

Factors that influence choice of contraception at mid trimester termination of pregnancy
at Groote Schuur Hospital vs. New Somerset Hospital, Cape Town

by

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Turn-It-In Report

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List of Abbreviations

TOP	Termination of pregnancy
MEC	Member of the Executive Council
CDC	Centers of Disease Control and Prevention
WHO	World Health Organization
GSH	Groote Schuur Hospital
NSH	New Somerset Hospital
IUD	Intra Uterine Device
IUCD	Intra Uterine Copper Device
LARC	Long Acting Reversible Contraception

Abstract

Background: Little is known about factors which influence women's attitudes toward and choice of contraception following mid-trimester termination of pregnancy. Contraceptive counselling is part of the work-up and is an essential part of the documentation required by the department of health.

Aim: To investigate the motivation behind the contraceptive choice in those women who present for a mid-trimester termination of pregnancy presenting to Groote Schuur Hospital and New Somerset Hospital and to see if there were any differences in the choice of contraception between these two groups of women

Methods: We interviewed women accessing mid-trimester TOPs at two state hospitals within the Cape Town West Metropole using a purpose built non-validated, qualitative questionnaire for the purpose of this study.

Findings: The injectable was the most used contraceptive method before TOP and LARCS were more utilized after TOP. Duration of action of methods and personal preference were what motivated the choice of contraception for most women in this study with no statistically significant difference between the two groups. Women in this study did not indicate that counselling influenced their choice. However, there was an eight-fold increase in the uptake of LARCS post TOP. Knowledge of its long duration of action was the motivating factor for choosing a LARC and this information would have been imparted during the counselling process. Women who underwent a medical TOP were more likely to choose an injectable contraceptive whereas women who underwent surgical TOPs chose the IUCD. Delay to diagnosing pregnancy and decision to TOP were reasons for TOP being delayed to the mid trimester.

Conclusion: Counselling provided at TOP, positively impacted women's contraceptive choices, improving the uptake of highly effective contraceptive methods. Stronger sexual education programmes that teach young women about their menstrual cycles, contraception and how to prevent unintended pregnancies needs to form part of basic education core curriculums as well as primary health care programmes. Negative staff attitudes towards this essential service needs to be addressed.

Chapter 1: Literature Review

Access to safe and well-timed induced abortion, done in the appropriate setting by skilled professionals reduces the burden of unsafe abortions on the public and on national health budgets. South Africa has one of the most liberal Termination of Pregnancy (TOP) acts. The Choice on Termination of Pregnancy Act 92 of 1996, (Appendix A) states any woman can have an abortion on demand up to 12 weeks of gestation.(1) A termination may be provided after 12 weeks up to 20 weeks gestation if the pregnancy poses a socioeconomic burden on the woman, if it endangers the woman's physical or psychological health, if the fetus is severely physically or mentally deformed or if the pregnancy is as a result of rape or incest. TOPs performed before the first 12 weeks may be performed by a medical doctor or by any midwife or registered nurse who has undergone the required training. All TOPs performed after 12 weeks must be performed by a medical doctor and all TOPs need to be performed in a facility that has been approved by the provincial Member of the Executive Council (MEC) as having met the requirements of safety, staffing and equipment and the ability to provide safe TOP. (1)

Despite this, provision of safe abortion is still largely undermined by a lack of trained professionals who are willing to perform abortions, the continued stigma which surrounds abortion and a general lack of knowledge and understanding around the TOP laws of the country by both users and providers. (2) A lack of trained professionals who are willing to perform first trimester TOP, especially in the poorer rural communities renders this very important Act devoid of all its good intention. This results in unintended pregnancies that progress past the safe 12 week cut off, leaving these women vulnerable to seeking out and accessing TOPs at later gestations which may or may not be legal or safe. (3)

According to the Centre for Disease Control and Prevention (CDC), an unintended pregnancy is a pregnancy that is unplanned and may be completely undesired. (4) Forty percent of all pregnancies worldwide are unintended, with an estimated 42 million women having unintended pregnancies annually. (5)(6) Of these, 50% will end in an induced abortion.(5) These occur more frequently in developing countries.(6) Therefore unintended pregnancies are the leading cause of induced abortions world-wide. Reasons for unintended pregnancies are complex and multi factorial.(3) They may be classified into patient specific or contraceptive causes. Patient factors include, but are not limited to, poor knowledge pertaining to contraceptive methods and actions, access to quality

health care in developing countries, financial instability, rape, incest and other forms of abuse including emotional or socio-economic abuse. (7) Contraception causes may occur when there is contraceptive failure, when contraception is used incorrectly or inconsistently, or where there is no use of contraception at all.

Approximately 222 million women in developing countries have unmet contraceptive needs. (8) Making reliable contraception universally available would address this issue. The freedom of choice of timing of pregnancy, pregnancy spacing and choice of number of pregnancies promotes basic human health rights. It reduces pregnancy induced exacerbations of co-morbid diseases such as diabetes, hypertension and cardiac disease, thus reducing maternal morbidities and deaths. (9)

Reproductive health education allows women to be autonomous over their bodies. Good knowledge, beliefs and access to quality family planning services are essential to the global improvement of women's health. (7) Effective family planning counselling has been proven to improve women's family planning choices. The CHOICE project in the United States of America showed that when access and cost barriers were removed and when women were given accurate, effective, unbiased contraceptive counselling, using the tiered effectiveness method of counselling, women were more likely to opt for highly effective LARCs. (10). Tiered effectiveness counselling aims to improve the uptake of LARCs by providing information about the most effective contraceptive methods first. This model of counselling was developed to provide both end-users and providers with the most accurate information about contraceptives. (11) Studies have shown that tiered-effectiveness counselling resulted in a 75% increase in LARC uptake. (10)(11)

Good quality family-planning counselling is counselling which is provided by a skilled counsellor. It is non-biased, rights based, and client centred. It provides information which is evidence-based so that the client is empowered to choose a method that addresses all her needs and allows her to navigate side-effects. Clients need to be informed on methods effectiveness, safety, their expected side-effects and how to manage these. (12)

The National Contraceptive Clinical Guidelines of 2019 endorses the GATHER approach for contraceptive counselling. The acronym stands for Greet, Ask, Tell, Help, Explain and Return, Refer and Reassure. This tool helps counsellors remember the cycle of

contraceptive counselling. Greeting the client ensures the client feels respected, is comfortable and develops rapport. Ask aims to establish the purpose of the visit, the contraceptive needs and fertility desires of the client. Tell provides clinically sound information about methods. Explain assists the client by telling the client how a chosen method works, about its safety, its efficacy and side effect profile, what to expect and how to manage these. Return provides dates to return, information about a return to fertility and reassurance that the client may return before her given date if she has any concerns.

Good family planning and contraception policies will help to stabilise the world's expanding population which is largest in the developing countries. (9)(13) There are multiple other indirect benefits of having national policies in place that promote contraception for all women. Good contraception reduces the maternal morbidity and mortality rates as well as perinatal and child mortality rates and reduces the need for abortions. (9,14) A reduction in unintended pregnancies will lead to a reduction in the need for safe and unsafe induced abortions and ultimately have a reduction in maternal morbidity and mortality. (6) Social and environmental benefits are indirect and include control over the negative effects of the expanding global population such as global warming and the depletion of natural resources and water supplies. (9)

An induced abortion is a common end result of an unintended pregnancy. This includes any procedure, whether done surgically or by ingestion of medication, that causes the end of a pregnancy or the expulsion of the products of conception. First trimester abortions are medically safer and considerably cheaper than those performed in the second trimester and can be done as an outpatient procedure.(15) . 'The WHO guideline, Safe abortion: technical and policy guidance for health systems (2012), recommends manual or electric vacuum aspiration, dilation and evacuation, or medical management, either using a combination regimen (mifepristone followed by misoprostol) or misoprostol alone.' (16)

In 2014, 42 000 000 unintended pregnancies ended in induced abortions worldwide, with a resultant mortality rate of 13% (68000 deaths). (5,17) In addition, 5 million of these women suffered some morbidity requiring hospital admission and treatment.(2,7) The percentage of maternal deaths directly attributable to abortions in South Africa is unknown. The National Confidential Enquiries into Maternal Deaths does not have a separate category for abortion-related maternal deaths.(18) Incomplete abortions and, in

particular, unsafe abortions are an important cause of maternal mortality and morbidity in South Africa. The exact morbidity and mortality rates specifically related to unsafe abortions are not known. Data collection and record keeping may be challenging in some countries, especially those where abortions are illegal. Where records are kept, it is usually not of the highest quality. Despite this there is an estimated 44 686 women who are admitted with incomplete abortions and 425 women who die annually in public hospitals from complications of abortion in South Africa.(19) Fifteen per cent of patients have severe morbidity i.e. haemorrhage, uterine rupture, hysterotomy and hysterectomy, sepsis and infertility while a further 19% have some morbidity such as lower abdominal pain, mild vaginal bleeding and evacuation of products. (19) There remains a lack of recent publications which addresses the morbidity and mortality rates related to unsafe abortions. The National Confidential Enquiry into Maternal Death does not have a specific category for maternal deaths resulting from illegal abortions.

Women who are usually the most affected by unsafe abortions form part of the most productive sub-group of society. (3) Twenty-six per cent of maternal deaths in low income countries occur in young women aged 15 -19.

Unplanned pregnancies can be problematic and speak largely to the public health needs for family planning services in a country or region. In many developing countries, especially those in Africa, reproductive ill- health and high maternal morbidity and mortality rates are still particularly concerning.(7) In certain parts of Africa, women have shown a preference for non-pharmaceutical forms of contraception such as periodic abstinence and rhythm methods to avoid pregnancy.(17) This is in an attempt to achieve society's goal of showing discipline by being able to avoid sexual contact and thus preventing pregnancy. However, a lack of knowledge of when the safe periods are in which to have unprotected sex, has led to more unintended pregnancies and induced abortions. A Nigerian study revealed that only 56 percent of participants knew when in their menstrual cycles pregnancy was most likely to occur. (7,17) A study from France determined that women who presented for an abortion had either stopped all forms of contraception in the preceding 6 months or had changed to a less effective method.(20) Contraceptive failure was mainly associated with the use of the oral contraceptive pill because its efficacy is user dependent.(20)

Despite South Africa's legalization of first trimester abortion, 25% of induced abortions in South Africa, occur in the second trimester (21). The continual high incidence of mid trimester abortion is a result of delays in suspecting pregnancy, time between suspecting pregnancy and taking a test, time from result and the decision to terminate, time from decision and requesting an abortion and time between requesting an abortion and the procedure. In sub Saharan Africa this still places a significant burden on national health budgets. (5) These abortion procedures require longer periods away from work as they necessitate hospital admission. They require the need for doctor facilitated procedures, they often require surgical completion of the termination and they require larger amounts and multiple doses of medication. They may also require the use of blood products, antibiotics, analgesia as well as the need for additional human resources in the form of nursing, surgical and anaesthetic teams. (7,14)

WHO defines unsafe abortion as a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both.(20) Approximately half of all induced abortions performed worldwide are still considered to be unsafe. The large majority of these take place in developing countries, where 98% of all unsafe abortions occur.(6,22,23) Because abortion remains outlawed in many developing countries, women are forced to have unsafe and unmonitored abortions. This is demonstrable by abortion rates being higher in countries with more restrictive abortion laws. In Western Europe, where abortion is legal the abortion rate is 12 per 1000 whilst in Africa the abortion rate is 29 per 1000 and in Latin America it is 32 per 1000.

South Africa is an example of where abortions became legal, where women are able to access safe abortions that are well timed positively resulted in a 91% reduction in the number of abortion related deaths between 1994 and 2001. (22) Where safe abortion practices are followed the mortality rate is less than 1 per 100 000 procedures performed.(24)

Health systems which lack the proper infrastructure and funding to meet the vast health needs of the people they serve, contributes to the disproportionately high maternal mortality rate in developing countries. This is compounded by communities who ostracize and stigmatise abortion and do not prioritise women's health rights. (23) This is evidenced by family planning services and access to contraception being sparsely available and

unfunded in many developing countries. This is perpetuated by lack of reproductive health education in these countries. This lack of knowledge on the reproductive physiology and menstrual cycle makes the more socially accepted natural methods of contraception more likely to fail.(7) Reasons for not using modern contraception amongst women from developing countries despite not wanting to fall pregnant were infrequent sex, unaffordable cost, fear of side effects including future infertility, breastfeeding and lactation induced amenorrhea as contraception, opposition to use from community leaders and partners, provider bias and gender disempowerment. (22)

The delay in accessing first trimester abortions in a country where safe first trimester abortions are readily and freely available still concerns many in the health profession. However, there are multiple obstacles or delays that are faced or have been identified along the pathway to obtaining an abortion. A significant individual factor is the initial delay to diagnosis of a pregnancy. Many women do not have regular menstrual cycles and therefore are not immediately concerned when their menses are delayed until they are more than 12 weeks pregnant. Some women do not feel that pregnancy was possible despite not being on reliable contraception. This was because they were not in stable relationships at the time of conception and sexual intercourse was spontaneous or sporadic and therefore, they did not feel that they were at any real risk for falling pregnant. Many women admitted to discontinuation of hormonal contraceptive methods because of unacceptable side effects such as irregular bleeding patterns or weight gain or partner dislike where barrier methods were not used. Many people are aware of the 12 week cut off for a first trimester abortion but are not aware of the 20 week cut off for second trimester abortions.(3) Therefore, some women thought they were too far along to have an abortion, following the diagnosis of a pregnancy further than 12 weeks gestation..

