Finland (36%), [4] and the United States of America (45%). [21]

Contraception and termination of pregnancy

Studies in South Africa and other parts of the world have shown a high number of women who request TOP reporting contraceptive failure. In a study

of contraceptive failure in a rural South African population, [23] 29% were reported to have contraceptive failure, and 20% of women seeking first trimester TOP in Cape Town public health facilities [22] were reported to have contraceptive failure. Elsewhere in the world, reported figures for contraceptive failure include Nigeria (46%), [20] USA (58%), [21] Finland (75%) [4] and Sweden (33%). [30] Reasons for these high failure rates include adverse side effects. For example, in a rural South African population [23] 47.8% of TOP patients discontinued contraception due to adverse side effects. In Finland [4] it was found that women seeking abortion had a higher incidence of side effects than those continuing with their pregnancies and that they were more sensitive to the side effects. Another common reason was poor compliance. This could either be because the women did not consider themselves as being at risk e.g. they had short unstable relationships, [15, 30] or thought that they were infertile. [35] Other reasons include lack of access to contraception due to social factors. [23]

Among sexually active women between the ages of 15 and 49 years, the SADH 1998 [28] found that knowledge of a modern contraceptive method was universal while only 71% had ever used a method and only 62% of those who were sexually active were currently using a contraceptive method. The majority used injectable contraception (30%) followed by the pill (13%) and sterilisation (12%). Only 2.3% of the women used the condom, and very few women (1%) used traditional methods (withdrawal, periodic abstinence, herbs and other methods). The SADH 2003 [17] shows similar findings but there has been a decline in the level of knowledge of contraceptive methods since 1998, and also a decline in the proportion of women who have ever used

contraception. [17] A national sexual survey of males also showed good knowledge of contraceptives but poor utilisation. [25] Other South African studies show similar findings. [19, 22, 24, 26, 32]

Several reasons for non-use of contraception have been identified. An MRC report on adolescent sex and contraceptive experience in Limpopo [3] found that the management of side effects was not satisfactory, there was lack of privacy, there was a negative attitude by nursing staff, and there was lack of enough information. In a study of contraceptive failure in a rural South African population, [23] 47.8% of women seeking termination of pregnancy were found to have discontinued contraception because of various side effects, although most (30%) said there was ‘’no reason’’ for discontinuation. A 1988 Swedish study on contraceptive use in women seeking termination of pregnancy [30] reported they had a higher incidence of side effects, which reduces motivation to use contraception. Contraception counselling should focus on evaluation and explanation of side effects.

A study in 1995 at Doornkop, Soweto, on the impact of service provision on contraceptive usage and immunisation coverage [36] found that although improved service provision had considerable impact on immunisation coverage, there was little change in contraceptive usage.

Emergency contraception

A study of emergency contraception in public sector primary healthcare clients in South Africa between November 1999 and August 2000 [37] found that 23% of them had heard of emergency contraceptives and of these only 9% had

ever used it. It also found that after explanation of the method 90% were willing to use it in the future if the need arose, and 92% would recommend it to a friend who needed it. This is in contrast to the situation in developed countries. In a British study of pregnant teenagers' knowledge and use of emergency contraception, from August 1992 to January 1994, [38] 81% of the respondents knew of emergency contraception, while in a study of use of emergency contraception among teenagers in Finland 1996, [39] only 3% of 14-15 year olds and 1.5% of 17 year olds did not know of emergency contraception. However, a very small percentage used the method in both studies. The promotion of emergency contraception is hindered by the fear that it could lead to irresponsible sexual behaviour and repeated use. A Canadian report [40] states that emergency contraception has the potential to dramatically reduce unwanted pregnancy and thus abortion. However, this modality faces opposition from some religious and pro-life groups who regard emergency contraceptive pills as abortifacients. Providing information and easy availability could help popularise the method but care should be taken not to tout it as a regular contraceptive method but a backup for contraceptive failure.

Emergency contraception was made available in South Africa over-the-counter under pharmacist supervision in November 2000 [16]. However various Randomised Controlled Trials [41, 42, 43] and systematic reviews [44, 45] on advance provision of emergency contraception have shown that making emergency contraception readily available either through over-the-counter pharmacy access or by advance provision of emergency contraception did not reduce unwanted pregnancies at population level. More importantly though,

there was no increase in reported high-risk sexual behaviour, no change in pattern of contraception or condom use, and no increase in STIs with increased access, but women who had advanced provision of emergency contraception were more likely to use the medication and use it sooner after sex.

Social factors and termination of pregnancy

The study of risk factors for teenage pregnancy among sexually active black adolescents in Cape Town in 1995 found that teenagers who had forced sexual initiation were more likely to fall pregnant. [26] One-third of pregnant teenagers reported their first sexual encounter as being forced or coerced. However, in a study of contraceptive failure in a rural South African population, [23] only 0.3% of women seeking termination of pregnancy had been raped. A national survey of 15 – 24 year old youth reported that 6% of them had been coerced or forced into sex, and only 30% of females really wanted their first sexual encounter compared to 83% of the males. [29] A systematic review on factors that shape young people's sexual behaviour reports that some young women fear physical violence or retribution if they refuse sex. [46]

Drugs and alcohol are also important factors. The NYBRS reports that 13.8% of learners had had sex while under the influence of alcohol or drugs. [14] The national survey of 15 – 24 year old youth found that over half reported ever having drunk alcohol, and of these 24% had had sex while under the influence of alcohol. [29] In a survey of women having termination of pregnancy in Helsinki, Finland, 14% of women seeking termination of pregnancy were

drunk at the time of conception and did not use contraception. [4] The author concluded that the majority of these women may have been negligent with contraception.

No South African study has looked at the effect of relationship on TOP, but a 1988 Swedish study on contraceptive use in women seeking TOP found that short unstable relationships were more frequent in women seeking abortion. The choice and use of contraception was also influenced by lack of a permanent partner. [30] An analysis of sexually active women from a national survey of 15 – 24 year olds shows that young women may consider contraception only when involved in a long term regular relationship. Women with more than one sexual partner in the last 12 months were less likely to use contraception. [15] There is a need to offer contraception to women who are intermittently sexually active. Women also make contraceptive trade-offs as relationship length increases as shown by decreasing condom use in cohabiting partners. [17] Limited discussions about contraception or condoms with the partner is also linked to inconsistent use. [15] It was also shown that women with a parent or guardian at home with whom they could discuss sex were more likely to use contraception. [15] In the study of risk factors for teenage pregnancy among sexually active black adolescents in Cape Town [26] pregnant teenagers were more likely to come from larger households and less likely to live with biological parents.

The SADH 2003 reports that less than 3% of sexually active women aged 15 – 49 years had more than one partner in the last 12 months. However younger people are more likely to have multiple sexual partners. [17] the

NYRBS shows that 70.2% of learners had more than one partner in the last three months, [14] and the national survey of HIV and sexual behaviour found that 27% of sexually active 15 – 24 year old had more than one sexual partner in the last 12 months. [15]

Contraception and STIs/HIV

Given the types of contraception most popular among women (injection, pills and sterilisation), the SADH1998 concluded that there is a clear need to promote the use of family planning methods which also encourage disease prevention especially transmission of STD's and HIV. [28] The number of sexually active women aged between 15 and 49 years who were currently using the condom has increased from 1.9% (SADH1998) to 7.9% (SADH 2003). Higher usage is reported in younger people. [17, 28] A national male sexual and reproductive health survey of young men aged 16 to 20 years showed that the male condom was the most common method used. [25] Thirty one percent of the respondents had used the male condom, while 2% had used the female condom. A study of Cape Town high school students [24] found that condoms were used by 68% of the respondents during the last sexual intercourse and that males were more likely to use condoms than females. The NYRBS [14] (44.8% use condoms and 28.8% always use a condom) and the national survey of young South Africans [29] (52% used condom at last sex and 33% always use a condom) show similar results. Social reasons were likely to influence condom use as shown by a systematic review on factors that shape young people's sexual behaviour. [46] These include perception of partners as being at risk of STDs or HIV, condoms being associated with stigma of disease, condoms implying sexual experience (undesirable for

women), and the notion that women carrying condoms defy gender stereotypes that women are 'swept off their feet'. Thus programmes that don't address social factors are only tackling part of the problem. Several factors, which vary substantially across South Africa, have been shown to reduce access to condoms in a study on barriers to accessing free condoms at public health facilities across South Africa in 1998 and1999. [47] These factors include partner attitude, use of other forms of contraception, female gender, perception of being at low risk of acquiring HIV and those with a lower frequency of sexual intercourse. However, in a study of dual contraception using data from the SADH 1998, [35] a small number (11%) of sexually active women aged between 15 and 49 years used a condom at last sexual intercourse and a subgroup of these (6%) used a condom and another contraceptive method. Condom use was reduced with lower educational status, increasing age, rural women, not owning a television set, pregnancy, intention to fall pregnant, women who thought they were infertile, and those who perceived themselves as low HIV risk. Condom use was increased in women who had an occasional partner, more than one sexual partner in the last year (similar findings in SADH 2003 [17]), and those who knew of the dual role of condoms of contraception and STI/HIV prevention. Although condoms provide dual protection, in the long run they have an unacceptable contraceptive user-failure rate, [48] hence the need to combine the condom with another highly effective method.

The female condom is the only female initiated barrier contraceptive available in the South African public health system. Its effectiveness is comparable to the male condom. [49] An advantage over other barrier methods is that it is

made of polyurethane which is stronger than latex, and is therefore not affected by oil based lubricants. While contraceptive efficacy is similar, it might be more effective in STI protection. A study to gauge the acceptability of the female condom [50] in 1996 and 1997, found that although it was a female initiated method, it still required the cooperation of the male partner, and there was a high discontinuation rate (81-91%) due to partner reluctance to use the method. Other problems encountered were over-lubrication, difficulty with insertion, discomfort after insertion, slippage, or being pushed inside during sexual intercourse. Overall the response was positive with 96% of the women saying they could recommend the method to their friends and 86% would be interested in using the method again.

TOP services at Chris Hani Baragwanath Hospital

At Chris Hani Baragwanath Hospital, four second trimester, and up to ten first-trimester termination of pregnancies are performed daily. A total of 30-35 patients may be seen daily and up to 20 are referred to the private sector (usually because of limited capacity and advanced gestation i.e. late 2nd trimester). This is a costly programme given the fact that the second trimester abortions usually require evacuation of the uterus under general anaesthesia. Apart from the financial implications, termination of pregnancy is an intensely emotional experience with moral and religious connotations, where the client and sometimes the health service provider may require counselling. [12] Primary prevention (contraception) is thus preferable to secondary prevention (termination of pregnancy).

We have no data regarding clients who request termination of pregnancy at Chris Hani Baragwanath since the legalisation of TOP. A previous study looked at the proportion of pregnancies that end in TOP with reference to maternal age. [18]

The objectives of this study were to establish the demographic characteristics of the women requesting TOP at CHBH. To assess their knowledge of different contraceptive methods including the emergency contraceptive pills, to find out whether contraception was easily available and accessible, and what proportion of them were using contraception at the time of conception, i.e. the user failure rate. For those who were not using contraception the study set out to find if there were reasons particular methods were not favourable (whether used previously or not). The study also examined the adequacy of contraceptive counselling, by asking them about their perception of the adequacy of information they received at the clinics and whether they felt they had received contraception of their choice. The study also aims to establish the proportion of these women who initially desired to continue with the pregnancy, and also whether the current status of the relationship leading to the pregnancy influenced contraception use or the decision to terminate the pregnancy. To assess whether legalisation of TOP would lead to its abuse by using it instead of contraception, the study sought to determine the proportion of these women who were having repeat TOP.

It is hoped that information from this study will help us understand this group of women and would be used to make recommendations for improving provision of reproductive health.

Methods

The setting of this study was the TOP clinic (ward 54) at Chris Hani Baragwanath Hospital (CHBH), which is a large teaching hospital with approximately 3000 beds. CHBH is one of the sites designated by the Minister of Health to provide abortion services under the CTOP Act. Its catchment area consists of the Soweto Townships, Lenasia and Orange Farm.

The TOP clinic provides pregnancy testing, early pregnancy ultrasound, counselling, referral to peripheral clinics of uncomplicated pregnancies in the first trimester for termination, termination of second trimester pregnancies and complicated first trimester pregnancies (for example, those with previous caesarean section and those with concurrent medical diseases). It also provides termination for uncomplicated first trimester pregnancies for clients who live near the hospital.

The study period was from the 4 February to 4 March 2002. This was cross sectional survey using a questionnaire. This method was chosen because data from a large number of participants needed to be collected in a short space of time and there were limited resources due to lack of funding. The study included women between the ages of 13 and 49 years, who were requesting TOP (before any procedure) and had been referred from their local clinics or their general practitioners with a positive pregnancy test or pregnancy proven on ultrasound of less than 20 weeks of gestation. Convenience samples of up to a maximum of ten clients were recruited each day. The prospective participants were approached by Dr WW Edridge, Dr RB

Nyakoe or the Sister on duty in ward 54 who had been briefed about the study. The clients were approached in the order that they had arrived in the clinic to request TOP, and the first ten clients who agreed to complete the questionnaire were recruited. These ten clients did not necessarily go on to have a TOP at CHBH. Counselling had not yet been provided by the time the participants completed the questionnaires.

The self-administered questionnaire (Appendix A) consisted of 30 questions and could be completed in approximately 20 minutes. It contained questions regarding the demographic details of the respondent (age, area of residence, religious affiliation, schooling or working, highest level of education, breadwinner in the respondents' family, how many months or weeks pregnant). Initial intention with regard to the pregnancy and reasons for requesting TOP were explored thus, 'have you at any stage wanted to keep this pregnancy?' and 'if you didn't want an abortion at any stage, what made you decide to have an abortion now?'. The current status of the relationship was enquired of as follows, 'are you still in a permanent relationship with your husband or boyfriend?' and 'does your husband or boyfriend stay with you only "some nights" or "almost all nights"?' On current use of contraception: 'were you using contraception when you became pregnant?', and 'which type of prevention were you using at the time of falling pregnant?' Past contraception use was asked, and to explore if there were reasons clients did not like specific contraceptive methods, the question asked 'are there any reasons you don't like the different types of prevention?' and then listed each method for which the clients would write why they did not like it or write 'no reason' if there was none. About their experience with contraception the

question asked; ‘do you know the nearest clinic where you can obtain contraception?’, and ‘do you know the times of day when you could be able to find it open?’, and ‘have you ever had difficulty getting prevention?; if so, say what the difficulty was’, ‘in your opinion have the sisters or doctors told you “enough” about prevention or “too little”?. About the choice of contraceptive: ‘do you feel that you came away with the prevention method of your choice?’ and they could answer “my choice”, “sister’s choice”, “doctor’s choice” or “I have not used prevention before”. Regarding contraception following the TOP: ‘do you intend to use contraception in the future and if so what method will you use?’ The number of sexual partners the respondents had in the past year was also asked for to try and gauge sexual behaviour.

To limit misinterpretation of the questions due to language difficulties, the questionnaire was offered in six of the official languages: IsiZulu, SeSotho, IsiXhosa, SeTswana, Afrikaans, and English. The respondents were also encouraged to approach the researchers or the sister on duty if they needed assistance to complete the questionnaire. The questionnaire was initially drafted in English and was pre-tested on nursing staff and doctors and then translated into the other five languages. These were then back-translated to English by a second speaker of that language to check for accuracy, and where large discrepancies existed a third speaker of that language was asked to explain the difference and consensus was then reached as to the best translation. The translation was done by volunteer nurses and doctors. No piloting of the questionnaire was done on prospective participants due to lack of funding.

Answering the questionnaire was entirely voluntary and anonymous, and individual questions could be omitted. To limit recall bias, the respondents were provided with a room where they could complete the questionnaire in private while they waited to be seen. There was no financial compensation or favoured treatment for completing the questionnaire and no discredit for non-completion. It was made clear that participation in the study was for research purposes and that all the information was confidential and could not affect the care or attitude towards the client (appendix B). Once completed (or not), the questionnaire was deposited in a sealed box which was opened at the end of the day. Verbal consent was obtained from all the subjects. Parental consent could not be obtained for subjects who were minors (less than 18 years), because this could have compromised confidentiality and would also be in conflict with the CTOP act which does not require parental consent for minors who wish to have a TOP. Minor subjects therefore gave consent as was done for women older than 18 years of age.

The data was analyzed using the Epi Info 6 computer software programme. This was mainly a descriptive study and many parameters are described as frequencies or simple percentages. Where analysis of data was performed, comparison of frequencies was done using the chi-square test and comparison of means using non-parametric tests (Kruskal-Wallis H test and Wilcoxon 2-sample). A p value of less than 0.05 was taken as significant. It was estimated that a sample of about 200 women would be sufficient, to provide a precision of within 7% of observed frequencies in the range around 40 – 60%.