It is therefore evident that through good family planning policies and access to its services that many of the above negative health impacts as well as social and financial burdens would be easily prevented and remedied.

Good family planning policies have been shown to prevent not only the immediate unintended pregnancy, but it also promotes good reproductive health in the individual. It stabilises family units and communities as well as slows down the ever-expanding global population and in effect assists in negating the negative effects of the overextended environment.

Good reliable contraception which is easy to use with minimal side effects should be a national health priority in every country and home.

Chapter 2: Methodology

2.1 Problem Statement

It is not known what factors influence women's attitudes and choices on contraception when undergoing a mid-trimester termination of pregnancy at Groote Schuur Hospital (GSH) and New Somerset Hospital (NSH) in Cape Town.

2.2 Aims and Objectives

The aim of this study was to elicit an understanding of the motivation behind contraceptive choice of those women who present for a mid-trimester termination of pregnancy, through a purpose built non-validated questionnaire for the purpose of this study.

The objectives of this study were

1. To assess the understanding of methods of contraception, post counselling, in women who have undergone a second trimester TOP.
2. To understand what motivates women when choosing specific methods of contraception post TOP

The secondary objectives of the study were:

1. To assess the demographics of the women who present for a mid-trimester TOP.
2. To assess the socioeconomic and social circumstances of women presenting for a mid-trimester TOP.
3. To assess the contraceptive history of women undergoing a mid-trimester TOP, including
 - a. past contraception history,
 - b. future contraception choice,
 - c. rate of uptake of contraception in first time users post TOP,
 - d. the percentage of women who did not receive their contraceptive choice and the reasons thereof
4. To assess the reasons behind the delay to TOP until the mid-trimester

2.3 Study Design

A prospective cross-sectional study was conducted at Groote Schuur Hospital and New Somerset Hospital.

The study protocol was approved by the Human Research Ethics Committee of the University of Cape Town in July 2018 (HREC 246/2018) (Appendix 3).

The study took place in two public sector teaching hospitals in Cape Town, Groote Schuur hospital, a tertiary level hospital and New Somerset Hospital, a secondary level hospital, each with its own drainage areas and referral criteria. Both hospitals offer general specialist obstetrics and gynaecological care and run on a 24 hour basis with availability of surgeons, anaesthesia, theatre services and blood products and both offer a service of abortion up to a maximum of 20 weeks and 0 days gestation if the pregnancy posed a socioeconomic risk, a mental or physical health risk to the mother or the fetus, if the pregnancy was a product of rape or incest. There are differences in the protocols for TOP in these hospitals. This is based on personnel, time, and institutional resources. Both are documented and acceptable methods of TOP. At GSH, medical termination is offered to women between 17 weeks and 20 weeks gestation. At GSH, patients within the drainage area are seen at the family planning unit in the outpatients' department to be scanned for the gestational age of the pregnancy, or they are referred from referral sites with an ultrasound already performed. Women requesting a TOP, who are found to be between 17 weeks and 20 weeks gestational age are then referred to the general gynaecological outpatient department. The women are assessed by a member of the gynaecological outpatient team for suitability for the TOP and to rule out any medical or safety contraindications to the procedure. Once the current gestational age and suitability is confirmed, she is then counselled on the procedure as well as contraceptive methods available to her after the procedure is completed, the patient is consented for an HIV test, her blood group and rapid syphilis tests are done and consent for the TOP is obtained using the TOP consent form (Appendix C). There is a dedicated 4 bed day unit for this procedure. Women receive mifepristone which they must take 48 hours prior to admission to the day unit. The patient takes this dose at home. On admission, sublingual misoprostol is initiated and continued 3-hourly as an in-patient until there is expulsion of the products of conception. Evacuation of the uterus may be required if the abortion is incomplete. The contraception choice is administered just before discharge once the abortion is complete

and the patient has been assessed as fit for discharge by the allocated intern. Implants and intrauterine contraceptive devices (IUCD) are inserted by the interns and COCs and injectable contraception are administered by the nursing staff.

NSH conducts surgical evacuations for all terminations until 20 weeks. Women requesting a TOP at NSH are seen in the outpatient department and open a file, they are seen and scanned for viability and gestational age by one of the attending medical officers. If the woman's pregnancy is found to be between 12 weeks and 20 weeks, she is then sent to make an appointment for her TOP with the administrative clerk of the gynae ward. The woman is also seen by a social worker who will counsel her on the what to expect at the TOP procedure as well as offer her contraception counselling.

Women presenting at NSH for TOP take 400mcg of Misoprostol, sublingually at 5 am at home (on the day of procedure). Thereafter, they present to the hospital at 7 am on the same day. They are given a second dose of 400mcg of Misoprostol at 8 am if no bleeding or abdominal pain has occurred. This is followed by an evacuation of the uterus of all products of conception under local anaesthetic in a dedicated theatre space by a trained provider. This TOP procedure is conducted as an outpatient procedure at New Somerset Hospital. At both institutions contraceptive counselling would have been commenced at the initial presentation for TOP request. The contraception choice was administered on the day of procedure prior to discharge. IUCDs are inserted at the end of the procedure by the same medical doctor who conducted the surgical TOP. Alternatively, implants are inserted in the gynae wards, combined oral contraceptives (COC) and injectables are administered by the nursing staff in the women's health clinic.

2.4 Participants

The study population was recruited by convenience sampling at the two hospitals. Women presenting for a second trimester socioeconomic TOP at GSH and NSH were approached to participate in the study. All women who were present at the time that the interviewers were present in the wards or Women's Clinic were approached. They were deemed to be eligible based on the following criteria.

Inclusion criteria

- Age 18-49years old
- Gestational age 12w0d-20w0d confirmed by ultrasound scan
- Patients who are able to communicate in English, Afrikaans, isiXhosa
- Patients who are able to understand and give written consent.

Exclusion criteria

- Patients who are younger than 18 or older than 49 years of age
- Gestation below 12 +0 weeks or above 20+0 weeks gestation
- Legally incapable to give consent
- Women who are unable to communicate in English, Afrikaans or isiXhosa
- Women who are unable to understand the study or are not willing to give consent
- All women who are having a TOP for reasons other than for socioeconomic reasons

2.5 Questionnaires

Questionnaires for patients undergoing a mid-trimester TOP, for socioeconomic reasons, were designed using the format of a previously approved and validated questionnaire from previous contraception studies conducted by the Reproductive Medicine Unit in the Department of Obstetrics and Gynaecology at the University of Cape Town.

A 72-point questionnaire was designed and used for this study (Appendix 5).

The questionnaire covered the following areas:

- Demographics: Age, population group, home language, religion, socioeconomic status and educational background
- Social history: marital status, financial and emotional support and substance use
- Medical history
- Obstetric history
- Knowledge of contraception including:
 - History of previous contraceptive use
 - Reasons for discontinuation if any
 - History of contraception failure
 - Previous TOPs
 - From whom, if any contraception counselling was received and the rating thereof
 - Choice of future contraception and why
 - Accessibility to TOP services and reasons for delay to mid trimester TOPs

2.6 Recruitment and Consent

All the investigators who participated in the study were trained by the primary investigator. Recruitment took place from October 2018 to June 2019. All women who qualify to partake in the study were approached individually after completion of the TOP but prior to discharge, either in the gynae wards of GSH or at the Women's Health Clinic at NSH. Potential participants were counselled about the study, in a quiet private room. Recruitment was done in this way to alleviate any anxiety that potential participants may have had that nonparticipation may negatively impact their access to treatment. Each woman was provided with an information sheet (Appendix 4) about the study, which was offered in a language of her choice, which was translated by a professional translator from English into Afrikaans or Xhosa. The women were then allowed time to reflect about the information given to them and allowed time to make an autonomous decision whether they would like to participate in the study or not. Any questions were addressed by the study team. All participants who agreed to participate in the study, were then interviewed by the primary investigator or a trained member of the research team.

Participants who consented to participate in the study were interviewed and a questionnaire was administered. (Appendix 5) The questionnaire was administered. This was done after procedure was completed. It included social and demographic information of participants as well as an assessment of their knowledge on contraceptives in general and their previous contraceptive choices and to identify any factors which may have influenced their decision then as well as their contraceptive choices after being counselled on both the TOP procedure and the contraceptive options available to them after the TOP procedure was complete.

2.7 Data capturing and analysis

The answers to each question in the questionnaires were numbered in such a way that it matched a numerical variable which was entered into a database using Microsoft EXCEL. Categorical variables were summarized by frequency and percentage tabulation and were illustrated by means of bar graphs and pie charts.

The Chi-squared test was used to analyse the difference between the GSH and NSH group regarding the following variables: past and future contraception use, which health professional counselled participants and what motivated choice of contraception.

Chapter 3: Results

3.1 Demographics and Socio-Economic Status

Table 1 illustrates the demographic details of the participants in our study.

Both groups of participants had a mean age of 28. Women accessing care at GSH and NSH had a median gravidity of 4. The median parity for both institutions was 3.

The largest proportion of the participants were unmarried. At NSH more than 50% of the women were in a stable relationship but not living with their partners. A third of women were not in any relationship at both facilities respectively. Twice as many women were unmarried but living with their partners at GSH as compared to those at NSH.

Forty-six percent of the women at GSH were unemployed, however 36% of these women were self-reliant. Thirty percent of the women at NSH had some form of casual employment, a further 25% of the cohort were unemployed. Thirty-eight percent of women at NSH reported as being self-sufficient despite not all of them being employed.

All participants had some form of formal education. The majority of this was secondary level education. At NSH, 75% of women had secondary education whereas 66% of women at GSH had secondary education.

The distribution of emotional support was similar amongst both groups. Parents were the primary source of emotional support followed by the partners and then siblings. Interestingly, 7% of women in both groups stated that they were their own emotional support and 1 woman at GSH and 2 women at NSH stated that they had no support.

Table 1: Demographics

Baseline characteristics of the participants		
Demographic		
	GSH	NSH
Age		
Min	18	18
Mean	28.2	28.1
Max	46	44
Gravidity		
Min	1	1
Median	4	4
Max	7	7
Parity		
Min	0	0
Median	3	3
Max	6	6

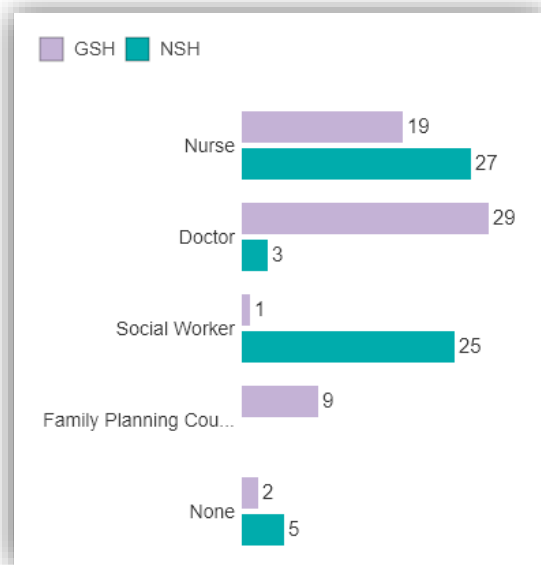
	GSH		NSH	
	N	%	n	%
Relationship Status				
Single/Stable/Cohabiting	14	23.3	7	11.6
Single/stable/not cohabiting	19	31.7	32	53.3
Single	21	35	18	30
Married	4	6.7	1	1.7
Divorced	2	3.3	1	1.7
Separated	0	0	1	1.7

Employment Status				
Casual	9	15	18	30
Housewife	1	1.7	2	3.3
Permanent	16	26.6	8	13.3
Self Employed	1	1.7	7	11.7
Student	5	8.3	10	16.7
Unemployed	28	46.7	15	25
Financial Support				
Self	22	36.7	23	38.3
Partner	9	15	13	21.7
Parents	19	31.7	18	30
Sibling	5	8.3	4	6.7
Child support Grant	3	3.3	2	5
Disability Grant	1	1.7	0	0
Other	1	1.7	0	0
Educational Status				
Primary	10	16.7	1	1.7
Secondary	40	66.6	45	75
Tertiary	10	16.7	14	23.3
Emotional Support				
Self	4	6.7	4	6.7
Parents	20	33.3	19	31.7
Partner	14	23.3	17	28.3
Siblings	15	25	9	15
Children	0	0	2	3.3
Friend	2	3.3	6	10
Other	4	6.7	1	1.7
None	1	1.7	2	3.3

3.2 Contraception

3.2.1 Contraception Counselling

Figure 1: Health Professional administered counselling



Counselled By	GSH (n=60)	NSH (n=60)
Nurse	19	27
Doctor	29	3
Social Worker	1	25
Family Planning Counsellor	9	0
None	2	5

Health Care Professional

Figure 1 represents **from whom participants received contraception counselling**.