Prior ethics approval was obtained from the Committee for Research on Human Subjects, of the University of the Witwatersrand, ethics certificate number M011128 (Appendix C).

Results

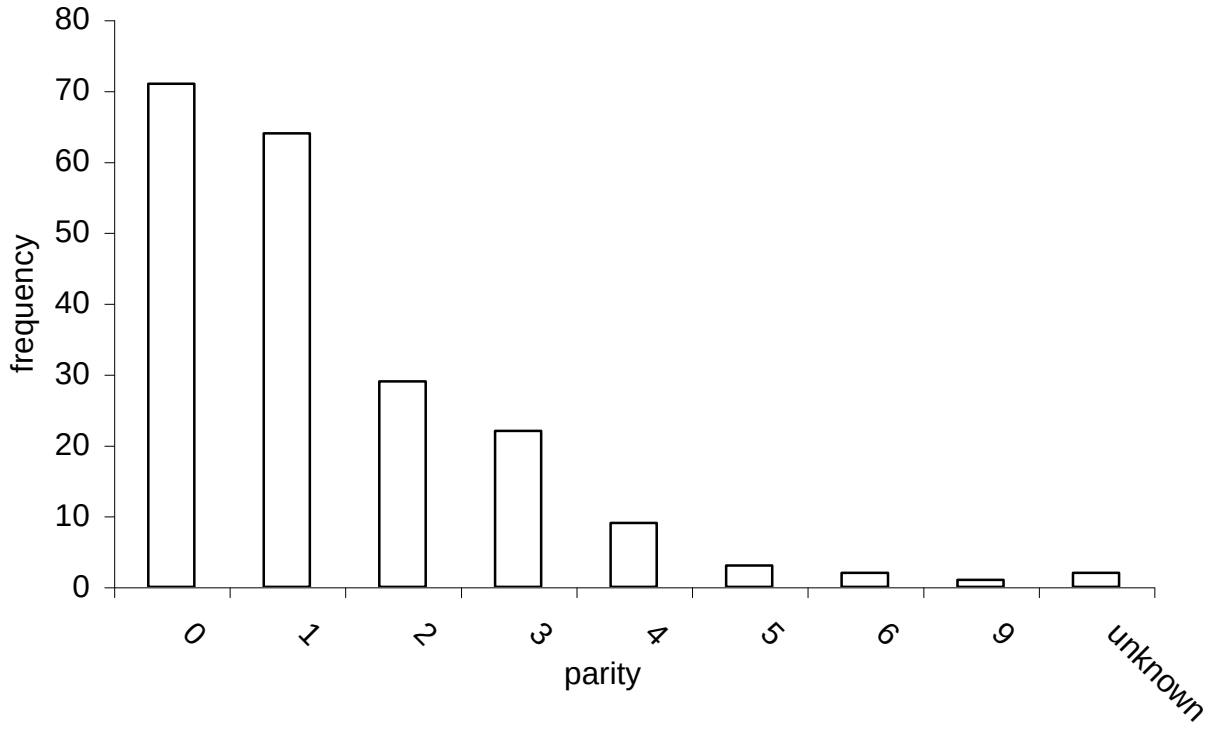
A total of 780 women requested TOP during this period. Two hundred and twenty nine were approached to participate in the study. Twenty five declined and 204 agreed to complete the questionnaire. One questionnaire was unsuitable for analysis, so that a total of 203 questionnaires was finally analysed. The sample represents 26% of women requesting termination of pregnancy during this period, with an analyzable response rate of 89%. All questionnaires were self administered except for one where the respondent who could not read or write.

The youngest respondent was 13 years and the oldest was 42 years of age. The mean was 25.3 years. Table 1 shows the frequencies of respondents in 5-year age group intervals. Twenty two percent were teenagers while 47% were 25 years or older.

Table 1. The frequencies of different age groups, in respondents requesting termination of pregnancy, at Chris Hani Baragwanath Hospital gynaecology clinic

Age group (years)	Frequency (n=203)	Percentage (%)
<15	4	2
15-19	40	20
20-24	63	31
25-29	41	20
30-34	28	14
35-39	23	11
≥40	4	2

Figure 1. Frequency of different parities in respondents requesting termination of pregnancy at Chris Hani Baragwanath Hospital (n=203).



The parity of the respondents is shown in Figure 1. The number of women requesting termination of pregnancy decreased progressively with increasing parity. Thirty-five percent were nulliparous, and 32% had had one previous live birth. One woman was para 9.

Table 2. Area of residence of respondents requesting termination of pregnancy at Chris Hani Baragwanath Hospital gynaecology clinic**.**

	Frequency (n=203)	Percentage (%)
Soweto	159	78
Orange Farm	8	4
Lenasia	15	7
Central Johannesburg	7	4
West Rand	6	3
Sebokeng	1	0.5
East Rand	1	0.5
Unknown	6	3

One hundred and thirty four (66%) of the respondents were in the first trimester of pregnancy, while 34 (17%) were in the second trimester, and in the remaining 35 (17%) the gestation was unknown (either first or second trimester).

The area of residence of the respondents is shown in Table 2. One hundred and eighty-two respondents (90%) came from the hospital's catchment area (Orange Farm, Lenasia, and Soweto townships), and 159 (78%) of these were from the Soweto townships. The rest of the respondents 15 (7%) came from other areas (West Rand, Johannesburg, East Rand and Sebokeng). Six respondents did not give their area of residence.

The religious beliefs of the respondents were as follows: a total of 165 (81%) were Christian, of which 49 (24%) were Catholics, 80 (39%) were members of various Protestant denominations, 30 (15%) were members of African Christian religions and six (3%) were Christians who did not specify their denomination. There were three Hindus (1.5%) and one Muslim (0.5%). Twenty-nine clients (14%) did not belong to any formal religious order and five respondents did not answer the question.

The highest level of education of the respondents is shown in Table 3, and Figure 2 shows their present occupation. The majority of the respondents (86%) had secondary school education or higher. However, 39% were still in school or about to start studying. Only 21% were employed and 6% were about to start working. Most (52%) were financially dependant on their parents, and only 10% were dependent on their husband or partner. In 72% of the households, the breadwinner was female (respondent, mother,

grandmother, sister, aunt). Eight respondents did not answer the question (Table 4).

Forty-four percent of the respondents stated that they were no longer in a relationship with their partners. In 11% of the respondents the pregnancy was a result of a casual relationship (Table 5).

Table 3. The frequency of respondents in various levels of education who requested termination of pregnancy at Chris Hani Baragwanath Hospital. (n=203)

Education level	Frequency (%)
Primary (grade 1-7)	24(12%)
Secondary (grade 8-12)	139(69%)
Technikon /College	25(12%)
University	11(5%)
Unanswered	4(2%)

Figure 2. Occupation of respondents requesting termination of pregnancy at Chris Hani Baragwanath Hospital (n=203).

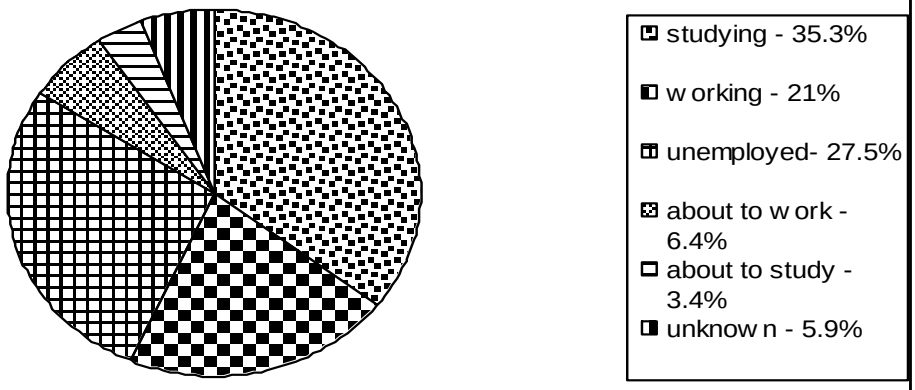


Table 4. Breadwinners in the families of respondents requesting termination of pregnancy at Chris Hani Baragwanath Hospital, (n=195). Eight respondents did not answer the question.	
Breadwinner	Frequency (%)
No one	8 (4%)
Client	48 (25%)
Parents	102 (52%)
Husband/ Partner	19 (10%)
Siblings	10 (5%)
Other relatives	8 (4%)

Table 5 The frequency of respondents requesting termination of pregnancy who were still in a permanent relationship (n = 203)	
Permanent relationship	Frequency (%)
Yes	83 (41%)
No	89 (44%)
Never	22 (11%)
Unanswered	9 (4%)

One hundred and twenty-two respondents (60%) spent only some nights with their partners during the relationship while 32 (16%) spent almost all nights with their partners during the relationship. Twenty five (12%) said they did not spend any nights at all with their partners, while 24 (12%) did not answer the question.

There was no relationship between staying with the partner (i.e. for all nights, some nights, or no nights) with current contraceptive use (Chi-squared test; p=0.72), (Table 6).

There was a tendency for older women to stay most nights with their partners compared with younger women, (Kruskal Wallis H test; p=0.08), (Table 7).

Table 6: Relationship between nights spent with partner and current contraceptive use, there was no significant relationship between nights spent with partners and current contraceptive use (p=0.72; Chi-squared test). N=174

Nights spent with partner	Current Contraceptive Use		Total
	Yes	No	
Never	15	10	25
Some Nights	70	48	118
Almost All Nights	16	15	31
Total	101	73	174

Table 7: Relationship between night spent together and age of respondents, there was a trend towards older women spending most nights with partners compared to younger women (Kruskal-Wallis H test; p=0.08).

Nights spent together	Mean age in years (median age in years)
Never	25.6(22)
Some nights	25.3(24)
Almost all nights	27.8(26)

Table 8: Initial intentions of the respondents requesting TOP at CHBH regarding their pregnancy (n=203).	
Initially wanted pregnancy	Frequency (%)
Yes	44 (22%)
No	142(70%)
No answer	17(8%)

Twenty two percent of the respondents initially wanted to keep the pregnancy, while 70% wanted an abortion from the time they confirmed the pregnancy and 8% did not answer the question. (Table 8).

Eighty respondents (40%) gave reasons for requesting termination of pregnancy. Of these, 28 (35%) were economic reasons, 15 (19%) were partner related problems, (e.g. divorce, 'do not want a child', 'partner married'' etc). Nine (11%) said the pregnancy was unplanned, eight (10%) gave unspecified social problems, six (7.5%) said that they had another young child, and only two (3%) said that they were about to start working. (Table 9).

Table 9: Reasons for requesting termination of pregnancy by respondents at Chris Hani Baragwanath Hospital. Eighty respondents answered the question. (n=80).	
Reason for termination	Frequency (%)
Economic	28 (35%)
Relationship related	15 (19%)
Educational	12 (15%)
Work	2 (3%)
Unplanned	9 (11%)
Other child	6 (8%)
Other social problems	8 (10%)

Five (2.5%) of the respondents had had an abortion previously. One of them had had two previous abortions and two of the clients did not answer the question.

One hundred and thirteen respondents (56%) reported that they were using contraception at the time that they became pregnant. Eighty five (42%) were not using any contraception and five respondents (2.5%) did not answer the question. Table 10 shows the various methods that respondents reported they were using. The other methods used included two respondents who used emergency post-coital contraception and one who had a failed sterilisation.

Table 10. Reported current contraceptive use of the respondents requesting termination of pregnancy at Chris Hani Baragwanath Hospital (n=203). Some respondents used more than one method.

Contraception	Yes (%)	No (%)	No answer (%)	Total
Condom	64(31.5%)	134 (66%)	5(2.5%)	203
The pill	49(24.1%)	150 (73.9%)	4(2.0 %)	203
Injectable	43(21.2%)	156 (76.8%)	4(2.0 %)	203
IUCD	0 (0%)	199 (98%)	4(2.0 %)	203
Withdrawal	1 (0.5%)	198 (97.5%)	4(2.0 %)	203
Other	3 (1.5%)	197 (97%)	3(1.5 %)	203

Twenty-two respondents (11%) knew of the emergency contraceptive pill but only two of them used it.

In order to establish whether the respondents had used methods which were abandoned or exchanged for others implying dissatisfaction, methods of

contraception previously used by the respondents are shown in Table 11. Forty-six percent of respondents had used the condom in the past, 29% had used the oral contraceptive pill, and 38% had used the injectable contraceptive. Only 2.5% had used the IUCD and 2% had used the withdrawal method. Other methods used previously were the emergency contraceptive pill (1%), traditional method ‘’thapo’’ (0.5%) and previous sterilisation (0.5%).

Table 11: Contraception previously used by respondents requesting termination of pregnancy at Chris Hani Baragwanath Hospital. (n=203)

Contraception	Ever used (%)	Never used (%)	No answer (%)	Total
Condom	94 (46.3%)	102 (50.3%)	7(3.4%)	203
The pill	59 (29.1%)	138 (68%)	6 (3.0%)	203
Injectable	78 (38.4%)	119 (58.6%)	6 (3.0%)	203
IUCD	5 (2.5%)	192 (94.6%)	6 (3.0%)	203
Withdrawal	4 (2.0%)	193 (95%)	6 (3.0%)	203
Other	4 (2.0%)	193 (95%)	6 (3.0%)	203

Anticipating the difficulty of establishing contraception in the future, the respondents were asked if they would have reasons for not using certain contraceptive methods in the future: 166 (82%) had ‘no reason’ for not using the condom, 168 (83%% had ’no reason’ for not using IUCD, 158 (79%) had ’no reason’ for not using the oral contraceptive pill and 136 (68%) had ’no reason’ for not using injectable contraception.

The other major reasons given for not using the various methods were as follows: 12 (6%) said that their partners would not like the condom, 19 (9%) said they feared they would forget to take the oral contraceptive pill regularly, 18 (9%) said the injectable contraceptive would make them gain weight, and 7 (3%) said that they did not know of the IUCD.

Previous condom use did not significantly influence current contraceptive use, while clients who previously used oral or injectable contraceptives were more likely to use contraception currently (Table 12).

Table 12: Relationship between past oral contraceptive use, past injectable contraceptive use, and past condom use with reported current contraceptive use in clients requesting termination of pregnancy at Chris Hani Baragwanath Hospital.

Past contraceptive		Current contraceptive use		Result
		Yes	No	
Past pill user (n=195)	Yes	45	13	More likely to use contraception than non-users (Chi-squared test; p=0.0007)
	No	66	71	
Past injectable contraceptive (n=195)	Yes	54	23	More likely to use contraception than non-users (Chi-square test; p=0.01).
	No	57	61	
Past condom user (n=194)	Yes	49	45	No significant difference (Chi-squared test; p=0.21).
	No	61	39	

The respondents were asked about their knowledge of the location of the local family planning clinics and if they had experienced any difficulty obtaining contraception. Eighty-two percent of the respondents knew where the nearest

clinic was. Seventy-seven percent of the respondents had had no difficulty obtaining contraception, while 7% of the respondents stated that they had experienced difficulty in obtaining contraception. The difficulties described included mistreatment by the clinic staff, refusal of the respondent's choice of contraceptive method, delay in starting contraception, contraceptives being out of stock, clinics being very far away, mobile clinics which operate on certain days only, and parental objection.

There was no significant association between knowledge of where to obtain contraception (nearest family planning clinic) and current contraceptive use, (Chi-squared test; p=0.90)(Table 13).

Table 13: Relationship between knowledge of nearest clinic to obtain contraception with current contraceptive use. No significant relationship between knowledge of nearest clinic and current contraceptive use (Chi square test; p=0.90). (n=180; 23 respondents did not answer the question)

Knowledge of nearest clinic	Current contraceptive use		Total
	Yes	No	
Yes	92	74	166
No	8	6	14
Total	100	80	180

When asked whether they received enough information about contraception, of those who had sought contraception and who answered the question, 54% said they received too little information and 46% said they had got enough information (138 of the respondents had sought contraception from their local clinic in the past and 45 of these respondents did not answer the question).

Considering whether an imposed choice of contraceptive might be less likely than a personal choice to confer compliance, the respondents were asked whether they made an independent choice of contraceptive or had had a contraceptive method imposed on them. Seventy-four percent said it was their choice. However 20% said it was the 'sister's choice', and 6% said it was the 'doctor's choice'.

Condom users were generally younger than non-condom users, while oral or injectable contraceptive users tended to be older than non-users (Table 14). Women of higher parity were more likely to use contraception compared with women of lower parity (p=0.004), (Table 15).

Table 14: Relationship between age and various methods of contraception in respondents requesting termination of pregnancy at Chris Hani Baragwanath hospital.

Contraception	Mean age in years (Median age in years)		P value (using the Wilcoxon 2 sample test)
	User	Non-user	
Condom	22.7(21)	27.4 (27)	<0.0001
Oral contraception	28.4 (28)	23.9 (22)	<0.0001
Injectable contraception	26.7(25)	24.2 (23)	0.003

Table 15: Relationship between parity and contraceptive use (n=196; 7 respondents did not answer the question about current contraceptive use) (Kruskal-Wallis H test; p=0.004).