Most women who accessed the mid-trimester medical TOP service at GSH received counselling. Of the women who received counselling, nurse practitioners counselled 31.7% (n=19) of the women, 48.3% (n=29) were counselled by a doctor who saw them in the clinic. Groote Schuur Hospital had a special counsellor who came in on specific days, specifically for TOP contraceptive counselling, 15% (n=9) were seen by this cadre of staff. One woman was counselled by the social worker at GSH. Three percent (n= 2) reported not receiving any counselling at all.

Most women who accessed mid-trimester surgical TOPs at NSH, received contraception counselling as part of the TOP service. The counselling was done separately and prior to their procedure (92%). Similar numbers of women were counselled by a nurse or social worker, 45% (n=27) and 41.7% (n=25) respectively. Only five percent (n=3) of the women were counselled by a doctor. Five (8.3%) women reported that they did not receive counselling.

There was a statistically significant difference between the GSH and NSH groups in terms of who offered the contraceptive counselling. P-value <0.01.

3.2.2 What Motivates Contraceptive choices

Table 2: Factors which Motivated Contraceptive Choice

Motivation	GSH (n=60) Δ	NSH (n=60)
Fear of Side Effects	3	0
Counselling	3	5
Best Side Effect Profile	4	1
Contraception	4	6
Personal Preference	14	10
Last Long	32	38

We sought to establish which factors influenced the choice of contraception women would eventually use following the TOP procedure (see figure 2). They were presented with a list of choices from which they could choose as many as were applicable. Where none of the options applied, she could describe her reasons in her own words.

Fifty-three percent (n=32) of the women at GSH reported that the long duration of action was what motivated them to choose their specific contraceptive method. Twenty-three percent (n=14) chose a contraceptive because of personal preference. Four women (6.6%) chose a contraceptive based on its beneficial side effect profile while 3 (5%) based their choice on their fear of alternative method side effects. Four (6.6%) other women chose a contraceptive because of the contraceptive benefit alone.

Only 3 women (5%) reported that the counselling alone motivated their choice of contraception. Three women (5%) chose a particular contraceptive because they feared side effects of other contraceptives.

Most women, 63.4% (n=38), interviewed at NSH chose their contraceptive based on the duration of action. This was followed by personal preference, accounting for 16.6% (n=10). One (1.7%) women chose their method based on side effect profile. Ten percent

of the women (n=6) were motivated by their desire for contraception. Only 8.34%(n=5) of the women felt that counselling was the reason that motivated their choices.

There was no statistically significant difference in what motivated women's choice of contraception. This was evidenced by Pearson Chi squared P-value of 0.230

3.3 Past contraception history

Table 3: Past Contraceptive Use

Past Contraception	GSH (n=60)	NSH (n=60)
Injectable	39	43
LARCS	6	2
IUCD	2	1
Implant	4	1
Condoms	5	5
Pill	5	3
Emergency Contraception	0	1
None	5	5
Natural	0	1

Table 3 demonstrates the past contraception use amongst the women.

Most women had used some form of contraception in the past. This may have been distant from the time of conception of this pregnancy. The injectable contraceptive was the most commonly used contraceptive in women accessing TOP services at GSH. LARCS were underutilized, with IUCDS and implants used by only 10% (n=6) of women. Barrier contraception and the pill were used by 8.3% (n=5) women each. None of the women at GSH had used emergency contraception.

Five (8.3%) women reported never having used contraception before. The injectable contraceptive was most commonly used, 71% (n=43) of women reported using it previously. The IUCD, implant, natural method and emergency contraception were each used by 1 woman, respectively. Barrier methods were used by 8.3% (n=5) and the pill by 5%(n=3) of the women.

There was no statistically significant difference in past contraception use amongst the two groups.

3.4 Reasons for cessation of contraception use

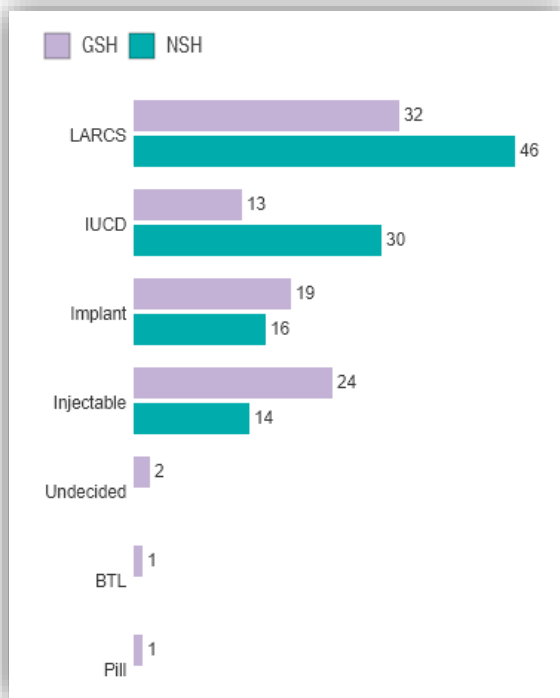
Table 4: Reasons for cessation of contraception use

	Pill Stop		Injection Stop		Condom Stop		IUCD Stop		Implant Stop	
	Users	%	Users	%	Users	%	Users	%	Users	%
	19	100%	94	100%	103	100%	4	100%	9	100%
Change	3	16	6	6.4					4	45
Side Effects	4	21	18	19.4	4	4	1	25	3	33
Medical Reason					1	1				
Default	9	47	52	56	91	88.3				
Difficult to Access	2	11	8	8.6						
Failure	1	5	9	9.6						
Other					7	6.7	3	75	2	22

Table 4 depicts reasons for cessation of contraception use. Ninety-five percent of pill users stopped using the pill prior to conception. Forty-seven percent of pill users defaulted their contraception. One pill user experienced contraception failure. Fifty-six percent (n = 52) of injectable users defaulted their contraception, 19.4 % (n=18) of users stopped using injectables because of side-effects and 9.6 % (n=9) of injectable users experienced contraception failure. Eighty-eight percent of condom users defaulted condom use. One IUCD user removed the IUCD due to side effects. A third of implant users removed their implant due to intolerable side-effects and 45% (n=4) of implant users stopped using the implant due to changing their method.

3.5 Contraceptive Method Opted for After Counselling and prior to TOP Procedure

Figure 2: Contraception to be Used After Completion of TOP Procedure



Future Contraception	GSH (n)	%	NSH (n)	%
LARCS	32	53	46	77
IUCD	13	22	30	50
Implant	19	31	16	27
Injectable	24	40	14	23
Undecided	2	3	0	0
BTL	1	2	0	0
Pill	1	2	0	0

The choice of contraception is represented in figure 2.

Intra uterine copper devices and implants were chosen by 52% (n= 32), of the women at GSH. Injectables remained a popular choice, chosen by 40% (n =24) of the women. One woman chose the contraceptive pill, 1 woman opted to have a bilateral tubal ligation and 2 women were undecided at the time of the interviews. Eighty-one percent (n=49) of the women in the GSH cohort were not using any contraception at the time of conception. Of these women, 49% chose a LARC and 42.8% (n=21) chose injectables as their future methods. One woman opted for the pill.

Seventy-one percent of the women in the GSH cohort received their contraception at the time of the interview. Three women did not receive their choice of contraception due to a shortage of stock. A further 3 women were asked to follow up in 6 weeks to receive their method of choice. Two of these women opted to have an IUCD and the other opted to have a tubal ligation. All these women were offered an alternative method of contraception, either an injectable or a COC before discharge.

Participants undergoing a second trimester medical TOP at GSH were managed as in-patients and had to be formally reviewed and discharged by the attending doctor before they received their discharge medication, which included contraception. Consequently, nine women (15%) were still awaiting their contraception at the time of the interview.

All the women receiving care at NSH opted to use contraception. Most women chose a LARC (76%). IUCDs were chosen by 50% (n=30) and implants by 26% (n=16) of women. The remaining 24 % (n=14) of the women all chose the injectable. Eighty- three percent (n=50) of the women at NSH indicated that they were not using any contraception at the time of conception. All these women chose a future contraceptive method. Of these women, 40 chose a LARC, 25 chose an IUCD and 15 chose an implant. Ten women chose the injectable.

There was a statistically significant difference in the women's choice of contraception following the TOP amongst the two groups as evidenced by a Pearson Chi squared P-value of 0.018. This difference may be attributed to more women at GSH opting for the injectable and more women at NSH opting for an IUCD.

3.5 TOP

3.5.1 Delays to TOP

3.5.1.i Reasons for Delay to TOP at GSH

Figure 3: Delays to TOP at GSH

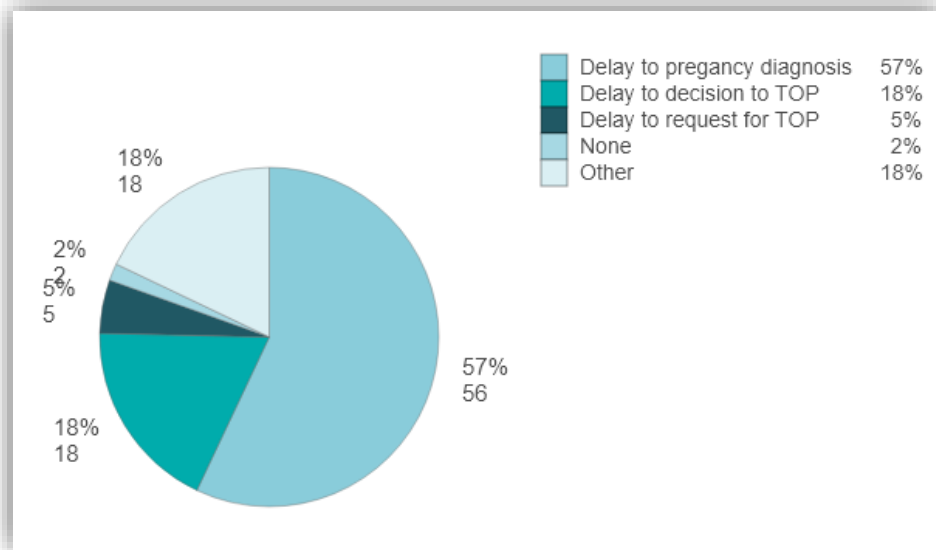


Figure 3 illustrates reasons why women who received treatment at GSH delayed their TOP to the mid-trimester. More than half of the women who had their TOP at GSH 57% (n=34) reported the reason for TOP delay into the mid-trimester was that they were unaware of their pregnancy until after 12 weeks. Eighteen percent of the women delayed access due to indecision for termination. Five percent (n=3) of women reported that once they made the decision to terminate their pregnancy, they delayed seeking out facilities that offered TOPs. One woman reported no reason for having her TOP after 12 weeks. The remaining 18% did not state the exact reason for their delay.

3.5.1.ii Reasons for Delay to TOP at NSH

Figure 4: Delays to TOP at NSH

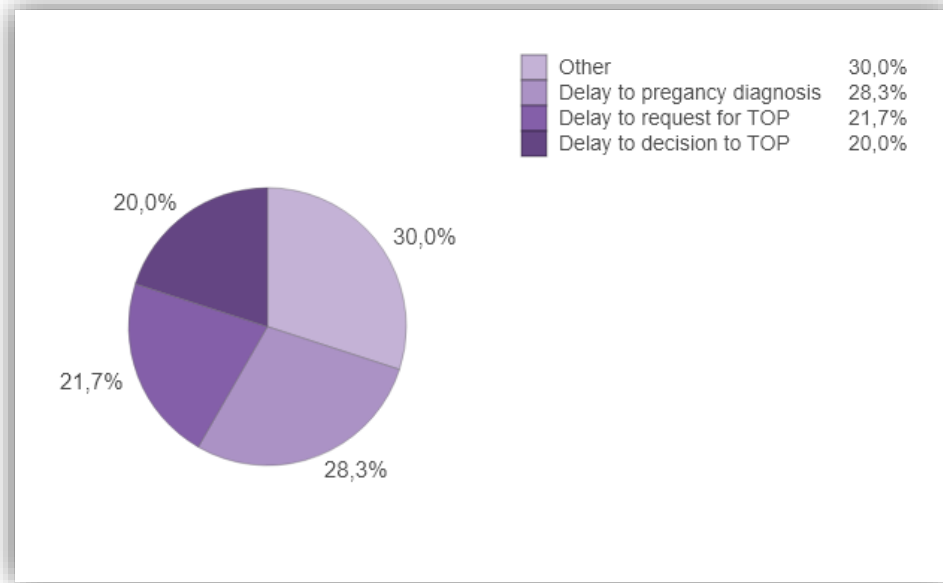


Figure 4 demonstrates the reasons why women who received their treatment at NSH delayed the TOP until the mid-trimester

Twenty- eight percent (n =17) of the women at NSH reported the reason for TOP delay into the mid-trimester was that they were unaware of their pregnancy until after 12 weeks. Indecision on whether to have a TOP or not accounted for 20% (n= 12) of the delay into the second trimester. Twenty- one percent (n=13) of the women had decided to have a TOP but were delayed by not presenting to a facility where they could have a TOP done until 12 weeks gestation had already passed. Thirty percent of the women did not give a reason for their delay.