Parity	Current contraception		Total
	Yes (%)	No. (%)	
0	29 (41)	41 (59)	70
1	36 (57)	27 (43)	63
2	24 (86)	4 (14)	28
3	15 (83)	3 (17)	18
4	6 (66)	3 (34)	9
5	2 (66)	1 (34)	3
6	1 (50)	1 (50)	2
9	0 (0)	1 (100)	1
Total	113 (58)	83 (42)	196

An attempt was made to assess whether instability of sexual relations was a risk factor in the request for TOP. Clients were asked the number of partners they had had in the last year. One hundred and thirty six (67%) said they had had one partner, 27 (13%) said they had had two partners, and 11 (5%) had had three or more partners. Twenty nine (14%) did not answer the question. There was no significant relationship between the number of partners in the last 12 months with current contraceptive and condom use, *p=0.67* and *p=0.51* respectively using chi- square test (Table 16).

Respondents were asked about their intentions for future contraception. Twenty-four percent of the respondents did not answer the question, 7% said they would use no method, 16% said they would use contraception but did not specify a method. Thirty per cent chose injectable contraception (Table 17).

Table 16: Relationship between the numbers of sexual partners in the last 12 months of the respondents requesting TOP at CHBH with reported current contraceptive use and condom use.					
		Number or sexual partners in the last 12 months			p value (Chi-squared test)
		1	≥ 2	Total	
Current contraception (n=172)	Yes	94	28	122	p=0.67
	No	40	10	50	
	Total	134	38	172	
Current condom use (n=174)	yes	46	16	62	p=0.51
	No	88	24	112	
	Total	134	40	174	

Table 17: Future contraceptive choices of respondents requesting termination of pregnancy at Chris Hani Baragwanath Hospital. (n=203).	
Future contraception	Frequency (%)
No answer	48 (24%)
No method	14 (7%)
Not specified	33 (16%)
Condom	13 (6%)
The Pill	18 (9%)
Injectable	62 (30%)
IUCD	4 (2%)
Post-coital	2 (1%)
Abstinence	1 (1%)
Sterilization	8 (4%)

Discussion

This study is unique in that apart from looking at the demographic and contraceptive characteristics of women requesting TOP at CHBH, it also looked at the current status of women's relationships and the initial desire to continue with pregnancy. Twenty-two percent of the respondents initially wanted to keep the pregnancy. This may be a group that is beyond the reach of contraception as it represents a misunderstanding of the desirability of a pregnancy in the relationship. The information obtained from the study is very important as interventions can be tailored to this specific group.

CHBH serves an urban population from the Soweto, Lenasia and Orange Farm regions. The majority (90%) of the respondents came from the hospital's catchment area, but other came from areas such as The West Rand (3%), East Rand (0.5%), Johannesburg (3.5%) and Sebokeng (0.5%). It is also possible that a proportion of respondents came from other areas, rural or urban, because six clients (3%) did not give their addresses and those given might have been temporary. Of the 524377 TOPs done in the country up to 2005, a disproportionately large number (39.8%) were done in Gauteng province. [2] In this study, inadequate coverage of termination of pregnancy services is highlighted by the distances travelled to CHBH for termination of pregnancy. Some respondents came from as far as the East Rand and Sebokeng.

Young women less than 25 years made up a large number of the respondents, with teenagers accounting for 21.7%. This is in keeping with

findings in other South African studies. [19, 22] Sixty-five percent of the respondents had had a previous live birth, but the number of women requesting termination decreased with increasing parity. This is in keeping with other studies in South Africa [19, 22] and in the United States. [21] Elsewhere in the world clients with a previous live birth were in the minority. [4, 20, 30] The reason for the higher number of multiparous respondents in South Africa might be because termination of pregnancy was only legalised in 1996. Thus women might have carried unintended pregnancies to term in the past. Failure to use TOP is also associated with lack of knowledge or social stigma. [15] Another reason could be that South African women take up contraception and other health services only after coming into contact with antenatal services and delivery. [16] The situation in the United States of America might be linked to the introduction of Medicaid cover for abortion. [21]

There is usually a fear that women might abuse TOP services and use them as a form of contraception. This was not shown in this study. Only 2.5% of the respondents stated that they had had a previous termination of pregnancy but this could not be confirmed by assessment of previous records. One could have expected a higher number of clients having their second abortion since the study was performed five years after The Choice on Termination of Pregnancy Act was enacted, and studies [4, 20, 21, 30] in other parts of the world have shown that women who have had one abortion are more likely to have another. However, other South African [19, 22, 34] studies show similar low rates of repeat TOP.

Eighty one percent of the respondents were Christians, 14% did not affiliate themselves to any religion, 1.5% were Hindus, and 0.5% were Muslim. Religion might play an important part in an individual's decision to have a termination of pregnancy. The Catholic Church is perceived to be very strict in matters of fertility regulation. [31] It believes that human 'right to life' begins at conception and is totally opposed to abortion. However 24% of the respondents were members of the Catholic Church and denomination was not associated with the request for TOP.

The majority of the respondents (86%) had secondary school education or higher and 39% were still in school or about to start studying. Thus, school (from primary school through to tertiary institutions) might be a good place to introduce interventions aimed at decreasing unwanted pregnancy.

Economic issues are associated with the decision to have a termination of pregnancy. The results showed that only 21% of the respondents had an income while most were dependent on their parents (54%) and relatively few (10%) were dependent on the income of their partners. Seventy-two per cent of households had a female breadwinner, and this is much higher than the South African average of 50.4% female headed households. [5] The inability of the male partner to fulfil the traditional role of provider, for a variety of possible reasons, might significantly contribute to the request for abortion in this group. Economic problems were cited by 35% of respondents as the reason for deciding to terminate the pregnancy. Improvement in socioeconomic status of women and of the general population might play a role in reducing the number of TOPs.

The respondents' knowledge of the major contraceptive methods was good, except for emergency contraception, where 89% of the respondents did not know of it. According to the SADH 2003 [17] knowledge of contraception is good among South African women aged 15 – 49 years, except for diaphragm, foam, jelly (9.8%) and implants (9.3%) which are not available to the South African public health sector. Knowledge of male sterilisation (28.8%), female sterilisation (45.5%) and IUCD (40.3%) is also low.

South Africa has a high contraceptive usage when compared to other African countries. Its contraceptive usage is dominated by the injectable contraceptive, although use of the condom has increased in recent years especially in young people. [6, 17] This could be due to its dual role in contraception and HIV prevention. The respondents in this study differ from the wider South African sexually active female population in that they used more of the contraceptive methods (condoms and pills) that are effective when used properly and consistently by motivated clients, and less of the methods (sterilisation, IUCD, and injectable contraception) which don't require continued patient motivation to ensure efficacy, except for the injectable contraception which requires regular 8 or 12 weekly appointments for injections.

Contraceptive usage at the time of conception was reported by 56% of the respondents. Most of them (32%) reported that they were using the condom which is not reliable for preventing pregnancy if not used properly and consistently with each act of sexual intercourse, although it does have an obvious advantage in preventing HIV. Reasons for condom failure, (whether breakage, slippage or inconsistent use), were not asked. Reasons given for

not using the condom included partner dislike for the method (6%), though 'no reason' was the main response in 82% of the respondents. The pill was used by 24% of the respondents. It is reliable (failure rate 0.1-4/100 women years) [49] if used properly, but it is apt to be affected if some tablets are skipped or if drug interactions occur or there is diarrhoea and vomiting. Injectable contraception (failure rate 0.4-2/100 women years) [49] use was reported by 21% of the respondents which is a surprisingly high number. The cause for the high failure rate needs to be investigated further. It is possible that the injections were not given at the proper intervals, or that side effects e.g. weight gain or irregular menses and amenorrhea led to the discontinuation of method, or lack of transport, or poor service at the clinics led to irregular use. From this study, it is not possible to identify a cause. It may be, as stated previously, that reported and actual use were different because of prestige bias. However, ascertaining other possible causes of the high reported failure rate is important as the injectable contraceptive is the most popular method in South Africa. [3, 17, 19, 23, 28]

One client had had a sterilisation which is consistent with the method failure rate of 0 -0.5 /100 women years. [49] Sterilisation should be promoted as it is quite reliable as indicated by its low failure rate in the literature. Male sterilisation should also be considered at all times and discussed with women, as it is easier to perform and is as effective as female sterilisation.

None of the respondents had used the intrauterine contraceptive device (IUCD). In the SADH 2003, [17] only 0.8% of sexually active South African women aged 15 – 49 years were using the IUCD. In this study 2.5% of the

respondents had ever used the IUCD and 3.4 % did not know it. The reasons for the low usage of the IUCD were not investigated. There is lack of trained personnel to insert an IUCD and also a concern about the high prevalence of STIs. [16] The IUCD is suitable for older women who have children and are in stable relationships. This method should be promoted for use in appropriate women.

The report by 56% of the respondents that they were using contraception at the time of conception implies either that they reported to be using contraception when they were not or may have been associated with inadequate knowledge about how to avoid contraceptive failure. In this study, 46% of the respondents reported that they did not receive enough information regarding contraception at the family planning clinic. There was no attempt in the study to ascertain the quality of information the clients received at the clinics. In a study of women undergoing abortion in an inner London health district, [51] women were found to be knowledgeable about the pill but only 57% of them knew that extra precautions had to be taken with missed pills and only 50% knew that diarrhoea, vomiting and other medications could reduce contraceptive efficacy. In a study of adolescent sex and contraceptive experiences in the Limpopo province in South Africa, [3] teenagers also complained of not receiving enough information about contraception.

Although 74% of the respondents in this study were able to make their ’own choice’ regarding contraception, 20% said it was the ’sister’s choice’ and 6% said it was the ‘doctor’s choice’. Adequate counselling should enable clients to make a choice of a contraceptive method and be motivated enough to cope

with adverse effects when they occur. A method not chosen by a client is perhaps more likely to be discontinued. On the question of choice, some studies found that clients were sometimes denied their choice of contraception by nurses, parents, spouses and even the Church. [3, 23]

In trying to determine whether lack of availability of contraception in the community was a significant cause of contraceptive failure or non-use, the study did not find a link. Eighty-two percent of the respondents knew where and when to obtain contraception, and there was no significant relationship between knowledge of the nearest clinic where one could obtain contraception and current use of contraception. Of those who had gone to a family planning clinic to obtain contraception, 77% had no difficulty and only 7% encountered specific problems. Difficulties which were experienced by this minority included mistreatment by nursing staff, refusal to give the respondents their method of choice, delay in starting contraception, contraceptives being out of stock, clinics being far away, mobile clinics only available on certain days, and parental interference. Similar problems were encountered by teenagers in Limpopo province [3] and women requesting TOP in a rural South African population. [23]

Fear of weight gain with hormonal contraception, especially with injectables, was stated as a reason for not using the particular methods by 13% of all the respondents who answered the question. Other adverse effects mentioned included menstrual irregularity and amenorrhea (3.5%), nausea and vomiting (2%), headache (2.5%), skin problems (2%) and painful injection (1.5%).

Side-effects did not seem to be associated with discontinuation of contraception or non-use in the respondents.

Respondents were asked if there were reasons for not wishing to use a particular method of contraception in the future, in an attempt to assess if there were factors that made a particular method unpopular, and to ascertain if this was a group in whom there was not an acceptable choice among the current methods. Most answered 'no reason' for not using each method and this mirrors findings in a study [23] of failed contraception in a rural South African population where there was more discontinuation of contraception for no acknowledged reason and poor compliance, than for adverse side effects. Of the respondents who gave reasons for not using the various contraceptive methods, 9% said they feared gaining weight on injectable contraception, 9% feared they would forget to take the oral contraceptive pill every day, 6% stated that their partners disliked the condom, and 3% had never heard of the IUCD. Although adverse effects were not a major reason for not using contraception, there is a need for repeated counselling to evaluate and explain positive and adverse side effects, and to address reasons for contraceptive failure. In other studies, [4, 23] adverse side effects were found to be a significant contributor to discontinuation of contraception or to poor compliance. It has also been found that women seeking TOP experience more adverse effects than others. [30]

Emergency contraception is still not well known. Eighty four percent of respondents did not know of its existence. Only twenty-two (11%) had knowledge of the method and only two (1%) actually used it. Other studies

show similar findings. [3, 4, 25, 23, 37, 51] In an MRC technical report in 1997 on adolescent sex and contraceptives [3], it was found that even some healthcare workers were unfamiliar with emergency contraception. Generally, information given of emergency contraception is poor. [3, 4, 23, 37, 51] Although systematic reviews [44, 45] and randomised controlled trials [41, 42, 43] have shown that increased access to emergency contraception did not decrease unwanted pregnancies at a population level, women should be given information and easy access to emergency contraception as this can reduce their individual risk of unwanted pregnancy and can be used as a back-up to effective ongoing contraception. [16]

Most South African women take up contraception after their first pregnancy, [16, 17] however, 7.5% of the respondents who gave reasons for seeking a TOP said it was because they had another small child. Also, 65% of the respondents had had a previous live birth. This situation can be prevented by adequate counselling and ensuring that each woman has a strategy to prevent pregnancy postpartum. A survey of the timing of postpartum contraceptive initiation in Kayamandi in the Western Cape [52] found that women were not adequately counselled before implementation of postpartum contraception. Counselling could help women to plan for and negotiate resumption of sexual activity, and improve their ability to use contraception.

This study found that being in a permanent relationship and spending most nights with partners did not significantly influence contraceptive use or condom use. Forty one percent of the respondents were still in a permanent relationship. This represents either user-failure of contraception or lack of

communication in the relationship, with a misunderstanding as to whether a child would be wanted or not. In another 44% who were no longer in a permanent relationship, the pregnancy might have led to the breakdown of the relationship. The discordance in relationship may be due to poor communication between couples and cannot be addressed by provision of contraception. The national survey of sexually active 15 – 24 year old women shows that contraceptive use is increased if the women discussed condom use with their partners. [15]

Only in 11% was pregnancy the result of a casual relationship. No South African study has looked at the effect of relationship on TOP, but a 1988 Swedish study on contraceptive use in women seeking termination of pregnancy [30] found that a situation of short unstable relationships was higher in women seeking abortion, and the choice and use of contraception was also influenced by the absence of a permanent partner. A Finnish study [4] on reasons for pregnancy termination found that most clients made the decision to terminate the pregnancy as a couple and did not want to accuse their partner of the pregnancy or its termination.

In this study 19% of the women reported having two or more partners in the last year. This is high when compared with the SADH 2003 [17] in which only 2.5% of women aged 15-49years had two or more sexual partners in the last year. The SADHS 20003 also found that men and women in their 20s are most likely to have multiple partners and that 15% of women used condoms with their husband compared to 47% who used condoms with a non-cohabiting partner. It seems that young women make contraceptive trade-offs

where condom use declines with increasing length of relationship. [15] It must therefore be emphasised that apart from abstinence, barrier contraception alone or in combination with another method can also be used to prevent transmission of HIV and other STIs. Young women are also more likely to use contraception when reporting a single partner, when reporting a main partner, and when reporting increased sexual activity in the past month.[15]

The role of forced sex and coercion was not asked for in this study. However, clients do come to the clinic from the police or the counsellors giving this history, but this was not the case in this study.

It was also shown that the type of contraception currently used was also influenced by age, parity and previous contraceptive use. The women who chose to use the condom were younger, while oral and injectable contraceptive users were older. The reason may be that older women have had more time to be exposed to various methods available, and also have less concern about adverse effects of these contraceptives on menstruation and future fertility. Also, previous oral or injectable contraceptive users were more likely than non-users to use contraception currently, though ineffectively, while previous condom use did not affect current contraceptive use.

Regarding future contraceptive use, potentially up to 47% of the respondents would not use contraception, (16% who were still undecided, 7% who would not use any contraceptive, 24% who did not answer the question and 1% who would use abstinence). Forty three percent of the women would use a highly reliable contraceptive method (injectable contraceptive, the pill, IUCD, or

sterilisation). Up to 7% would use a less reliable method (condom or postcoital pill only). The questionnaire was however answered prior to counselling. The respondents who were still undecided, those who would not use any method, or use an unreliable method would benefit from thorough counselling to improve uptake of contraception and thus prevent another unwanted pregnancy. At CHBH there is no family planning clinic, and consideration should be given to starting such a clinic which could counsel, initiate contraception, and arrange appropriate follow up with the clients' local clinic.

There are many limitations of this study including the following.