3.5.2 Delays to Accessing TOP service

Most of the women, 78% (n=47), attending GSH reported having no delays when accessing a mid-trimester TOP procedure. Thirteen women (21.6%) reported some delay. This included admission delay which was reported by 8.3% (n=5) of the women. The average waiting time for admission to the day unit at GSH was 2.1 weeks. This was calculated as the difference between the gestational age at which women presented themselves to the GSH OPD to request the TOP and the gestational age at which the TOP was performed. Four women reported a referral delay, 2 women reported being delayed by staff attitudes when requesting a TOP, 1 woman was delayed by not having access to transport and 1 woman reported her access being delayed by the administration process.

Seventy percent of the women at NSH experienced no delays when accessing the service. Referral delay into the service was experienced by 8.3% (n=5) of the women. Two women had transport delays. Three women (10%) reported that staff attitudes were instrumental in their delay in accessing the service. Two women (3.3%) reported the administrative process as being a delay in their ability to access the TOP service. This particular delay was an inconvenience delay and was expressed as being the time delay between folder retrievals on arrival and the procedure being done. This was the only aspect of the entire service that they felt could be improved upon.

There was no significant difference in delay to access to TOP services amongst the two groups in this study.

Chapter 4: Discussion

Unmet contraceptive needs are one of the leading causes of unintended pregnancies, affecting approximately 225 million women worldwide.(8) Sound knowledge of the different methods of contraception allows women to exercise their right to choose when and how many times to conceive. This allows them to understand the side effects, manage omissions and failures and allows them to make sound choices. Many of these unintended pregnancies end up in induced abortions. Meeting women's contraceptive needs will prevent 67 million unintended pregnancies, 36 million induced abortions and 76000 maternal deaths worldwide.(5)

Sixty percent of sexually active women age 15-49 in South Africa are currently using contraception. The most commonly used methods among sexually active women are injectables (3-month, 18% and 2-month, 7%) and male condoms (16%). Contraceptive use amongst women in a relationship is lower at 55%. (25)(25)

According to the FP2020 report, the most popular method used by SA women was the injectable (47.3%), followed by the male condom (24.5%). The combined oral contraceptive (COC) was used by 10.5% of women while the LARCS- IUCD and Implant-were the least utilised by 1.9% and 6.7% respectively. (26)

Qualitative South African studies have shown that injectables remain the contraceptive of choice amongst South African women despite South Africa's progressive family planning policies and availability of a variety of methods.(27) In-depth interviews with women attending antenatal services revealed that 82.5% of interviewees intended to return to the injectable contraceptive as it was what they were most familiar with, what their peers were using and was what was often recommended by health care providers. Interviewees also reported that their limited knowledge on LARCS and other methods was due to the limited counselling they received. This lack of knowledge in turn, is what led to interviewees opting for the injectable contraceptive. (27) Other recognised barriers included chronic staff shortages, lack of in-service training and ineffective or no counselling. In addition, stock-outs hamper availability of a preferred method and if the method is available there may not be trained staff to administer it. (28)

We found that 80% of the participants in our study were not on any form of contraception at the time of conception, despite not wanting or planning a pregnancy. Defaulting contraception was common amongst women who used short -acting contraceptives and barrier methods. All women who previously used the COC had stopped using the COC before conception, 47% of COC users defaulted their method . Fifty-six percent (n=52) of injectable users defaulted their method. Eighty-five percent of the women (n=103) reported having used condoms at some point in the past, even if it was not the most recent form of contraception used and 88% (n=91) of those who used condoms reported defaulting its use prior to conception.

Women justified their contraceptive cessation from a list of options. Intolerable side-effects which included weight gain and abnormal bleeding was an important reason for stopping or changing contraceptive methods. These findings were in keeping with a Senegalese study that found that method -related reasons which included fear of side-effects, menstrual problems and weight gain were the second most quoted reason for discontinuation of a method after reduced need , except for IUCDs where method-related causes for discontinuation, such as menstrual complaint and excessive bleeding, was the number one reason for premature discontinuation of the method (29)

We also found that difficulty accessing contraceptive services affected continuation rates, as found in the South African study on provider perspectives on contraceptive service delivery. The CHOICE project in the United States of America showed that removing, cost and access barriers along with effective tiered counselling improved the uptake of highly effective LARCs to 75% (10)

Other reasons included defaulting and method failure. This finding was in keeping with previous South African studies which have shown that many women who used an injectable method have been late or have never returned for their re-injection appointments. Thus leading to a suspension or the complete cessation of the method use. (30)

A large epidemiological study showed very similar reasons for discontinuation of contraception which included method failures, unacceptable side-effects and reasons

related to poor service provision.(26) Long acting reversible contraceptives have lower discontinuation rates due to the 'fit and forget' method of contraception. This, in addition to their higher efficacies make it an excellent form of contraception. (26) Eight women in this study had previously used a LARC, 3 of which were IUCD, only 1 women removed the IUCD due to side-effects, the other 2 women did not stipulate their reasons for discontinuation of the method. Five women had previously used an implant, 4 of which removed the device prematurely due to side-effects. One woman did not give any reason as to why she discontinued its use. It is well known that women discontinue the implant due to unwanted side effects and most often they were inadequately counselled with regards to the possible side effects.(31)

Most of the women who accessed TOP services during the study period were in their late 20's and had a secondary level education. Sixty-Four percent (n=77) of women were in some form of relationship either married, cohabiting or not cohabiting. Despite not planning a pregnancy, they were not using any form of contraception. This is in contrast to an American rastudy, that showed that there is a statistically significant correlation between the length and type of relationship and contraception use.(26) Women who are married, were in long-term relationships or were living with their partners were more likely to use consistent and reliable forms of contraception when compared to women who were single or in short-term or casual relationships. (32)

We found that there was a correlation between level of education and choice of contraception, however this was not statistically significant P-value =0.1. Sixty- five percent of women who had a secondary level of education chose a LARC.

Women reported on contraceptives used at any time prior to the current conception. The 3 monthly progestogen injectable contraceptive was the most commonly used. Other studies found similar results. In particular, a Ghanaian study demonstrated that women preferred to use the injectable contraceptive citing a 91% satisfaction rate.(33) A study from Cape Town assessing the knowledge and use patterns of long-acting and permanent methods of contraception amongst post-partum women showed that most women were using the three month injectable contraceptive.(30) The injectable was

favoured for its convenience and ease of use. It also came recommended by health care providers, which motivated women to opt for it.(30)

LARCS were previously underutilized in the study population Despite South Africa's high prevalence of HIV and other STI's, barrier methods were used in less than 10% of the subjects in this study. Poor utilisation of condoms in eight countries in sub-Saharan African was related to people being in apparent monogamous relationships, i.e. marriage or long-term relationships. Reasons for this include perceived mistrust when using condoms and a sense of not being at risk of HIV and other STI's. For those in casual relationships, there was male disapproval of condom use, the possibility of reduced sexual pleasure, unanticipated sexual encounters and the lack of availability of condoms were additional reasons cited for poor uptake of barrier contraception. (34) In Botswana where HIV/AIDS has a high prevalence reasons for not using condoms were related to desire for fertility, a reduced fear of HIV/AIDS due to improved antiretrovirals, drug and alcohol abuse, refusal by a partner and gender inequality in relationships. Female condoms were unpopular amongst users due to its large size and perceived difficulty of insertion. (34,35)

Good quality family planning counselling has been proven to be a powerful tool when it comes to motivating sexually active women to use good contraceptive methods. A study from Swaziland showed an increase in the uptake of LARCs and sterilizations after contraception counselling. Seventy-eight percent of women chose either a LARC or a sterilization after counselling by a trained professional. (36) Counselling allowed women and couples to choose a method that best meets their contraceptive and non-contraceptive requirements. There are better continuation rates where women have been comprehensively counselled.(36)

Every available opportunity to counsel women and their partners must be utilized. Every opportunity should be sought to counsel patients. Poor knowledge about LARCs and other non-reversible methods were thought to be the cause of their non-use. Therefore, it can be hypothesised that good, effective contraception education through counselling may be useful in improving the uptake of LARCs in South Africa.

LARCs which are available today are highly effective in reducing the number of unintended pregnancies, are safe, have a long duration of action and are reversible. Most LARCs have been shown by studies to be 20% more effective than the oral contraceptive pill. (37) In 2009, LARCs became the first-line recommendation by the American College of Obstetricians and Gynaecologists. The CDC recommends LARCs to the majority of women who have reached their menarche. The WHO recommends the use of LARCs in women with or without children, in adolescents and in women over the age of 40. (37)

Women in this study did not indicate that counselling influenced their choice. However, many women (n=64) who were not using a LARC previously opted for a LARC following TOP. This is an eight-fold increase from the eight women who had been using a LARC prior to receiving counselling. This increase in uptake was based on the knowledge of its long duration of action. This information would have been imparted during the counselling process. This may be the effect of highly effective, structured contraceptive counselling. This contrasts with women who did not receive counselling who chose the previous default contraception, the injectable. Interestingly, all the women at NSH chose a method that did not require administration daily or monthly. Seventy five percent of women chose LARCs (50% IUCD, 25% implants) and the remaining 25% chose the injectable. This indicates excellent uptake of long- acting contraceptives which is immediately dispensed at the time of the procedure.

At NSH there is a dedicated Women's Health Clinic staffed by a social worker, an enrolled nurse, a registered nurse and a doctor. The social worker counsels the women about the TOP procedure as well as contraception. Nursing staff are responsible for contraception counselling as well as dispensing and administration of the medication. A doctor performs the TOP procedure and inserts the IUCD immediately after completion of TOP. The possible reasons for the excellent uptake may be the consolidated service which includes same day counselling, procedure and dispensing of chosen method. All procedures are surgical, therefore if an IUCD was the chosen method it was inserted at the same procedure by the attending health care worker. This is in contrast to the medical TOP offered at GSH. This entails repeated doses of misoprostol which induces an abortion within 24 hours, following which a woman must either wait until discharge to receive her contraceptive of choice or be taken to a different area to receive insertion of an IUCD or be referred. Consequently, the procedure is more protracted at GSH and may leave time

for women to decide against a LARC. An alternative theory may be that the counselling given to the women at GSH may not be as effective as the counselling given at NSH. Similarly a Cambodian study found that women who underwent medical TOPS were more likely to initiate their long acting contraceptives later than women who underwent surgical TOPs.(38)

Randomised controlled trials indicated that delayed insertion of IUCDs resulted in a reduction in the number of insertions. A delay to inserting IUCDs resulted in a reduction in insertion rate of 28.7% as compared to immediate insertions which had a 100% insertion rate.[CI 23.7-33.7]. (39) This is in keeping with our findings.

Insertion of implants may be done at the time of the TOP procedure without affecting-the success rate of either medical or surgical TOP procedures.(40) A study showed a 73% continuation rate of the implant at 6 months when it was inserted at the time of the termination.. Fifty-nine percent of the women who were to have a delayed insertion defaulted their follow-up appointment. (40) All but four women in this study who opted for the implant received their implants. This was due to a stock-out. These four women were offered an alternative method of contraception before being discharged and advised to follow up at their local family planning clinic if they wished to have the implant inserted at a later date. Stock-outs occur occasionally, most recently there was a nationwide shortage of the 3-month progestogen injectable contraceptive as well as implants with short expiry dates with no replacement. (Department of health occurrence 2020)

Contact with the health care services as a result of seeking a TOP resulted in all but 2 women choosing a method of contraception. This is an integral part of the TOP process with women who have had the procedure leaving with an effective birth control method. Our study indicated that although 80% of women were not using any contraceptive at the time of conception nearly 100% left with adequate contraception and a large proportion had received a LARC. A quarter of women who accessed TOP services at GSH chose the injectable and cited personal preference and prior experience as their motivation.

Mid-trimester abortions account for only 10-15% of all induced abortions worldwide. However, they are responsible for 66% of the morbidities and mortalities associated with induced abortions.(41) Concerted global efforts have been made to improve abortion outcomes including the legalization of first-trimester TOPs. South Africa has one of the

most liberal TOP ACTs. According to the South African Choice on Termination of pregnancy Act of 1996, any woman may request a TOP on demand if the TOP is requested before 12 weeks of gestation. The women in our study accessed TOP services in the second trimester. We sought to determine whether there were any barriers to accessing first trimester TOP.

A qualitative study conducted in South Africa demonstrated that reasons for delaying TOPs are multifactorial and complex.(42) These were related to the menstrual cycle and reproduction and included a lack of knowledge and understanding of the menstrual cycle and fertile periods, failure to recognise changes in their menstrual cycles as well as pregnancy signs and symptoms. Other reasons included difficulty in making the decision to terminate the pregnancy, the fear of stigma and health system- related barriers which included staff attitudes, limited first trimester TOP services and inadequate referral systems. (42)

Women in our study reported similar reasons which included a delay in diagnosing the pregnancy, followed by a delay on deciding whether or not to have a TOP and then a delay to requesting a TOP even after the decision to have a TOP had been made.

TOP services in South Africa are free of charge, however individual financial constraints and limited access to transport are causes for women not being able to access these services. Many public sector facilities offering mid-trimester TOPs do so by way of in-patient medical TOPs as is the case with GSH. Availability of beds in the wards remains a factor in delaying access to TOPs with an average waiting time of two weeks from first visit to TOP service to access to the TOP procedure. (42)

In contrast to the above, 70% of the women in this study stated that they had no problem in accessing mid-trimester TOP services. There was no difficulty in locating and accessing reproductive health services once they had decided to seek out TOP services. Eight percent of women at both facilities reported a delay in being referred from their primary health care facilities to the second trimester TOP services and a further 3 women reported admission delays as being a reason for experiencing any difficulties in accessing services.

Three women in the entire study attributed staff attitudes to the reason behind their delay to accessing TOPs. Qualitative South African studies have shown that most professional nurses have negative attitudes towards TOPs including that there should be a minimum age in order to access TOPs and that women shouldn't be allowed to have repeat TOPs. Nurses have reported that the stigma associated with performing TOPs has impacted their mental health negatively citing feelings of guilt and depression. Many professional nurses still do not want to work in TOP services nor do they wish to be associated with them and where they do provide services they would like to have more support.(28)

The exact staff attitude problems which were experienced by the women of this study was not further investigated.

Chapter 5

5.1 Conclusion

Unmet contraception needs remain a global problem resulting in unintended pregnancies and induced abortions. Ultimately this results in higher maternal morbidity and mortality rates. Providing effective contraception choices through counselling and availability of a variety of methods, which allows women and their partners to time and space their pregnancies, forms part of basic human health rights and assists in achieving sustainable development goals.

While most participants were knowledgeable about contraception, having used some method in the past, 80% of participants were not on contraception at the time of conception. The injectable contraceptive remains a popular choice amongst participants, however, defaulting follow-up for re-injection and side-effects remains an obstacle for sustained use and affects continuation rates. Counselling provided at TOP, positively impacted women's contraceptive choices with 94% of women opting to use contraception going forward and more specifically the use of a LARC. The uptake of IUCDs was higher at surgical TOP whilst the injectable contraceptive was the contraceptive of choice at medical TOP. Therefore, it can be said that the provision of good quality contraception counselling at all health provider interactions is a vital and necessary measure to improve the uptake of all contraceptive methods especially LARCs.

Consolidated services, as delivered at NSH, appeared to allow better uptake of LARC's and injectables.

Women who accessed TOP services in the Cape Town Metro West were in their late 20's, had a secondary education and were in a relationship. Neither being in a stable relationship nor having formal education was associated with contraception use.

South Africa has legalized first trimester TOPs however, there remains a demand for mid-trimester TOP which carries greater risk and morbidity. Delays into the mid-trimester occurred due to many complex reasons. These included a lack of knowledge around reproductive physiology, when to suspect and diagnose pregnancy, indecisiveness on

whether to proceed with a TOP and fear of staff attitudes. Stronger sexual education programmes that teach young women about their menstrual cycles, contraception and how to prevent unintended pregnancies needs to form part of basic education core curriculums while staff attitudes towards this essential service needs to be addressed.

5.2 Strengths

1. This study was conducted in two major hospitals in the Cape Town Metro West. Each hospital has its own drainage area and referral criteria thus the study population was more representative of the Cape Town Metro West population
2. The study sample size was calculated such that the power would avoid any type I or type II errors.
3. The questionnaires were administered.
4. The study was very cost-efficient and did not require any funding or study grants.

5.3 Limitations

1. Interviews which took place at GSH were held opportunistically once the TOP procedure was complete. This was usually prior to the patient's formal discharge. Contraception, at the time, formed part of the patient's TTO thus interviewees were interviewed before their contraception was administered and thus, they may have reported that they did not receive their contraceptive choice at the time of the interview. None of the women who opted for contraception left the ward without a method.
2. Where staff attitudes were cited as a reason for a delay to TOP, the exact causes and incidents were not explored. This could have helped in the design of staff training programmes to address negative attitudes towards women seeking TOPs.
3. Administrative delays were cited as a reason for delays to accessing TOPs. This is thought to be an inconvenience delay due to long waiting times whilst opening folders before gaining access to the TOP service. The exact nature of the administrative delay was not further investigated and thus its impact on the service delivery cannot be stated with certainty.

5.4 Recommendations

1. Provision of effective contraception counselling at every contact with women of reproductive age.
2. Contraception should ideally be prescribed with the ward medication on the in-patient prescription chart for medical TOP.
3. Injectables and implants can be administered prior to or at the time of the TOP. IUCDs should be fitted prior to discharge and pills can be given to the patient on admission with instructions on when and how to start them after discharge at medical TOP.
4. Implementation of sexual education programmes at primary health care clinics in order to teach women about the menstrual cycle, fertile period, risks of unprotected sex and how to prevent unintended pregnancies.
5. Further studies may be required to establish whether:
 - Highly-effective, structured and tiered contraceptive counselling impacts women's choice of contraception
 - the of method of TOP impacts women's choice of contraception.
 - women's choice of contraceptive is affected by the option of having the method administered immediately at procedure vs awaiting discharge
 - staff attitudes impact on the timing of TOPs.

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Appendices

Appendix 1 – Act 92 of 1996

CHOICE ON TERMINATION OF PREGNANCY ACT

[Updated to 18 February 2008]

Act 92 of 1996 (GoN 1891, G. 17602),

Proc. R8, G. 17746,

Act 38 of 2004 (GoN 129, G. 27267, c.i.o 11 February 2005),

Act 32 of 2007 (GoN 1224, G. 30599, c.i.o 16 December 2007),

Act 1 of 2008 (GoN 213, G. 30790, c.i.o 18 February 2008).

[Commencement: 1 February 1997]

General Note: (1) The Choice on Termination of Pregnancy Amendment Act 38 of 2004 was declared inconsistent with the Constitution by the Constitutional Court (See *Doctors for Life International v Speaker of the National Assembly and Others* 2006 (6) SA 416 (CC)). (Order of Court dated 17 August 2006 and published in *Government Gazette* GG 29207 dated 15 September 2006).

The order of invalidity was suspended for 18 months to enable Parliament to re-enact this statute in a manner that is consistent with the Constitution.

The Choice on Termination of Pregnancy Amendment Act 1 of 2008 was assented to on 12 February 2008 and promulgated on 18 February 2008.

(2) Act 38 of 2004, s 7 substituted for the expression “registered midwife”, wherever it appears, of the expression “registered midwife or registered nurse”.

(3) Act 1 of 2008, s 7 substituted for the expression “registered midwife”, wherever it appears, of the expression “registered midwife or registered nurse”, except in the circumstances contemplated in section 2(1)(c).

ACT

To determine the circumstances in which and conditions under which the pregnancy of a woman may be terminated; and to provide for matters connected therewith.

(Afrikaans text signed by the President.)

(Assented to 12 November 1996.)

PREAMBLE

Recognising the values of human dignity, the achievement of equality, security of the person, non-racialism and non-sexism, and the advancement of human rights and freedoms which underlie a democratic South Africa;

Recognising that the Constitution protects the right of persons to make decisions concerning reproduction and to security in and control over their bodies;

Recognising that both women and men have the right to be informed of and to have access to safe, effective, affordable and acceptable methods of fertility regulation of their choice, and that women have the right of access to appropriate health care services to ensure safe pregnancy and childbirth;

Recognising that the decision to have children is fundamental to women's physical, psychological and social health and that universal access to reproductive health care services includes family planning and contraception, termination of pregnancy, as well as sexuality education and counselling programmes and services;

Recognising that the State has the responsibility to provide reproductive health to all, and also to provide safe conditions under which the right of choice can be exercised without fear or harm;

Believing that termination of pregnancy is not a form of contraception or population control;

This Act therefore repeals the restrictive and inaccessible provisions of the Abortion and Sterilisation Act, 1975 (Act 2 of 1975), and promotes reproductive rights and extends freedom of choice by affording every woman the right to choose whether to have an early, safe and legal termination of pregnancy according to her individual beliefs.

BE IT ENACTED by the Parliament of the Republic of South Africa, as follows.

ARRANGEMENT OF SECTIONS

1. Definitions
2. Circumstances in which and conditions under which pregnancy may be terminated
3. Place where termination of pregnancy may take place
4. Counselling

5. Consent
6. Information concerning termination of pregnancy
7. Notification and keeping of records
8. Delegation
9. Regulations
10. Offences and penalties
11. Application of Act
12. Short title

Schedule

1. Definitions

In this Act, unless the context otherwise indicates—

“Director-General” means the Director-General of Health;

“gestation period” means the period of pregnancy of a woman calculated from the first day of the menstrual period which in relation to the pregnancy is the last;

“Head of Department” means the head of a provincial health department;
[“Head of Department” ins by s 1(a) of Act 38 of 2004, s 1(a) of Act 1 of 2008.]

“incest” means sexual intercourse between two persons who are related to each other in a degree which precludes a lawful marriage between them as contemplated in section 12 of the Criminal Law (Sexual Offences and Related Matters) Amendment Act, 2007;

[“incest” subs by s 68 of Act 32 of 2007.]

“medical practitioner” means a person registered as such under the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act 56 of 1974);

“Member of the Executive Council” means the member of the Executive Council of a province who is responsible for health in that province;

["Member of the Executive Council" ins by s 1(b) of Act 38 of 2004, s 1(b) of Act 1 of 2008.]

"Minister" means the Minister of Health;

"minor" means any female person under the age of 18 years;

"prescribe" means prescribe by regulation under section 9;

"rape" refers to the offences contemplated in sections 3, 4 and 15 of the Criminal Law (Sexual Offences and Related Matters) Amendment Act, 2007;

["rape" subs by s 68 of Act 32 of 2007.]

"registered midwife" means a person registered as such under the Nursing Act, 2005 (Act 33 of 2005), and who has in addition undergone prescribed training in terms of this Act;

["registered midwife" subs by s 1(c) of Act 38 of 2004, s 1(c) of Act 1 of 2008.]

"registered nurse" means a person registered as such under the Nursing Act, 2005 (Act 33 of 2005), and who has in addition undergone prescribed training in terms of this Act;

["registered nurse" ins by s 1(d) of Act 38 of 2004, s 1(d) of Act 1 of 2008.]

"termination of a pregnancy" means the separation and expulsion, by medical or surgical means, of the contents of the uterus of a pregnant woman;

"woman" means any female person of any age.

2. Circumstances in which and conditions under which pregnancy may be terminated

- (1) A pregnancy may be terminated—

- (a) upon request of a woman during the first 12 weeks of the gestation period of her pregnancy;
 - (b) from the 13th up to and including the 20th week of the gestation period if a medical practitioner, after consultation with the pregnant woman, is of the opinion that—
 - (i) the continued pregnancy would pose a risk of injury to the woman’s physical or mental health; or
 - (ii) there exists a substantial risk that the fetus would suffer from a severe physical or mental abnormality; or
 - (iii) the pregnancy resulted from rape or incest; or
 - (iv) the continued pregnancy would significantly affect the social or economic circumstances of the woman; or
 - (c) after the 20th week of the gestation period if a medical practitioner, after consultation with another medical practitioner or a registered midwife, is of the opinion that the continued pregnancy—
 - (i) would endanger the woman’s life;
 - (ii) would result in a severe malformation of the fetus; or
 - (iii) would pose a risk of injury to the fetus.
- (2) The termination of a pregnancy may only be carried out by a medical practitioner, except for a pregnancy referred to in subsection (1)(a), which may also be carried out by a registered midwife who has completed the prescribed training course.

3. Place where termination of pregnancy may take place

- (1) Termination of a pregnancy may take place only at a facility which—
 - (a) gives access to medical and nursing staff;
 - (b) gives access to an operating theatre;
 - (c) has appropriate surgical equipment;
 - (d) supplies drugs for intravenous and intramuscular injection;
 - (e) has emergency resuscitation equipment and access to an emergency referral centre or facility;
 - (f) gives access to appropriate transport should the need arise for emergency transfer;
 - (g) has facilities and equipment for clinical observation and access to in-patient facilities;
 - (h) has appropriate infection control measures;
 - (i) gives access to safe waste disposal infrastructure;
 - (j) has telephonic means of communication; and
 - (k) has been approved by the Member of the Executive Council by notice in the *Gazette*.
- (2) The Member of the Executive Council may withdraw any approval granted in terms of subsection (1)(k).
- (3) (a) Any health facility that has a 24-hour maternity service, and which complies with the requirements referred to in subsection (1)(a) to (j), may terminate

pregnancies of up to and including 12 weeks without having to obtain the approval of the Member of the Executive Council.

(b) The person in charge of a health facility contemplated in paragraph (a) must notify the relevant Member of the Executive Council that the health facility has a 24-hour maternity service which complies with the requirements referred to in subsection (1)(a) to (j).

(4) The Member of the Executive Council shall once a year submit statistics of any approved facilities for that year to the Minister.

(5) Notwithstanding anything to the contrary in this Act, the Minister may perform any of the functions that the Member of the Executive Council may or must perform, if it is necessary to perform such function in order to achieve any of the objects of this Act.

[S 3 subs by s 2 of Act 38 of 2004, s 2 of Act 1 of 2008.]

4. Counselling

The State shall promote the provision of non-mandatory and non-directive counselling, before and after the termination of a pregnancy.

5. Consent

(1) Subject to the provisions of subsections (4) and (5), the termination of a pregnancy may only take place with the informed consent of the pregnant woman.

(2) Notwithstanding any other law or the common law, but subject to the provisions of subsections (4) and (5), no consent other than that of the pregnant woman shall be required for the termination of a pregnancy.

(3) In the case of a pregnant minor, a medical practitioner or a registered midwife, as the case may be, shall advise such minor to consult with her parents, guardian, family members or friends before the pregnancy is terminated: Provided that the

termination of the pregnancy shall not be denied because such minor chooses not to consult them.

- (4) Subject to the provisions of subsection (5), in the case where a woman is—
- (a) severely mentally disabled to such an extent that she is completely incapable of understanding and appreciating the nature or consequences of a termination of her pregnancy; or
 - (b) in a state of continuous unconsciousness and there is no reasonable prospect that she will regain consciousness in time to request and to consent to the termination of her pregnancy in terms of section 2,
- her pregnancy may be terminated during the first 12 weeks of the gestation period, or from the 13th up to and including the 20th week of the gestation period on the grounds set out in section 2(1)(b)—
- (i) upon the request of and with the consent of her natural guardian, spouse or legal guardian, as the case may be; or
 - (ii) if such persons cannot be found, upon the request and with the consent of her *curator personae*:

Provided that such pregnancy may not be terminated unless two medical practitioners or a medical practitioner and a registered midwife who has completed the prescribed training course consent thereto.

- (5) Where two medical practitioners or a medical practitioner and a registered midwife who has completed the prescribed training course, are of the opinion that—
- (a) during the period up to and including the 20th week of the gestation period of a pregnant woman referred to in subsection (4)(a) or (b)—

- (i) the continued pregnancy would pose a risk of injury to the woman's physical or mental health; or
 - (ii) there exists a substantial risk that the fetus would suffer from a severe physical or mental abnormality; or
- (b) after the 20th week of the gestation period of a pregnant woman referred to in subsection (4)(a) or (b), the continued pregnancy—
- (i) would endanger the woman's life;
 - (ii) would result in a severe malformation of the fetus; or
 - (iii) would pose a risk of injury to the fetus,

they may consent to the termination of the pregnancy of such woman after consulting her natural guardian, spouse, legal guardian or curator personae, as the case may be: Provided that the termination of the pregnancy shall not be denied if the natural guardian, spouse, legal guardian or *curator personae*, as the case may be, refuses to consent thereto.

6. Information concerning termination of pregnancy

A woman who in terms of section 2(1) requests a termination of pregnancy from a medical practitioner or a registered midwife, as the case may be, shall be informed of her rights under this Act by the person concerned.

7. Notification and keeping of records

- (1) Any medical practitioner, or a registered midwife who has completed the prescribed training course, who terminates a pregnancy in terms of section 2(1)(a) or (b), shall record the prescribed information in the prescribed manner and give notice thereof to the person referred to in subsection (2).

- (2) The person in charge of a facility referred to in section 3 or a person designated for such purpose, shall be notified as prescribed of every termination of a pregnancy carried out in that facility.
- (3) The person in charge of a facility referred to in section 3, shall, within one month of the termination of a pregnancy at such facility, collate the prescribed information and forward it by registered post confidentially to the relevant Head of Department: Provided that the name and address of a woman who has requested or obtained a termination of pregnancy, shall not be included in the prescribed information.

[Words preceding the proviso to s 7(3) subs by s 3(a) of Act 38 of 2004, s 3(a) of Act 1 of 2008.]

- (4) The Head of Department shall—
 - (a) keep record of the prescribed information which he or she receives in terms of subsection (3); and
 - (b) submit to the Director-General the information contemplated in paragraph (a) every 6 months.

[S 7(4) subs by s 3(b) of Act 38 of 2004, s 3(b) of Act 1 of 2008.]

- (5) The identity of a woman who has requested or obtained a termination of pregnancy shall remain confidential at all times unless she herself chooses to disclose that information.

8. Delegation

- (1) The Member of the Executive Council may, on such conditions as he or she may determine, in writing delegate to the Head of Department or any other officer in the service of the State, any power conferred upon the Member of the Executive Council by or under this Act, except the power referred to in section 9.

- (2) The Head of Department may, on such conditions as he or she may determine, in writing delegate to an officer in the service of the State, any power conferred upon the Head of Department by or under this Act.
- (3) The Member of the Executive Council or Head of Department shall not be divested of any power delegated by him or her, and may amend or set aside any decision taken by a person in the exercise of any such power delegated to that person.

[S 8 subs by s 4 of Act 38 of 2004, s 4 of Act 1 of 2008.]

9. Regulations

The Member of the Executive Council may, in consultation with the Minister, make regulations relating to any matter which it is necessary or expedient to prescribe for the proper implementation or administration of this Act.

[S 9 subs by s 5 of Act 38 of 2004, s 5 of Act 1 of 2008.]

10. Offences and penalties

- (1) Any person who—
 - (a) is not a medical practitioner, or a registered midwife or registered nurse who has completed the prescribed training course, and who performs the termination of a pregnancy referred to in section 2(1)(a);
 - (b) is not a medical practitioner and who performs the termination of a pregnancy referred to in section 2(1)(b) or (c);
 - (c) prevents the lawful termination of a pregnancy or obstructs access to a facility for the termination of a pregnancy; or
 - (d) terminates a pregnancy or allows the termination of a pregnancy at a facility not approved in terms of section 3(1) or not contemplated in section 3(3)(a),

shall be guilty of an offence and liable on conviction to a fine or to imprisonment for a period not exceeding 10 years.

[S 10(1) subs by s 6 of Act 38 of 2004, s 6 of Act 1 of 2008.]

- (2) Any person who contravenes or fails to comply with any provision of section 7 shall be guilty of an offence and liable on conviction to a fine or to imprisonment for a period not exceeding 6 months.

11. Application of Act

- (1) This Act shall apply to the whole of the national territory of the Republic.
- (2) This Act shall repeal—
- (a) the Act mentioned in columns one and two of the Schedule to the extent set out in the third column of the Schedule; and
 - (b) any law relating to the termination of pregnancy which applied in the territory of any entity which prior to the commencement of the Constitution of the Republic of South Africa, 1993 (Act 200 of 1993), possessed legislative authority with regard to the termination of a pregnancy.

12. Short title

This Act shall be called the Choice on Termination of Pregnancy Act, 1996.

Schedule

No. and year of law	Short title	Extent of repeal
Act 2 of 1975	Abortion and Sterilisation Act, 1975	In so far as it relates to abortion

[Editor Note:

- (1) Act 38 of 2004, s 8 says—

8. Transitional provision

Any facility designated in terms of section 3(1) of the principal Act prior to the commencement of this Act must be regarded as having been approved by the Member of the Executive Council in terms of section 3(1)(k) of the principal Act as amended by this Act.

(2) Act 1 of 2008, s 8 says—

8. Transitional provision

Any facility designated in terms of section 3(1) of the principal Act prior to the commencement of this Act must be regarded as having been approved by the Member of the Executive Council in terms of section 3(1)(k) of the principal Act as amended by this Act.]

Appendix 2 – Notification of Termination of Pregnancy

NOTIFICATION OF TERMINATION OF PREGNANCY IN TERMS OF SECTION 7 OF THE ACT

CHOICE ON TERMINATION OF PREGNANCY ACT, 1996 (Act No. 92 of 1996)
TO BE COMPLETED BY A MEDICAL PRACTITIONER OR A REGISTERED MIDWIFE
(To be completed in duplicate).

This copy remains in the client folder.

1. PATIENT DETAILS Surname <input style="width: 150px;" type="text"/> First Names <input style="width: 150px;" type="text"/> Hospital No. <input style="width: 150px;" type="text"/> Age <input style="width: 40px;" type="text"/> Gravida <input style="width: 40px;" type="text"/> Parity <input style="width: 40px;" type="text"/> Miscarriages <input style="width: 40px;" type="text"/> Date LMP <input style="width: 80px;" type="text"/>	RACE <input type="checkbox"/> Asian/Indian <input type="checkbox"/> Black <input type="checkbox"/> Coloured <input type="checkbox"/> White <input type="checkbox"/> Other	PRESENT MARITAL STATUS <input type="checkbox"/> Married/Including Traditional <input type="checkbox"/> Living together <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widow
2. INSTITUTION Name <input style="width: 150px;" type="text"/> <input type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Hospital <input type="checkbox"/> Clinic		
3. ABORTION DETAILS Indication for termination of pregnancy (tick the appropriate block)		

Time from 1 st consultation to TOP procedure (total working days)		
<input type="checkbox"/> <10	<input type="checkbox"/> 10 - 15	<input type="checkbox"/> >15

<input type="checkbox"/> < 12weeks 0days: On demand	<input type="checkbox"/> >20 wks 0days: Maternal physical/mental
<input type="checkbox"/> 12wks 1day- 20 wks 0days: Maternal physical/mental	<input type="checkbox"/> >20 wks 0days: Fetus malformation
<input type="checkbox"/> 12wks 1day -20 wks 0days: Fetal physical/mental	<input type="checkbox"/> >20 wks 0days: Risk of injury to fetus
<input type="checkbox"/> 12wks 1day -20 wks 0days - Rape or incest	<input type="checkbox"/> *Mental disability
<input type="checkbox"/> 12wks 1day -20 wks 0days - Social/economic	<input type="checkbox"/> *Continuous unconsciousness
Gestation (weeks):	*Requires the consent of an additional medical/nurse practitioner - sign below

4. COUNSELLING <input type="checkbox"/> Pre-abortion counselling <input type="checkbox"/> Contraception counselling <input type="checkbox"/> Booking for post abortion counselling <input type="checkbox"/> Counselling refused CONTRACEPTION AFTER TOP <input type="checkbox"/> Sterilisation <input type="checkbox"/> Oral contraception <input type="checkbox"/> Long acting progesterone <input type="checkbox"/> IUCD <input type="checkbox"/> Condoms	5. CONSENT I have been informed about termination of pregnancy (including the possible adverse effects of drugs used) and give consent for terminating this pregnancy and/or removal of pregnancy products. (Delete where appropriate) I also understand that this consent includes management of any complication that may arise from the termination. (This may include anaesthesia or hysterectomy)
	Signature _____ Witness _____ Date _____

6. MANAGEMENT AND COMPLICATIONS	Drugs used	Method(s)	Complications
	Analgesia pre-TOP	Manual vacuum aspiration Date / /	No complications
	Analgesia intra-operatively	MTP Date / /	Perforation of uterus
	Analgesia post-TOP	D&E Date / /	Laparotomy for complications
	Misoprostol	Sharp curettage (D&C) Date / /	Method failure
	Mifepristone	Hysterectomy Date / /	Excessive bleeding
	Prostaglandin E2	Hysterotomy Date / /	
	Prostaglandin F2alpha		
	Prophylactic Antibiotics		
	Rhesus anti-D		

7. DETAIL OF PRACTITIONER(S) for COUNSELLING AND CONSENT

I declare the above information as correct.

Name <input style="width: 150px;" type="text"/>	Qualification <input style="width: 100px;" type="text"/>	Signature <input style="width: 100px;" type="text"/>	
Date <input style="width: 80px;" type="text"/>	<input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Medical practitioner	Reg. No <input style="width: 80px;" type="text"/>	
*Name <input style="width: 150px;" type="text"/> Qualification <input style="width: 100px;" type="text"/> Signature <input style="width: 100px;" type="text"/>			
Date <input style="width: 80px;" type="text"/>	<input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Medical practitioner	Reg. No <input style="width: 80px;" type="text"/>	

8. DETAIL OF PRACTITIONER PERFORMING THE PROCEDURE

Name <input style="width: 150px;" type="text"/>	Qualification <input style="width: 100px;" type="text"/>	Signature <input style="width: 100px;" type="text"/>	
Date <input style="width: 80px;" type="text"/>	<input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Medical practitioner	Reg. No <input style="width: 80px;" type="text"/>	

Date Admitted Date of Procedure Date of Discharge

NOTIFICATION OF TERMINATION OF PREGNANCY IN TERMS OF SECTION 7 OF THE ACT

CHOICE ON TERMINATION OF PREGNANCY ACT, 1996 (Act No. 92 of 1996)
TO BE COMPLETED BY A MEDICAL PRACTITIONER OR A REGISTERED MIDWIFE
(To be completed in duplicate).

Anonymous copy

1. PATIENT DETAILS	RACE	PRESENT MARITAL STATUS
Surname <input type="text"/>	<input type="checkbox"/> Asian/Indian	<input type="checkbox"/> Married/including Traditional
First Names <input type="text"/>	<input type="checkbox"/> Black	<input type="checkbox"/> Living together
Hospital No. <input type="text"/>	<input type="checkbox"/> Coloured	<input type="checkbox"/> Single
	<input type="checkbox"/> White	<input type="checkbox"/> Divorced
	<input type="checkbox"/> Other	<input type="checkbox"/> Widow
Age <input type="text"/>	Gravida <input type="text"/>	Parity <input type="text"/>
	Miscarriages <input type="text"/>	Date LMP <input type="text"/>

2. INSTITUTION	<input type="checkbox"/> Public <input type="checkbox"/> Private	<input type="checkbox"/> Hospital <input type="checkbox"/> Clinic	Time from 1 st consultation to TOP procedure (total working days). <table border="1"> <tr> <td><10</td> <td>10 - 15</td> <td>>15</td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </table>	<10	10 - 15	>15	<input type="text"/>	<input type="text"/>	<input type="text"/>
<10	10 - 15	>15							
<input type="text"/>	<input type="text"/>	<input type="text"/>							
Name <input type="text"/>									
3. ABORTION DETAILS									

Indication for termination of pregnancy (tick the appropriate block)	
<input type="checkbox"/> < 12weeks 0days: On demand	<input type="checkbox"/> >20 wks 0days: Maternal physical/mental
<input type="checkbox"/> 12wks 1day- 20 wks 0days: Maternal physical/mental	<input type="checkbox"/> >20 wks 0days: Fetus malformation
<input type="checkbox"/> 12wks 1day -20 wks 0days: Fetal physical/mental	<input type="checkbox"/> >20 wks 0days: Risk of injury to fetus
<input type="checkbox"/> 12wks 1day -20 wks 0days: Rape or incest	<input type="checkbox"/> *Mental disability
<input type="checkbox"/> 12wks 1day -20 wks 0days: Social/economic	<input type="checkbox"/> *Continuous unconsciousness
Gestation (weeks): <input type="text"/>	<i>*Requires the consent of an additional medical/nurse practitioner - sign below</i>

4. COUNSELLING	5. CONSENT
<input type="checkbox"/> Pre-abortion counselling <input type="checkbox"/> Contraception counselling <input type="checkbox"/> Booking for post abortion counselling <input type="checkbox"/> Counselling refused CONTRACEPTION AFTER TOP <input type="checkbox"/> Sterilisation <input type="checkbox"/> Oral contraception <input type="checkbox"/> Long acting progesterone <input type="checkbox"/> IUCD <input type="checkbox"/> Condoms	I have been informed about termination of pregnancy (including the possible adverse effects of drugs used) and give consent for terminating this pregnancy and/or removal of pregnancy products. (Delete where appropriate) I also understand that this consent includes management of any complication that may arise from the termination. (This may include anaesthesia or hysterectomy) Signature <input type="text"/> Witness <input type="text"/> Date <input type="text"/>

6. MANAGEMENT AND COMPLICATIONS		
Drugs used	Method(s)	Complications
<input type="checkbox"/> Analgesia pre-TOP	<input type="checkbox"/> Manual vacuum aspiration Date / /	<input type="checkbox"/> No complications
<input type="checkbox"/> Analgesia intra-operatively	<input type="checkbox"/> MTOP Date / /	<input type="checkbox"/> Perforation of uterus
<input type="checkbox"/> Analgesia post-TOP	<input type="checkbox"/> D&E Date / /	<input type="checkbox"/> Laparotomy for complications
<input type="checkbox"/> Misoprostol	<input type="checkbox"/> Sharp curettage (D&C) Date / /	<input type="checkbox"/> Method failure
<input type="checkbox"/> Mifepristone	<input type="checkbox"/> Hysterectomy Date / /	<input type="checkbox"/> Excessive bleeding
<input type="checkbox"/> Prostaglandin E2	<input type="checkbox"/> Hysterotomy Date / /	
<input type="checkbox"/> Prostaglandin F2alpha		
<input type="checkbox"/> Prophylactic Antibiotics		
<input type="checkbox"/> Rhesus anti-D		

7. DETAIL OF PRACTITIONER(S) for COUNSELLING AND CONSENT
I declare the above information as correct.

Name <input type="text"/>	Qualification <input type="text"/>	Signature <input type="text"/>
Date <input type="text"/>	<input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Medical practitioner	Reg. No <input type="text"/>
*Name <input type="text"/>	Qualification <input type="text"/>	Signature <input type="text"/>
Date <input type="text"/>	<input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Medical practitioner	Reg. No <input type="text"/>

8. DETAIL OF PRACTITIONER PERFORMING THE PROCEDURE

Name <input type="text"/>	Qualification <input type="text"/>	Signature <input type="text"/>
Date <input type="text"/>	<input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Medical practitioner	Reg. No <input type="text"/>

Date Admitted Date of Procedure Date of Discharge

Appendix 3 – Ethics Approval



UNIVERSITY OF CAPE TOWN
Faculty of Health Sciences
Human Research Ethics Committee



Room E53-46 Old Main Building
Groota Schuur Hospital
Observatory 7925
Telephone [021] 406 6492
Email: sumayah.riefdien@uct.ac.za
Website: www.health.uct.ac.za/fhs/research/humanethics/forms

09 July 2018

HREC REF: 246/2018

Dr M Patel
Department of Obstetrics & Gynaecology
H-Floor
OMB

Dear Dr Patel

PROJECT TITLE: FACTORS THAT INFLUENCE CHOICE OF CONTRACEPTION AT MID TRIMESTER TERMINATION OF PREGNANCY (MMed-candidate-Dr T Klassen)

Thank you for your response letter, addressing the issues raised by the Human Research Ethics Committee (HREC).

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

Approval is granted for one year until the 30 July 2019.

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.

(Forms can be found on our website: www.health.uct.ac.za/fhs/research/humanethics/forms)

We acknowledge that the student: Dr Thalia Klassen will also be involved in this study.

Please quote the HREC REF in all your correspondence.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please note that for all studies approved by the HREC, the principal investigator **must** obtain appropriate institutional approval, where necessary, before the research may occur.

Yours sincerely

PROFESSOR M BLOCKMAN
CHAIRPERSON, FHS HUMAN RESEARCH ETHICS COMMITTEE

Federal Wide Assurance Number: FWA00001637.

Institutional Review Board (IRB) number: IRB00001938

This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical

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Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Convention on Harmonisation Good Clinical Practice (ICH GCP), South African Good Clinical Practice Guidelines (DoH 2006), based on the Association of the British Pharmaceutical Industry Guidelines (ABPI), and Declaration of Helsinki (2013) guidelines.

The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.

Appendix 4 – Consent Form



Study Number

Factors that Influence Choice of Contraception at Mid trimester Termination of Pregnancy at Groote Schuur Hospital vs. New Somerset Hospital, Cape Town
HREC NO:.....

Consent Form

Why is this study being done?

Unplanned pregnancies can cause social, financial and health problems and it is due to unmet needs for family planning services in an area, community or country. This can be avoided with the use of good, reliable safe and user friendly contraception. We would like to see what makes women choose certain family planning methods, what side effects are considered to be unacceptable and what makes them stop using certain methods.

Our aim is to better understand how we at family planning services can help women to make the choice of family planning that would suit their needs best. By choosing an abortion you have indicated that this is a pregnancy that happened at the wrong time. To prevent pregnancy a good contraceptive would be recommended and you get to choose the family planning you want.

Why are you being asked to take part?

As a person who has had an unintended pregnancy and has chosen to stop your pregnancy you can best tell us your experience. We are interested on knowing what your knowledge was before you fell pregnant and your knowledge after you've been counselled about family planning and what choice you would make, if any for the future. The information you give us will help us understand the reasons women are unhappy with family planning and what are the reasons women stop using family planning.

How many people will take part in the study?

All women who have a termination of pregnancy in Groote Schuur or New Somerset Hospital over a 6 month period in 2018 will be asked to take part in the study.

How long will the study last?

You will be asked if you want to take part in the study at admission for abortion, before you are discharged home. If you agree you will sign this form to say that we can ask you to fill in a questionnaire once only.

You do not have to take part in the study if you do not want to. If there is a question you don't want to answer, you can just say so and move on to the next one or you can stop

the interview at any point. Your treatment will not be affected by you taking part in the study or not.

What do we do to decide if you are eligible to be take part?

To take part in the study you must:

- Have had a termination of pregnancy at this visit
- AND
 - Be between 18 and 49 years old

What will happen if you decide to take part in the study?

Before you go home from the place you had your abortion procedure, a trained member of the research team will ask you if you are willing to participate in the study. You will have time to read through the consent form in a quiet room and ask any questions. If you are happy to participate you can sign the form.

If you agree the research team member will ask a few questions on a questionnaire. The questions ask about your reason for the termination, whether you knew of family planning before falling pregnant, if you used anything before, if it gave you any problems and if you stopped what made you stop. It will ask if you have been given counselling about contraception before the termination and then ask if you wish to use contraception in the future. at the time the questions are asked, whether you are still using the loop and if not, why you decided to stop.

What are the risks and discomforts of this study?

This is a questionnaire.

The answers you give will not affect the care that you will get at any time.

There are no other procedures

Are there any benefits to you for being in the study?

There are no direct benefits to you for answering the questions. The results will help us to get a better understanding of how to assist women's contraceptive needs in the future.

What other choices do you have?

You can choose to take part or not to take part in the study. If you choose not to take part your care will not be affected by your decision. If at any point during the interview you want to stop answering the questions you must just say so and we will stop.

What will happen when the study is over?

The findings of the study will be given to the department of health. The results of the study will be published but your name and personal details will not be recorded. Nobody will be able to identify you in any way from the results of the study.

Will the results of the research be shared with you?

The results of the study will be made available to the doctors and nurses at your hospital or clinic. The results will not be shared directly with you but you may ask to see the results if you want to.

Will any of your blood, tissue or other samples be stored and used for research in the future?

We will not take any blood samples from you and there will be no other medical tests performed on you as part of this study

Will you receive any reward (money or food vouchers) for taking part in this study?

No. The interview will take place during your admission for your termination and the questions that are asked will be as part of the consultation. If you choose to take part in the study we will record your answers on a questionnaire and your medical notes, if you do not participate the answers will only be recorded in your medical notes.

Who will see the information which is collected about you during the study?

Only the research team will see the information that is collected about you. The report of the study will be sent to the department of health and we intend to publish the results. Your name will not be published in any of the reports that are sent out.

Who do I speak to (or contact) if I have any questions about the study?

If you have any further queries regarding this study, please feel free to contact:

Dr Thalia Klassen: Principal investigator. Department of Obstetrics and Gynaecology, University of Cape Town.

Telephone: 0723741380

Email: klassenthalia@gmail.com

Dr M Patel, Supervisor, Department of Obstetrics and Gynaecology, University of Cape Town. Telephone: 021-404 6026

Prof M Blockman

Chairperson: Research Ethics Committee

Tel: 021 406 6338

1. Have all your questions been answered?

yes

no

2. Do you agree to take part in the study?

yes

no

Patient Name:

Signature:

Date:

Witness Name:

Signature:

Date:

Please remember that participation is voluntary. You may choose to end the interview at any time if you are feeling uncomfortable. This will not affect the care you receive.

Have all your questions been answered?

Appendix 5 - Questionnaire



Factors that Influence Choice of Contraception at Mid trimester Termination of Pregnancy At
Groote Schuur Hospital vs. New Somerset Hospital, Cape Town

HREC NO:.....

QUESTIONNAIRE NO:

Background Information

1. Date of Birth (DD/MM/YYYY) ___/___/_____	
2. Age (in years and months) ___y___m	
3. Population Group (1) Black South African (2) Coloured (3) White (4) Asian (5) Foreign African (please specify) _____ (6) Foreign Non-African (please specify) _____ (7) Other (please specify) _____	
4. Home Language (1) English (2) Afrikaans (3) Xhosa (4) French (5) Other (please specify) _____	
5. Religion (1) Muslim (2) Protestant	

(3) Roman Catholic	
(4) Christian Other (please specify) _____	
(5) Hindu	
(6) Jewish	
(7) Other (please specify) _____	

Relationship Status and Support

<p>6. Marital Status</p> <ul style="list-style-type: none"> (1) Single, not in a relationship (2) Single in a stable relationship but not cohabiting (3) Single in stable relationship and cohabiting (4) Married (5) Divorced (6) Separated (7) Widowed 	
<p>7. From whom do you receive financial support? (Mark all that apply)</p> <ul style="list-style-type: none"> (1) Self (2) Partner/ Husband (3) Parent/s (4) Children (5) Sibling/s (6) Other Relative/s (please specify) _____ (7) Friend/s (8) Disability Grant (9) No Financial Support (10) I don't know 	
<p>8. From whom do you receive emotional support? (Mark all that apply)</p> <ul style="list-style-type: none"> (1) Partner/Husband (2) Parent/s (3) Sibling/s (4) Children (5) Other relatives (please specify) _____ (6) Friend/s (7) Other (please specify) _____ (8) No Emotional Support (9) I don't know 	

Socio-Economic Status

<p>9. Highest Level of Education</p> <ul style="list-style-type: none">(0) None(1) Primary School(2) Secondary School(3) Tertiary Education(4) Postgraduate degree	
<p>10. What is your job?</p> <ul style="list-style-type: none">(0) Unemployed(1) Self employed(2) Casual(3) Permanent(4) Housewife(5) Student	
<p>11. Type of Dwelling</p> <ul style="list-style-type: none">(1) Formal(2) Flat(3) Semi-detached house(4) Rented room(5) Servant's Quarter/Wendy house(6) Shack(7) Homeless(8) Other (please specify)	

Habits

<p>12. Do you smoke cigarettes?</p> <p>(1) YES</p> <p>(2) NO, never</p> <p>(3) STOPPED less than 6 months ago</p> <p>(4) STOPPED more than 6 months ago</p>	
<p>13. If YES, how many cigarettes a day?</p>	
<p>14. Do you consume alcohol?</p> <p>(1) YES</p> <p>(2) NO, never</p> <p>(3) STOPPED less than 6 months ago</p> <p>(4) STOPPED more than 6 months ago</p> <p>(5) N/A</p>	
<p>15. If YES, how many units per week?</p>	
<p>16. Do you use any recreational drugs?</p> <p>(0) NO, never</p> <p>(1) YES</p> <p>(2) STOPPED less than 6 months ago</p> <p>(3) STOPPED more than 6 months ago</p>	
<p>17. If YES, what drug do you use? (please list all)</p> <p>(1) TIK</p> <p>(2) Dagga</p> <p>(3) Opiates</p> <p>(4) Ecstasy</p> <p>(5) Mandrax</p> <p>(6) Other (please specify)</p> <p>(7) Not Applicable</p>	

Obstetric History

18. Have you ever been pregnant before this pregnancy? (1) Yes (2) No	
19. Gravidity (Number of pregnancies including this pregnancy)	
20. Parity (Number of children) _____	
21. Miscarriages _____	
22. Ectopic _____	
23. Previous TOPs _____	

Medical History

24. Do you have any medical conditions: (1) Hypertension (2) Diabetes (3) Respiratory (4) Cardiac (5) Other	
25. Do you know your RVD status: (0) Unknown (1) Positive (2) Negative	

Contraception

26. When last did you use contraception?	
<p>27. What method of contraception was the most recent method that you have used?</p> <ul style="list-style-type: none"> (0) None (1) Pill (2) Injectable (3) IUCD (4) Implant (5) Condoms (6) Diaphragm (7) TOP (8) Withdrawal (9) Natural 	
<p>28. Were you on any method of contraception when you became pregnant now?</p> <ul style="list-style-type: none"> (0) Unsure (1) Yes (2) No 	
<p>29. Have you ever used the following method of contraception?</p> <p>Pill</p> <ul style="list-style-type: none"> (1) Yes (2) No 	
<p>30. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <ul style="list-style-type: none"> (1) Yes (2) No (3) N/A (4) If yes, please explain 	
<p>31. Would you consider using it again?</p> <ul style="list-style-type: none"> (1) Yes (2) No (3) N/A 	

Please explain why	
<p>32. Have you ever used the following method of contraception?</p> <p>Injectable:</p> <p>(1) Yes</p> <p>(2) No</p> <p>(3) N/A</p>	
<p>33. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <p>(1) Yes</p> <p>(2) No</p> <p>(3) N/A</p> <p>(4) If yes please explain</p>	
<p>34. Have you ever used the following method of contraception?</p> <p>Implant:</p> <p>(1) Yes</p> <p>(2) No</p>	
<p>35. Would you consider using it again?</p> <p>(1) Yes</p> <p>(2) No</p> <p>(3) N/A</p> <p>Please explain why</p>	
<p>36. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <p>(1) Yes</p> <p>(2) No</p> <p>(3) N/A</p> <p>(4) If yes please explain</p>	

<p>37. Have you ever used the following method of contraception? IUCD (Loop):</p> <p>(1) Yes (2) No</p>	
<p>38. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <p>(1) Yes (2) No (3) N/A (4) If yes please explain</p>	
<p>40. Would you consider using it again?</p> <p>(1) Yes (2) No (3) N/A Please explain why</p>	
<p>41. Have you ever used the following method of contraception? Condoms:</p> <p>(1) Yes (2) No</p>	
<p>42. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <p>(1) Yes (2) No (3) N/A (4) If yes, please explain</p>	
<p>43. Would you consider using it again?</p> <p>(1) Yes (2) No (3) N/A Please explain why</p>	
<p>44. Have you ever used the following method of contraception? Diaphragm:</p> <p>(1) Yes (2) No</p>	

<p>45. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <p>(1) Yes (2) No (3) N/A (4) If yes please explain</p>	
<p>46. Have you ever used the following method of contraception?</p> <p>Withdrawal:</p> <p>(1) Yes (2) No</p>	
<p>47. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <p>(1) Yes (2) No (3) N/A (4) If yes please explain</p>	
<p>48. Would you consider using it again?</p> <p>(1) Yes (2) No (3) N/A Please explain why</p>	
<p>49. Have you ever used the following method of contraception?</p> <p>Natural:</p> <p>(1) Yes, please specify (2) No</p>	
<p>50. Have you ever experienced any side effects when using the above mentioned method of contraception?</p> <p>(1) Yes (2) No (3) N/A (4) If yes please explain</p>	
<p>51. Would you consider using it again?</p> <p>(1) Yes (2) No (3) N/A</p>	

Please explain why	
<p>52. Which method of contraception did you want to use following the procedure?</p> <p>(0) None (1) Pill (2) Injection (3) IUCD (4) Implant (5) Condoms (6) Diaphragm (7) Withdrawal (8) Natural (9) Female sterilization (10) Male sterilization</p>	
53. What made you choose that contraceptive method?	

<p>54. Was your choice of contraception given to you?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If not, why?</p>	
<p>55. Where did you receive your information on contraception from?</p> <p>Indicate yes or no for each of the following options</p> <p>(1) Information leaflet Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(2) Video Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(3) Poster Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(4) Consultation with a health professional Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(5) Group Chat Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(6) Social Media Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(7) Peer Yes <input type="checkbox"/> No <input type="checkbox"/></p>	
<p>56. What is your reason for terminating this pregnancy?</p> <p>(1) Socioeconomic</p> <p>(2) Contraceptive failure</p> <p>(3) No contraception</p> <p>(3) Other, please explain</p>	
57. During this TOP process, whom did you get contraception counseling from?	

<ul style="list-style-type: none"> (0) None (1) Social Worker (2) Nurse (3) Doctor (4) Specialist gynaecologist (5) Family planning counselor 	
<p>58. Please rate how well you understood contraception methods after you received counseling</p> <ul style="list-style-type: none"> (0) Not at all (1) Poor (2) Fair (3) Good 	
<p>59. If anything, what would you like to know more about?</p>	
<p>60. During this TOP process, whom did you get TOP counseling from?</p> <ul style="list-style-type: none"> (0) None (1) Social Worker (2) Nurse (3) Doctor (4) Specialist gynaecologist (5) Family planning counselor 	
<p>61. Please rate how well you understood the process of TOP after you received counseling</p> <ul style="list-style-type: none"> (0) Not at all (1) Poor (2) Fair (3) Good 	
<p>62. How many weeks pregnant were you when you requested a TOP?</p>	
<p>63. How many weeks pregnant were you at the time of the TOP being performed?</p>	
<p>64. What delayed you to having a TOP until after 12 weeks gestation?</p> <ul style="list-style-type: none"> (1) Delay in taking a pregnancy test (2) Delay in deciding on having a TOP (3) Delay to requesting a TOP (4) Delay in receiving a date for TOP procedure (5) Other , please explain 	

<p>65. Did you experience any difficulties in accessing a TOP? Choose one of the options below:</p> <ul style="list-style-type: none"> (0) No, none at all (1) Referral delay (2) Transport delay (3) Delay in getting admission date (4) Delay due to staff obstruction (5) Delay due to financial constraints (6) Other, please specify 	
<p>66. How could we improve this service?</p>	

<p>67. If you have use the injectable before would you use it again</p> <ul style="list-style-type: none"> (0) N/A (1) yes (2) no 	
<p>68. If you were on contraception before what was the reason for stopping your contraception if any?</p> <ul style="list-style-type: none"> (0) N/A (1) Changed method (2) Side effects (3) Medical reason (4) default (5) difficult access (6) other 	

<p>68. Did you have a medical TOP (given medication until the baby is aborted)</p> <p>(1) yes (2) no</p>	
<p>69. Where there any complications of the medical TOP</p> <p>(0) none (1) bleeding (2) pain (3) procedure failed (4) other, please explain</p>	
<p>70. Did you require an evacuation (a womb scrape)</p> <p>(1) yes (2) no</p>	
<p>71. Did you have a surgical TOP (suction of pregnancy)</p> <p>(1) Yes (2) No</p>	
<p>72. Where there any complications of the surgical TOP</p> <p>(0) none (1) bleeding (2) pain (3) procedure failed (4) other, please explain</p>	

Appendix 6 – GSH Institutional Approval



GROOTE SCHUUR HOSPITAL

Enquiries: Dr Bernadette Eick

E-mail : Bernadette.Eick@westerncape.gov.za

Dr M. Patel
OBSTETRICS & GYNAECOLOGY

E-mail: m.patel@uct.ac.za / lake.24@gmail.com

Dear Dr Patel

RESEARCH PROJECT: Factors That Influence Choice Of Contraception At Mid-Trimester Termination Of Pregnancy (Mmed Dr T. Klassen)

Your recent letter to the hospital refers.

You are granted permission to proceed with your research, which is valid until **30 July 2019**.

Please note the following:

- a) Your research may not interfere with normal patient care.
- b) Hospital staff may not be asked to assist with the research.
- c) No additional costs to the hospital should be incurred i.e. Lab, consumables or stationary.
- d) **No patient folders may be removed from the premises or be inaccessible.**
- e) Please provide the research assistant/field worker with a copy of this letter as verification of approval.
- f) Confidentiality must be maintained at all times.
- g) Should you at any time require photographs of your subjects, please obtain the necessary indemnity forms from our Public Relations Office (E45 OMB or ext. 2187/2188).
- h) Should you require additional research time beyond the stipulated expiry date, please apply for an extension.
- i) Please discuss the study with the HOD before commencing.
- j) Please introduce yourself to the person in charge of an area before commencing.
- k) On completion of your research, please forward any recommendations/findings that can be beneficial to use to take further action that may inform redevelopment of future policy / review guidelines.
- l) **Kindly submit a copy of the publication or report to this office on completion of the research.**

I would like to wish you every success with the project.

Yours sincerely

DR BERNADETTE EICK
CHIEF OPERATIONAL OFFICER
Date: 31 August 2018

C.C. Mr L. Naidoo
Professor E. Weimann
Professor L. Denny

G46 Management Suite, Old Main Building,
Observatory 7925
Tel: +27 21 404 6288 fax: +27 21 404 6125

Private Bag X,
Observatory, 7935
www.capegateway.gov.za

(Annexure B) to the provincial Research Co-ordinator

(Health.Research@westerncape.gov.za).

4. The reference number above should be quoted in all future correspondence.

Yours sincerely

Signature Removed

DR J EVANS

ACTING DIRECTOR: HEALTH IMPACT ASSESSMENT

DATE: 2018/10/03