This is a cross-sectional questionnaire survey. Despite the advantages of using this research method; there are many sources of bias. The respondent has to interpret the questions, retrieve the necessary information and then decide what answer to give, before the researcher makes their own interpretation of the answer. Sources of error include misinterpretation of the question, failure to recall information, and misrepresentation so as to appear in a better light [53]. To combat this, the questionnaire was translated into six of the official languages and the respondents were encouraged to ask for help with any questions if the need arose. Misrepresentation (prestige bias) is a possible weakness and this study relied on the honesty of the respondents. An attempt was made to minimise this by ensuring that the information was anonymous and confidential and that the questionnaire was self administered in private [54]. Recall bias is difficult to deal with, but we tried to reduce this by giving examples of possible responses to questions where possible, trying to

avoid medical terms, and where appropriate by expanding on the questions to make them clear and to aid recall.

The questionnaire was pre-tested to evaluate whether the respondents interpreted the questions consistently as intended, and if the questions were appropriate. However, it was not piloted to check for ambiguity in the questions due to limited resources. The questionnaire was composed by the researchers, and not based on previously published models.

The sampling of the respondents might also have introduced bias in that the a convenience sample of early attendees was chosen, the first clients to attend each day might have been keen to arrive on time and so might also have given more favourable answers. Volunteer bias might also be a factor, as those who declined to participate in the study might have been different from those who agreed; however its influence might be small as we had a high analysable response rate. It is also possible that the respondents represent a high-risk group of women that was sent to CHBH, a referral centre. The sample is not representative of all women who seek TOP, but hopefully it will be representative of women who seek TOP at CHBH, the study sample size was 26% of the study population. Other studies in other areas have shown similar demographic characteristics, although not nationally representative of the South African sexually active women there are similarities when compared to the SADH.

The questionnaire was administered before TOP counselling; this is a weakness as women might have given different answers regarding future

contraception, but it is also a strength as counselling is an intervention and could have led to a change in perception and answers post counselling could have given a false impression of the respondents knowledge of different contraceptive methods. There is also risk of acquiescence, this was minimised by the fact that the questionnaire was self administered, in private, was anonymous and individual questions could be omitted. The questionnaires were placed in a sealed box which was only opened at the end of the day. The questions were worded in such a way as not to favour a certain response and where possible open questions were used.

This is a cross-sectional survey and as such can not allow deduction regarding causation, but can only be used to make associations, for which further studies would be needed to make firm conclusions. A stronger study design might have involved control groups of matched non-pregnant women, and pregnant women who planned to continue with the pregnancies.

There is a high prevalence of HIV infection in pregnant women attending antenatal clinics [55], and in the general population. [56] The HIV prevalence for 15 – 24 year old South Africans is 10.2%, it is disproportionately in women (15.5%) compared to men (4.8%). It is higher in 20-24 year olds (16.6%) than in 15 -19 year olds (4.8%). [5] The HIV prevalence in South Africa peaks at 25 29 years in women, and 35-39 years in men, the prevalence seems to be declining in the less than 20 year age group. [29] The fact that that the impact of knowledge of HIV status on the decision to terminate the pregnancy and its effect on contraceptive use was not determined is a weakness of the study.

However the study did ask for reasons for the decision to terminate the pregnancy and no one mentioned HIV infection.

Conclusions

This study set out to describe the demographics and contraceptive characteristics of women requesting TOP at CHBH.

The study confirmed previous findings in other South African studies that the majority of the women were young (less than 25 years), they were mostly from the Soweto townships and many were still in school, most had high school education or higher, and many were dependant on their parents, siblings or their partners, and most had had a previous live birth. A small number (2.6%) were having a repeat TOP.

The study also confirmed that the women had good knowledge of the major contraceptive methods, but poor knowledge of the emergency contraceptive pill.

A large number (56%) reported contraceptive failure. In contrast to sexually active women in the general population, these women used the condom (31.5%) more than other methods. The condom users were significantly younger than non users (confirming recent reports in the literature) while hormonal contraception users were significantly older than non users.

Accessibility of contraceptives was not a problem but counselling might have been.

The majority of the respondents had no reason why particular methods of contraception were not favourable suggesting that there were not women in this group for whom no method was acceptable. However up to 47% of the women requesting TOP were still undecided on a method to use.

Relationship status or cohabiting did not have a significant effect on contraceptive use, in contrast to findings in recent surveys. This might be due to a type two error, and further studies with larger sample sizes would be needed to confirm this. Eleven percent of the respondents were never in a permanent relationship while 44% were still in one. Twenty-two percent of the respondents initially wanted to continue with the pregnancy. This group might represent women who did not take contraception with the mistaken belief that a pregnancy could be welcome. Such women might be resistant to improved contraception, and not represent true contraceptive failure, since contraception was not obviously desired. This is an interesting group that should be studied further.

The reasons for requesting TOP were mainly economic reasons (35%) or relationship problems (19%). The study also found that these women had more sexual partners than sexually active women in the general population but that the number of partners or the number of nights spent together with partner did not seem to influence contraceptive use.

This study has contributed to the existing literature in confirming that only a small percentage of women are having repeat TOP, that the emergency contraceptive pill is still not well known, and that contraceptive counselling is

inadequate, some may not represent true contraceptive failure, and few have no acceptable method of contraception. The study unlike other national surveys did not find a significant relationship between types of relationship, nights spent together with partner, or number of sexual partners with contraceptive use. It also confirms the increasing use of the condom especially by younger women, which might be a response to the HIV epidemic. Further studies are required to confirm and investigate the reasons for the reported high contraceptive failure rate, especially with injectable contraceptives. This study also highlights the need for further research into the quality of the counselling provided to women about contraception.

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Appendix A

THE QUESTIONNAIRE

INSTRUCTIONS: Dear patient, we are not trying to criticise your use or not of prevention in any way. We are trying to discover ways of improving the use of prevention in the community.

The answers you give will be **completely confidential,** that is they will not be shown to anybody.

The answers will be **completely anonymous** – you will not be able to be identified from the answers that you give from the moment that you write them.

If you do not want to answer any questions, you can simply **leave them out.** If you do not want to carry on with the questionnaire, or you do not want to hand it in at the end, simply **place the questionnaire in the wastebasket** and we will see that it is destroyed and not read.

We are trying to make prevention better and easier to use. Thank you for your assistance.

QUESTIONS

1.AGE (YEARS):…….

2. WHAT IS YOUR RELIGION or WHICH CHURCH DO YOU GO TO?

(EXAMPLE: "CATHOLIC" or "RHEMA" or "NONE")

……..

3.IN WHICH AREA DO YOU LIVE NOW?

(EXAMPLE: Diepkloof, Soweto)..……..

4.HOW MANY CHILDREN DO YOU HAVE?

(0,1,2,3,4,5,6,7,8,9,10):……

5. WHAT LEVEL OF EDUCATION DID YOU ACHIEVE? PLEASE WRITE THE GRADE (Example "Standard 5", or "Standard 10"), or write "Higher" for Technikon or University.

……

6. ARE YOU WORKING NOW OR STUDYING OR ABOUT TO START EITHER?

……
……

7. WHICH PEOPLE IN YOUR HOUSE BRING MONEY INTO THE HOUSE (EXAMPLE: "ME, MY MOTHER, AND MY HUSBAND"

……

8.HOW MANY WEEKS or MONTHS ARE YOU PREGNANT NOW?

(Example write 8 WEEKS or 2 MONTHS):…….

9.ARE YOU STILL IN A PERMANENT RELATIONSHIP WITH YOUR BOYFRIEND OR HUSBAND NOW (PLEASE WRITE "**YES**" OR "**NO**")? IF YOU WERE NOT EVER IN A PERMANENT RELATIONSHIP WITH THIS MAN PLEASE WRITE "**NEVER**"

(PLEASE WRITE "YES" or "NO" or "NEVER"):…….

10.DOES YOUR HUSBAND/ BOYFRIEND STAY WITH YOU ONLY SOME NIGHTS OR ALMOST EVERY NIGHT **(PLEASE WRITE.. 'ONLY SOME NIGHTS' or 'ALMOST EVERY NIGHT'**

……

11.HAVE YOU AT ANY STAGE WANTED TO KEEP THIS PREGNANCY?

YES OR NO: ……..

12. IF YOU WANTED AN ABORTION RIGHT FROM THE BEGINNING, <u>LEAVE THIS QUESTION OUT</u>. IF YOU DIDN'T WANT AN ABORTION AT ONE STAGE, WHAT MADE YOU DECIDE TO HAVE AN ABORTION NOW?

……

.

……
.

13.HOW MANY ABORTIONS HAVE YOU HAD BEFORE?

(None or 1 or 2 or 3 or 4 or 5, etc):……

---

14. IF YOU HAVE HAD AN ABORTION IN THE PAST WERE YOU GIVEN ADEQUATE INFORMATION ABOUT PREVENTION AFTER THAT ABORTION? PLEASE WRITE "YES" or "NO" or "I have not had an abortion before"

…….

15.WERE YOU USING PREVENTION WHEN YOU BECAME PREGNANT?

(YES OR NO):……

16.WHICH TYPE OF PREVENTION WERE YOU USING AT THE TIME OF FALLING PREGNANT? (EITHER ALL THE TIME OR SOME OF THE TIME). <u>IF YOU WEREN'T USING ANY</u> ON ANY OCCASION WRITE "NO" BY ALL THE CHOICES)

(WRITE "YES"or "NO" by each method)

CONDOMS:**……...**

PILLIES:**……**

INJECTIONS:**……...**

LOOP:**……...**

WITHDRAWAL METHOD:**……**

ANOTHER TYPE**,** WHAT WAS IT? (WRITE WHAT IT WAS OR WRITE “NO OTHER TYPE”) (Continued from Question.16)

……

---

17. DO YOU KNOW ABOUT ‘EMERGENCY PREVENTION’, which can be taken within 72 hours after love making without prevention to prevent a pregnancy? PLEASE WRITE “**YES**” or “**NO**”

……

---

18. IF YOU DO KNOW ABOUT ‘EMERGENCY PREVENTION’, DID YOU USE IT/ PLEASE WRITE “**YES**” or “**NO**”, or “**I DIDN’T KNOW**”

…….

19.WHICH TYPES OF PREVENTION HAVE YOU USED IN THE PAST?

I have used CONDOMS in the past (**YES** or **NO**):**……**

I have used PILLIES in the past (**YES** or **NO**)**……...**

I have used the INJECTION in the past (**YES** or **NO**):**……..**

I have used the LOOP in the past (**YES** or **NO**):**……**

I have used the withdrawal method (**YES** or **NO**)**…….**

I have used another method…. please say **WHICH ONE**?**…….**

……

20.ARE THERE REASONS WHY YOU DON’T LIKE DIFFERENT TYPES OF PREVENTION? IF THERE ARE NO REASONS WRITE ‘NO REASON’

Why I don’t use the LOOP (GIVE THE REASON OR WRITE “NO REASON”)

……

……

……

Why I don't use CONDOMS (GIVE THE REASON OR WRITE "NO REASON"):

……

……

……

Why I don't use THE INJECTION (Depo or Nuristerate)(GIVE THE REASON OR WRITE "NO REASON")

……

……

……

Why I don't use PILLIES (GIVE THE REASON OR WRITE "NO REASON")

……

……

……

21.Is there ANOTHER REASON why you don't use prevention? WHY? OR WRITE "NO REASON"

……

……

ABOUT YOUR EXPERIENCE WITH GOING TO GET PREVENTION

22. DO YOU KNOW WHERE THE NEAREST CLINIC IS TO YOUR HOME WHERE YOU CAN OBTAIN PREVENTION? PLEASE WRITE "**YES**" or "**NO**"

……

23. IF THERE IS A CLINIC THAT YOU KNOW OF, DO YOU KNOW OF TIMES IN THE DAY WHEN YOU WOULD BE ABLE TO GET TO THE CLINIC AND FIND IT OPEN. PLEASE WRITE **"YES", "NO", "DON'T KNOW".**

……

24.HAVE YOU EVER HAD DIFFICULTY GETTING PREVENTION? IF NO, WRITE **"NO"**. IF YOU HAVE HAD DIFFICULTY, **SAY WHAT THAT DIFFICULTY WAS**

……

……

……

25.IF YOU HAVE GONE TO GET PREVENTION IN THE PAST, HAVE THE SISTERS OR DOCTORS TOLD YOU ENOUGH ABOUT THE PREVENTION METHODS OR TOO LITTLE? PLEASE WRITE "**ENOUGH**" or "**TOO LITTLE**" or "**I have not used prevention**"

…….

26.IF YOU HAVE GONE TO GET PREVENTION IN THE PAST DO YOU FEEL THAT YOU HAVE COME AWAY WITH THE PREVENTION METHOD OF YOUR CHOICE OR THE METHOD OF THE SISTER'S OR DOCTOR'S CHOICE? PLEASE WRITE "**MY CHOICE**" or "**THE SISTER'S OR DOCTOR'S CHOICE**" or "**I have not used prevention**"

……

27. DO YOU INTEND TO USE PREVENTION IN THE FUTURE? IF YOU DO **WHICH METHOD WILL YOU USE?** IF YOU DO NOT, WRITE "I DO NOT INTEND TO USE PREVENTION"

……

28.IF YOU CAN IMAGINE 100 MEN IN SOWETO, OF THOSE 100, ACCORDING TO WHAT WE BELIEVE NOW, HOW MANY WOULD HAVE **HIV**? PLEASE MARK WITH A TICK THE ANSWER YOU THINK IS CORRECT

1 in 100 5 in 100 10 in 100 20 in 100

29. DOES YOUR BOYFRIEND/HUSBAND HAVE ANY OTHER SEXUAL PARTNERS? PLEASE WRITE "NO" or WRITE DOWN THE NUMBER HE HAS

……

30. HOW MANY DIFFERENT SEXUAL PARTNERS HAVE YOU HAD IN THE LAST YEAR? PLEASE MARK WITH A TICK OR WRITE THE NUMBER AT THE END

1 PARTNER 2 PARTNERS 3 PARTNERS

IF MORE THAN 3,

PLEASE WRITE THE NUMBER **……**

THANKYOU FOR YOUR ANSWERS.

YOU HAVE BEEN VERY HELPFUL.

WE HOPE YOUR ANSWERS WILL HELP US TO ENABLE BETTER PREVENTION USE IN THE FUTURE. THANK YOU.

Appendix B

INFORMATION SHEET FOR THE PREVENTION STUDY

DEAR PATIENT,

OUR NAMES ARE DR. WILLIAM EDRIDGE AND DR ROBERT NYAKOE. WE ARE DOCTORS IN THE GYNAECOLOGY DEPARTMENT OF BARAGWANATH HOSPITAL.

WE ARE DOING A STUDY TO TRY AND FIND OUT MORE ABOUT THE USE OF PREVENTION AND THE EXPERIENCES OF PEOPLE COMING TO US ASKING FOR AN ABORTION.

WE ARE NOT TRYING TO CRITICISE. WE ARE MERELY TRYING TO FIND OUT MORE ABOUT THE PEOPLE THAT WE ARE LOOKING AFTER. AND HOPEFULLY, IF WE CAN FIND OUT MORE, WE WILL BE ABLE TO MAKE THINGS BETTER.

IF YOU DO NOT FILL OUT THE QUESTIONNAIRE IT WILL NOT IN ANY WAY AFFECT THE CARE THAT YOU GET, NOR WILL IT AFFECT ANYBODY'S ATTITUDE TOWARDS YOU.

IF YOU DECIDE TO FILL OUT A QUESTIONNAIRE YOU DO NOT HAVE TO ANSWER QUESTIONS THAT YOU DON'T WANT TO. YOU CAN SIMPLY LEAVE THOSE QUESTIONS OUT. AT ANY TIME YOU CAN DECIDE THAT YOU DO NOT WANT YOUR ANSWERS TO BE SEEN AND WE WILL DESTROY YOUR ANSWERS WITHOUT THEM BEING SEEN.

YOUR ANSWERS WILL BE COMPLETELY CONFIDENTIAL. THAT IS NO-ONE ELSE WILL SEE YOUR ANSWERS AND NOONE ELSE WILL BE ABLE TO GET HOLD OF THEM.

YOUR CARE IN THIS UNIT WILL BE JUST THE SAME WHETHER YOU FILL OUT THE QUESTIONNAIRE OR NOT.

TO FILL OUT A QUESTIONNAIRE WILL TAKE ABOUT 20 MINS. YOU WILL BE GIVEN A ROOM TO GO INTO TO COMPLETE THE QUESTIONS, IF YOU AGREE TO DO SO.

Appendix C

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Edridge/Nyakoe

CLEARANCE CERTIFICATE	PROTOCOL NUMBER M011128
PROJECT	Contraception Study: Assessment of Patients Requesting TOP
INVESTIGATORS	Drs W/RB Edridge/Nyakoe
DEPARTMENT	School of Clinical Medicine
DATE CONSIDERED	Nov 2001/29Feb 2008
DECISION OF THE COMMITTEE*	Approved - with Note: University policy is that no human studies may commence without formal clearance from the Committee

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 08.02.29 CHAIRPERSON .....

(Professor P E Cleaton Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Dr W Edrige

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. I agree to a completion of a yearly progress report.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES