# Factors influencing the use of contraceptive methods amongst adolescents in George, South Africa

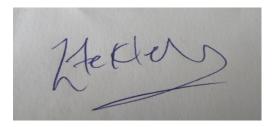
Elmari de Klerk

University of Stellenbosch 12689610 2011



## **Declaration**

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Dr Elmari De Klerk

Date: 30 October 2011

# **Abstract**

#### **Introduction**

A broad understanding of adolescent sexual behaviour is crucial: sexual experience and risky sexual behaviour are prevalent among adolescents. Many studies have been done and opinions have been given about adolescent behaviour regarding contraception and safe sexual practices. There seems to be sufficient knowledge, but passing it on to adolescents is inadequate. The aim of this study was to identify the factors that influence the use of contraceptive methods amongst 16 year old adolescents attending high schools in George, South Africa.

#### Method

This was a descriptive, cross-sectional study. Consent from parents/guardians and assent from study participants were obtained. Three high schools in George were randomly selected. All 16 year old learners attending these 3 schools, which assented and consented, were invited to voluntarily complete a self-administered questionnaire, specifically developed for this study.

#### **Results**

One hundred and eighty four 16-year old adolescents voluntarily took part. The male: female ratio was fairly equal. The average age of sexual debut was 15 years, with 42% using contraception at the time of the study. 33% of the sexually active respondents were not using contraception. Knowledge about contraception was reasonably good, with school, home and friends playing pivotal roles. Condoms were perceived to be to easiest available by the sexually active and non-active respondents, whereas injectable contraception was perceived easily available by the sexually active participants, but not by the sexually inactive participants. Contraception is being used mostly by instruction from parents, but peer pressure plays a role here too, as indicated by 20% of the respondents. The most popular reasons for not using contraception whilst being sexually active include: Sensation loss with condoms and partner pressure.

#### **Conclusion**

16 year old adolescents attending high schools in George do not differ much from their peers nationally and internationally. Their sexual debut is slightly earlier; therefore their contraception use debut is also earlier. Their knowledge regarding contraceptive methods is acceptable, showing that previous educational programmes are bearing fruit and still need to continue. Friend/peer factors play an important role in the decision making of the respondents. This has been shown in their knowledge gain, access to and reasoning behind

the use or non-use of contraception. These should be considered in new strategies aiming to improve the educational programmes.

## Introduction

A broad understanding of adolescent sexual behaviour is crucial: sexual experience and risky sexual behaviour are prevalent among adolescents.<sup>1</sup> Such behaviour increases the risk of sexually transmitted infections (STI's) and unintended pregnancy, which may result in severe and long lasting consequences for individual adolescents. Such outcomes are disproportionately borne by adolescents and are costly to greater society as well.<sup>1</sup>

We are faced daily with the problem of adolescents presenting with STIs and unplanned (and often unwanted) pregnancies. The terminations of pregnancy (TOP) clinics are booked to capacity and the HIV infection rate amongst 15-24 year olds is not stabilising. <sup>2,3</sup>

Adolescents' choices to become sexually active and to use contraception, as well as their ability to obtain and use contraception if this choice is made, are influenced by many factors. These factors need to be identified locally and globally.

Many studies have been done and opinions have been given about adolescent behaviour regarding contraception and safe sexual practices. <sup>4</sup> There seems to be sufficient knowledge, but passing it on to adolescents is inadequate. Does it change from generation to generation? Is it geographically related? How big a role does culture play? Why is it that the problem seems to be growing?<sup>5</sup>

This study focused specifically on 16 year old adolescents attending urban high schools, because this is a milieu where information is freely available and life skills teaching exposes them to information regarding contraception and safe sexual practices.

# **Literature review**

Adolescents engage in sexual activity at early ages. 47% of high school students in the USA have had sexual intercourse of whom 7.4% reports having sex before the age of 13.¹ The 2005 South African Behavioural, Sero-Prevalence and Mass Media Study Survey (SABSMM) reported that the median age of sexual debut for youth aged 15-24 years was 17 for both males and females.⁵ Berry and Hall report that 6% of young women (15-24 years) in South Africa claim to have had sex by the age of 15, compared to 12% of young men. By the end of their childhood (18 years), 42% of women and 63% of men had become sexually active. The provincial break down shows that the Western Cape holds true to the national trend.⁶

Sexual activity amongst adolescents brings its own problems. Unwanted teenage pregnancies are estimated to have included 900 000 teenage girls in the USA in 2005, of which 37% were <17 years old. This led to higher termination of pregnancy numbers. In South Africa, the Termination of Pregnancy Act was gazetted in 1994. Reproductive and abortion statistics show that 13% of all abortions are for women younger than 18 years old. The therapeutic (medical) abortion rate in Canada was 18.4 per 1000 females aged 15-17. When chosen to proceed with pregnancy, it inevitably leads to psychological and medical complications for mother and baby. Stills caused by Chlamydia, Gonorrhoea, Human Papilloma Virus and HIV are the most common ones diagnosed in adolescents who partake in unprotected sex. Two thousand nine hundred new cases of STI's per year were reported in 2000 in people aged 15-24 in the USA.

In Sub-Saharan Africa the most important STI is the HIV infection.<sup>5</sup> Estimated HIV prevalence among South Africans aged 2 years and older (2002-2008) was 10.9%.<sup>3</sup> In the age group 15-24 years old it is 8.7%. In the Eden district the prevalence increased (from 11.5% in 2006 to 13.1% in 2007%) in comparison to the national prevalence which declined in this specific age group. <sup>3.9</sup>

Teenagers' choices to become sexually active and to use contraception, as well as their ability to obtain and use contraception, if this choice is made, are influenced by many factors. <sup>5</sup> These include the adolescents' knowledge on the subject, their attitudes and beliefs towards it and their future expectations for their lives. Substance abuse inhibits the use of contraception and should be reckoned as a strong influencing factor as teenagers start experimenting with substances the same time they start experimenting with sex. On an intra-familial level, the strength of the family structure, the quality of communication and the socio-economic status all play a role in the decision making of the adolescents. <sup>1,5,15</sup> Peer influences play an incredibly important role outside the family. It should not be underestimated as the single most powerful persuasive factor for engaging in sex as an

adolescent.<sup>4,7</sup> A favourite saying amongst the old and wise is: It takes a village to raise a child. Norms and values in the community regarding contraception use and teenage pregnancies will influence the adolescent in her decision making process.<sup>10</sup>

Access to clearly understandable sexual health information and health services are important. Misperceptions about contraceptive methods can affect consistent use and effectiveness. Adolescents using contraceptives delay seeing a clinician for prescription until sexually active for more than 1 year. This results in a limited knowledge of the different types of contraception and availability. It is thought that to stress the noncontraceptive advantages of using contraceptives, such as decreased acne, has the potential to improve compliance. A study in Finland revealed that 2, 9% of the participants did not know what emergency contraception was. There is also a discrepancy between objective and perceived knowledge surrounding the use of contraceptives and this inevitably influences the risk profile of sexual behaviour. The stress of the sexual behaviour.

Real or perceived barriers to using contraceptives may play a very important role. It may discourage an individual from taking preventative action. Barriers previously identified include: Interference with sexual pleasure, imbalance of negotiating power, unavailability of contraceptives, morality, financial issues, inconvenience and peer pressure. Male adolescents demonstrated stronger views regarding barriers of which peer pressure played the most important role. 12

Early maturing females tend to become pregnant at younger ages than do later maturing females. Early menarche leads to early puberty which again leads to early sexual debut.<sup>13</sup> The median onset of sexual activity among young women in South Africa precedes the median age of first pregnancy by about five years and precedes the spike in HIV infection by roughly two years.<sup>14</sup> 50% of adolescent pregnancies in the rest of the world occur within the first months of initial sexual intercourse.<sup>8</sup> More than 40% of adolescent girls have been pregnant at least once before the age of 20 years.<sup>8</sup> Approximately one in five adolescent births are not first births. Once a teenager has had a baby she is at increased risk of having another.<sup>8</sup>

Poverty plays a significant role in adolescent pregnancy. Up to 83% of adolescents giving birth and 61% who have abortions are from poor or low-income families.<sup>5,8</sup> A history of sexual abuse is also a predictor of sexual intercourse during the early adolescent years.

Factors that are associated with delay in the start of sexual intercourse include: living with both parents in a stable environment, regular attendance at places of worship and higher

family income.<sup>1, 14</sup> Adult support for contraceptive use can result in improved compliance and successful contraception.<sup>4</sup>

Sex outside of marriage has become the norm for adolescents rather than the exception. Adults harbour the idea that increased availability of and increased knowledge of contraceptives will influence adolescents to engage in more risky sexual behaviour or encourage them to initiate sex.<sup>4</sup> Evidence shows that availability of family planning is linked to better contraceptive behaviour.<sup>4,8,11,15,16</sup> School based clinics seem to increase the use of contraception. Sexually active school-going women are 1.7 times more likely to use contraceptives than their same-aged peers. <sup>14</sup> Especially condom availability in schools is associated with increased use without increase rate of sexual activity. <sup>4,8,11,15,16</sup>

The general idea is that media, in the form of television, movies, radio, printed media, video games and internet plays a positive and negative role in sex education. The evidence shows adolescents who view television with sexual content tend to overestimate sexual behaviours and have more permissive attitude toward premarital sex.<sup>1</sup> A significant association between frequency of sexual content in television programmes viewed and likelihood of initiation of sexual intercourse, as well as progressive engagement in more advanced non-coital sexual behaviour exist.<sup>1</sup>

Mass media is an appealing strategy to influence young people's sexual and reproductive health because of its ability to reach large numbers of young people. Given the appeal and allure of mass media to young people, it has been used extensively to change knowledge, attitudes and behaviour regarding HIV, AIDS and pregnancy. Behaviour change with increased exposure to communication campaigns is estimated to have a 42-55% range of impact regarding self-efficacy of condom use. <sup>5</sup>

There is increasing evidence that different kinds of programmes my help decrease risky sexual behaviour and pregnancy among teenagers. There are strong indications suggesting that existing strategies need to be updated regularly, to stay relevant to each new generation of adolescents. The generations change, ideas and concepts change, and to successfully address the problem of risky sexual behaviour in adolescents, strategies need to be up to date to make a useful impact.

The aim of this study was to identify the factors that influence the use of contraceptive methods amongst 16 year old adolescents attending high schools in George, South Africa. The objectives included:

- To determine the age of first sexual encounter.
- To determine the age of first contraception use.

- To explore the success of contraception use by measuring outcomes like frequency of pregnancy.
- To determine the adolescent's perception of availability of contraception.
- To explore the knowledge about contraception.
- To explore factors that is associated with the use of contraception in the sexually active adolescent age group.

# **Method**

#### Study design

This was a cross-sectional, descriptive study.

#### Study setting

Three high schools in the town of George, Eden district: Outeniqua High School, Parkdene High School, and Thembalethu High School.

#### Study population

All 16 year old adolescents attending high schools in the town of George.

#### Study sample

Random sampling was used. The town of George was geographically divided into four equally large areas. Every high school's name in the separate areas were entered into a computer programme and randomly selected to minimize selection bias. The randomly selected schools were invited to join the study. If the invitation was declined the next randomly selected school was approached. The 16 year old adolescents from the partaking schools were invited to take part in the study depending on the inclusion and exclusion criteria. Everyone who fulfilled the inclusion criteria was included in the sample. A sample size of two hundred was aspired to.

#### Inclusion and exclusion criteria

| Inclusion                                     | Exclusion                                       |
|---|---|
| Attending a high school in George             | Not attending a high school in George           |
| 16 years of age                               | Not 16 years of age                             |
| Signed permission from parents/guardians      | No signed permission from parents/guardians     |
| Assent from adolescent                        | No assent from adolescent                       |
| Able to read either Afrikaans, English, Xhosa | Unable to read either Afrikaans, English, Xhosa |
| Voluntary participation                       | No voluntary participation                      |

#### **Data collection**

Data collection was done with a structured questionnaire which was self administered. (Addendum A). The questionnaire was developed by the researcher after reviewing the literature. It was available in three languages (Afrikaans, English and Xhosa) as these are the most prevalent languages amongst adolescents attending high schools in George and the three official languages of the province. This tool could be used in the future in similar studies with the necessary adjustments made with the assistance of more qualitative research, like focus group interviews.

The collection of the data was done anonymously. Only eligible adolescents were invited to take part in the study on an absolute voluntarily basis. Strict adherence to inclusion and exclusion criteria was maintained. The eligible adolescents were identified by the presentation of a signed consent form from their parents/guardians and an assent form from themselves (see Addenda E and F).

The questionnaire was presented to the study participants during a Life Skills class. The cooperation of the school staff was necessary to assist the researcher in this task. The adolescents were requested to complete the 3-page questionnaire anonymously under examination conditions, fold it and put it in a sealed container via a 'post box' like opening. The boxes were handed to the researcher. It was kept sealed until it was opened for data analysis.

#### **Analysis**

The statistical analysis aimed at doing basic descriptive statistics. All the results were imported into Excel spreadsheets and with the help of the University of Stellenbosch's Statistics department it was broken down to means, standard deviations, counts, percentages and graphs of each variable. A comparison of gender for the responses to the different questions was made. It started off with a Mann-Whitney test for the continuous variables. The rest of the analyses were chi-square analyses for categorical data. The respondents indicating to be sexually active were isolated and chi-square analyses for categorical data were done.

### **Ethical considerations**

Ethics permission was obtained from the University of Stellenbosch Ethics Committee (Ref no. N10/03/078). Permission was obtained from the Eden district health manager. Principals of the schools were approached personally for consent to participation. Informed consent from participants' parents or guardians (as they are still minors) was obtained. Informed assent from participants were obtained. Voluntary participation was sought. The questionnaires were completed anonymously. All data was handled without breaking confidentiality.

# **Results**

Three high schools in George participated. There are eight high schools in George, but only the three schools that accepted the invitation were included in the study. 230 16-year old adolescents took part in the study. 184 questionnaires were used for data analysis and 47 were rejected in adherence to the inclusion and exclusion criteria.

56% of the respondents were female and 44% were male. 51 (28%) of the respondents were using contraception at the time of filling in the questionnaire. 33 females indicated that they were sexually active, compared to 28 males.

The mean age of sexual debut was 15 years. It was closely followed by 14 years old and 16 years old. (See figure 1). The male and female comparison did not reveal any significant differences.

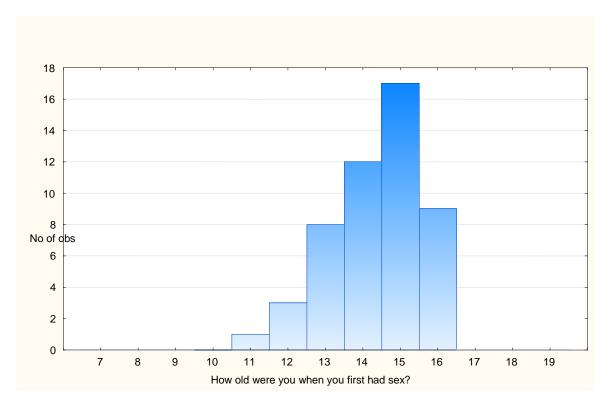


Figure 1: Age of sexual debut

The use of contraceptive methods appears to be initiated about the same time as sexual debut at 15 years of age with the males slightly earlier than the females. It follows the same trend with the second most likely age to start using contraception to be 14 and then 16 years old. Contraceptive methods had been initiated at an age as young as 12 years old

(See figure 2). Twenty (33%) of the sexually active participants were not using any contraception. Participants that indicated that they were not sexually active stated that 13 (11%) of them were using a form of contraceptive method.

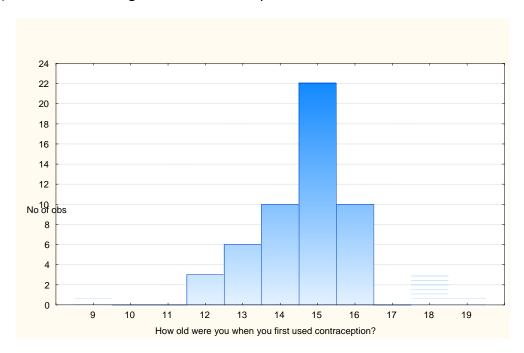


Figure 2: Age of initial use of contraceptive methods

175 (95%) respondents knew what condoms were. The Pill was the second best known contraceptive, 163(88%). 141 (76%) knew what injectable contraception was. The least well known contraceptive methods were: Morning after pill, 124(67%), Intra uterine contraceptive device, 71(38%) and contraceptive patches, 50(27%) (See Fig.3).

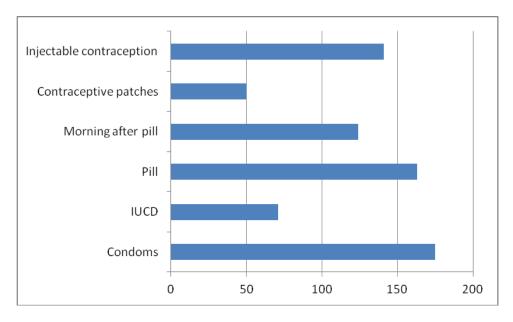


Figure 3: Knowledge of contraceptive methods

Male participants' knowledge regarding contraceptive methods was better than the females' in 4 out of the 6 categories. They were more knowledgeable about condoms (4%), intra-uterine contraceptive device (11%), morning after pill (18%) and the contraceptive patch (9%).

Fig.4 illustrates where respondents claimed they heard about contraception for the first time. Many indicated more than one option, which brought the total responses for this question to 228 (in 184 participants). 85(37%) mentioned school for the first time, followed by friends, 59(26%), home, 56(25%) and the media, 28(12%). 50% of sexually active participants first heard about contraceptive methods at school. 37(35%) of female participants first heard about contraceptive methods at home, versus 19 (23%) male participants.

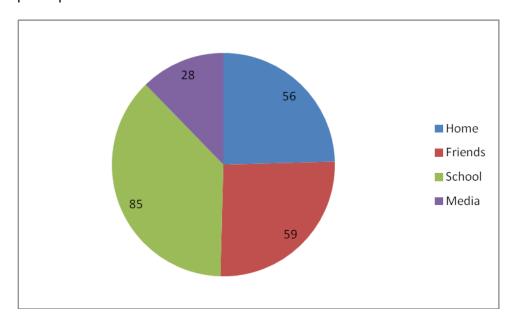


Figure 4: Responses to "Where did you hear about contraception for the first time?" ( N=228)

The adolescents perceive condoms to be easily available. 84% of the respondents agreed and 80% strongly agreed that condoms were easily available. The sexually active participants were more convinced about this (p=0.004). Injectable contraception is perceived to not to be easily available. Seventy four (40%) disagreed with the statement: *Injectable contraception is easily available*. The sexually active participants, however, agreed that it was easily available (p=0.008). There were mixed responses about the Pill, but the majority of respondents still perceived it to be easily available in a 60/40 split.

Only 4% have ever been treated for a STI. The rate of previous and current pregnancies was 5.6%.

The commonest reason overall for using a contraceptive method was instruction from their parents (38%), followed by 20% who claimed they use it because "all my friends do it", teachers (14%), and the media (17%). Other reasons included, "I don't want to get pregnant", "I don't want to get any infection", and "It is to protect myself". A statistically significant portion of male participants (32%) pay more attention to the media than their female counter parts (4%) (p=0.005).

The most common reason given for not utilising contraceptive methods whilst being sexually active was "Sex feels better without a condom" (33%). There was a statistically significant difference (p=0.00095) between males and females regarding this reasoning. This was followed by "Contraception is difficult to get hold of" and "My girl/boyfriend doesn't want me to" which carried the same weight, 8(15.7%). Reasons that did not have a significant role, were: Religion (3.9%), Knowledge regarding contraception (3.9%) and the perception that contraception is a nuisance (3.9%) (See Table 1).

| Reason                                       | Number of adolescents | %    |
|--|-----------------------|------|
| All my friends do it                         | 4                     | 7.8  |
| Sex feels better without a condom            | 17                    | 33.3 |
| It is difficult to get hold of contraception | 8                     | 15.7 |
| Contraception is expensive                   | 4                     | 7.8  |
| It is against my religion                    | 2                     | 3.9  |
| It is against my culture                     | 4                     | 7.8  |
| My girl/boyfriend doesn't want me to         | 8                     | 15.7 |
| It is a nuisance                             | 2                     | 3.9  |
| I do not know what contraception is          | 2                     | 3.9  |

Table 1: Reasons from sexually active participants for not using contraception (N=51).

## **Discussion**

The average age of sexual debut was 15 years, with females slightly earlier than the males. This is two years younger than the median age for sexual debut according to the national survey in 2005.<sup>3</sup> Risky sexual behaviour was identified in the acknowledgment that 33% of the sexually active participants were not using any form of contraception. The risks include earlier pregnancy for the female component and a greater risk of contracting HIV.<sup>14</sup> This could be one possible reason why the HIV prevalence in the Eden district has increased rather than decreased in comparison with the national prevalence.<sup>3</sup>

The knowledge of adolescents about the different types of contraceptive methods that are available was elicited by simple yes/no questions in the questionnaire. Most of the respondents knew what a condom (95%), the Pill (88%) and Injectable contraception (76%) was, but lacked knowledge regarding the intra uterine contraceptive device (38%) and the "morning after" pill (67%). The contraceptive method that the adolescents showed the least knowledge of was contraceptive patches (27%). Ongoing educational programs are still needed, targeted at specific methods of contraception, and particularly focussing on females.

This study showed that more adolescents heard about contraception for the first time at school (37%) rather than at home (25%). This could be the result of effective educational programmes in the district. Females pay more attention to their parents (35%) than the males (23%). Surprisingly, the results showed that friends were a very good source of information (26%). Peer education could be a tool that can be utilised in the future with the planning of new programmes regarding sexual education to adolescents.

Injectable contraception is one of the contraceptive methods that should be readily available at clinics or medical practices. The results, however, indicated that almost 40% of respondents felt that injectable contraception was difficult to obtain. The reasoning behind this perception would assist in understanding adolescents' views and inform future educational programmes. There was no doubt that the respondents thought condoms were easily available. It seems that past and present campaigns and programmes are bearing fruit in this regard.

We measured the success of contraception methods by looking at the pregnancy and STI rates among respondents. The pregnancy rate in South Africa in 2007 according to the National HIV and Syphilis Prevalence Survey of South Africa was 23/1000. <sup>3</sup> The number of pregnant learners in 2008 was 63/1000, of which the Western Cape was 34/1000. <sup>5</sup> This study revealed a 5.6% prevalence of pregnancies, which is more than the provincial and the national prevalence.

The prevalence of respondents that were treated for STI's was 4%, which is higher than the national prevalence.<sup>5</sup> The type of STI was not specified. The national prevalence for syphilis infection in 2007 was 2.9% and the prevalence among the 15-19 year olds was 1.9%. <sup>5</sup> The national HIV prevalence was estimated at 12.9% amongst the same age group. <sup>5</sup>

We explored the reasons why adolescents would or would not endeavour to use contraceptive methods when they are sexually active. Peer pressure had a positive influence in 20% of respondents, who claimed that they used contraception because "All my friends do it". Peer education should be utilised more in future educational programmes.

Males and females differed in their reasons for using contraception. Females used contraception because they were instructed so by their parents. This correlates with the findings that showed females heard about contraception at home for the first time. It appears that the females have a more "home-based" education about contraception compared to the males. Males, however, paid more attention to the television (17%) than to their teachers and parents. A statistically significant difference (p=0.005) was observed between male and female reasoning regarding the media influence. This is important information to consider in planning future male orientated programmes.

A difference between the sexually active males and females was shown in their reasoning to avoid contraception use. Males said that "Sex feels better without a condom" (23%). Females avoid using contraception as their "Boyfriend doesn't want me to" (7%). This suggests male dominance in the decision making processes surrounding contraception use in adolescents. This needs to be addressed in future educational programmes, including using the media.

#### Study limitations

The study sample was small. The factors that influenced the sample size were the willingness of the schools to participate in the study, the willingness of the parents to give consent for their children to take part in the study and the cooperation of the learners themselves regarding the completion and return of the consent forms. The questionnaire was not standardised or validated. This could have been improved with a prior focus group discussion with adolescents.

# **Conclusion and Recommendations**

16 year old adolescents attending high schools in George do not differ much from their peers nationally and internationally. Their sexual debut is slightly earlier; therefore their contraception use debut is also earlier. Their knowledge regarding contraceptive methods is acceptable, showing that previous educational programmes are bearing fruit and still need to continue. Peer factors play an important role in the decision making of the respondents. This has been shown in their knowledge gain, access to and reasoning behind the use or non-use of contraception. Males pay attention to the media regarding their knowledge gain and reasoning behind the use or non-use of contraception. These should be considered in new strategies aiming to improve the educational programmes.

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# Addendum A

|  |                    | Vraelys            |                                  | <           |                 |
|--|--------------------|--------------------|----------------------------------|-------------|-----------------|
| Hoe oud is jy? (Meld jou ouderd  |                    |                    |                                  |             |                 |
| Tot watter geslag bel  |                    | Manlik             |                                  | Vroulik     |                 |
| Het jy al ooit van enig  |                    | ende items gehoo   | r?                               |             |                 |
| Kondome<br>Intra-uteriene ko<br>Die Pil<br>Twee/drie maan<br>Morning after pil<br>Kontraseptiewe p | de inspuiting<br>I | apparaat (Loop)    | ja<br>ja<br>ja<br>ja<br>ja<br>ja |             | nee nee nee nee |
| Gebruik jy voorbehoo<br>toepaslike blokkie   |                    | Ja                 |                                  | Nee         | (Merk           |
| Hoe oud was jy toe jy  | die heel eerst     | te keer enige vorm | ı van vooi                       | rbehoedmidd | del gebruik he  |
| (Meld ouderdom   | )                  |                    |                                  |             |                 |
| Waar het jy die heel (Merk die toepask By die huis By vriende By die skool In die media Ander      | ike blokkie)       | n voorbehoedmid    |                                  | oor?        |                 |
|  |                    |                    |                                  |             |                 |



| 7.  | Waar kry jy die voorbehoedmiddels wat jy gebruik? (Merk die toepaslike blokkie)                                     |
|-----|---|
|     | By die huis By die skool By 'n kliniek of dokter By vriende Ander   |
|     |   |
| 8.  | Kondome is maklik verkrygbaar (Merk die toepaslike blokkie wat jou eerlike mening weerspieel)                       |
|     | Ek stem heelhartig saam Ek stem saam Ek stem nie saam nie Ek stem glad nie saam nie                                 |
| 9.  | Die Pil is maklik verkgrygbaar (Merk die toepaslike blokkie wat jou eerlike mening weerspieel)                      |
|     | Ek stem heelhartig saam Ek stem saam Ek stem nie saam nie Ek stem glad nie saam nie                                 |
| 10. | Inspuitbare voorbehoedmiddels is maklik vergrygbaar (Merk die toepaslike blokkie wat jou eerlike mening weerspieel) |
|     | Ek stem heelhartig saam Ek stem nie saam nie Ek stem glad nie saam nie  |
| 11. | Hoe oud was jy toe jy die eerste keer seks gehad het?   |
|     | (Meld ouderdom)   |



| 12. | Is jy al ooit vir 'n seksueel oordraagbare infeksie behandel?  (Merk die toepaslike blokkie)   |
|-----|--|
|     | Ja Nee   |
| 13. | Beantwoord SLEGS as jy seksueel aktief is:  Watter van die volgende sou jy aanvoer is die rede(s) waarom jy voorbehoedmiddels gebruik?  (Merk die toepaslike blokkies)   |
|     | My ouers het gese ek moet  Al my vriende gebruik dit  My onderwyser(s) het gese ek moet  Ek het dit op TV gesien  Ander:   |
| 14. | Beantwoord slegs as jy seksueel aktief is:  Watter van die volgende sou jy aanvoer is die rede(s) waarom jy NIE voorbehoedmiddels gebruik NIE.  (Merk die toepaslike blokkies)  Al my vriende doen dit Seks is beter sonder 'n kondoom Voorbehoedmiddels is moeilik om in die hande te kry Voorbehoedmiddels is duur Dit is teen my godsdienstige oortuigings Dit is teen my kultuur My ou/meisie wil nie he ek moet dit gebruik nie Dis 'n beslommernis |
|     | Ek weet nie wat voorbehoedmiddels is nie Ander:  |
| 15. | Slegs vroulik: Was jy al ooit swanger? (Merk die toepaslike blokkie)  Ja Nee   |

Baie dankie vir u deelname!!



# <u>Addendum B</u>

|   | Questionr  | naire                       |                   |
|---|--|-----------------------------|-------------------|
| How old are you? (State age)  |  |                             |                   |
| What is your gender   |  | Female                      |                   |
|   | about any of these before es or no with each item) | ?                           |                   |
| Condoms Intra-uterine cor The pill Three/two mont Morning after pi Contraceptive pa | I  | yes yes yes yes yes yes yes | no no no no no no |
| Do you use contrace<br>(Tick appropriate  |  | No                          |                   |
| How old were you w<br>(State age)   | hen you first used any form                        | n of contraception?         |                   |
| (Tick appropriate At home Friends School Media Other                                | about contraception the fir                        |                             |                   |

| 7.  | Where do you get the contraception you use? (if you are using any) (Tick appropriate box) |
|-----|---|
|     | Home School Clinic/Doctor Friends Other   |
|     |   |
|     |   |
| 8.  | Condoms are easily available (Tick appropriate box)                                       |
|     | Strongly agree Agree Disagree Strongly disagree   |
| 9.  | The Pill is easily available (Tick appropriate box)                                       |
|     | Strongly agree  Agree  Disagree  Strongly disagree  |
| 10. | Injectable contraception is easily available (Tick appropriate box)                       |
|     | Strongly agree  Agree Disagree Strongly disagree  |
| 11. | How old were you when you first had sex?  |

| 12. | Have you ever been treated for a sexually transmitted infection?   |
|-----|--|
|     | (Tick appropriate box)   |
|     | Yes No   |
| 13. | Only answer when you are sexually active:  |
|     | Choose the reason/s why you are using contraception.   |
|     | (Tick the appropriate box/es)  |
|     | My parents told me to  All my friends do it  My teacher told me to  I saw it on TV  Other:   |
|     |  |
| 14. | Only answer when you are sexually active:  Choose the reasons why you are NOT using contraception.  (Tick what is appropriate)   |
|     | All my friends do it  Sex feels better without a condom  It is difficult to get hold of contraception  Contraception is expensive  It is against my religion  It is against my culture  My boyfriend/girlfriend doesn't want me to use it  It's a nuisance  I don't know what contraception is  Other: |
|     |  |
| 15. | Only Females: Have you ever been pregnant? (tick appropriate box)  Yes No  |

Thank you for taking the time to fill in this questionnaire!



# Addendum C

|  | Imibuzo Elandelayo  |                                    |
|--|---|------------------------------------|
| Unangaphi?(Chaza iminyaka  |   |                                    |
| Isini sakho?<br>(Khetha ibhokisi   | Umfazi (  | Indoda                             |
| Sekhe weva ngezi ng<br>(Khetha u-ewe c   | gaphambili?<br>okanye u-hayi kwezi zilandelayo)                     |                                    |
| . •  | thu/ezimbini zenaliti yokucwangicisa ewe sela emva kodlewengulo ewe | hayi hayi hayi hayi hayi hayi hayi |
| Uyacwangcisa na?<br>(Khetha ibhokisi)  | ewe   | hayi                               |
| Ubunangaphi ukqala<br>(Chaza iminyaka  | a kwakho ukucwangcisa?  |                                    |
| Wava phi na ngocwa (Khetha ibhokisi) Ekhaya Abahlobo Esikolweni Koo-Mabanokak Okunye |   |                                    |



| 7.  | Ulufumana phi ucwangciso olus (Khetha ibhokisi)                  | sebenzisayo? |  |
|-----|--|--------------|--|
|     | Ekhaya<br>Esikolweni<br>Ekliniki/Ku-Gqirha<br>Abahlobo<br>Okunye |              |  |
|     |  |              |  |
| 8.  | Ikhondom zifumaneka lula<br>(Khetha ibhokisi)                    |              |  |
|     | Ndivuma kakhulu<br>Ndiyavuma                                     |              |  |
|     | Andivumi   |              |  |
|     | Andivumi kwaphela  |              |  |
| 9.  | Ipilisi yocwangciso ifumaneka l<br>(Khetha ibhokisi)             | ula          |  |
|     | Ndivuma kakhulu  |              |  |
|     | Ndiyavuma  |              |  |
|     | Andivumi   |              |  |
|     | Andivumi kwaphela  |              |  |
| 10. | Inaliti yocwangiciso ifumaneka                                   | lula         |  |
|     | (Khetha ibhokisi)  |              |  |
|     | Ndivuma kakhulu  |              |  |
|     | Ndiyavuma  | $\vdash$     |  |
|     | Andivumi   | $\vdash$     |  |
|     | Andivumi kwaphela  |              |  |
| 11. | Ubunangaphi ukuqala kwakho                                       | ukulalana?   |  |
|     | (Chaza iminyaka)   |              |  |

| 12. | Wawukhe wanyanngelwa igcushuwa? (Khetha ibhokisi)   |
|-----|---|
|     | Ewe Hanyi   |
| 13. | Ingaba yenye yezizathu ezibangela ukuba ucwangcise? (Kheta ibhokisi)  |
|     | Ndiyalelwe ngabazali ukuba ndence njalo  Bonke abahlobo bam benza njalo  Ndiyalelwe ngutitshala  Ndibone kumabonakude  Okunye:  |
| 14. | Ingaba sesinye sezizathu ezibangela ukuba ungacwangcisi xa ulalana? (Khetha efanelekileyo)  |
|     | Bonke abahlobo bam benza njalo Ukulalana kubhetele ngaphandle kwekhondom Akululanga ukfumana ucwangciso Ucwangciso lubiza imali eninzi Kuchasene nenkolo yam Kuchasene nesiko lam Intombi yam/umfana akafuni ndicwangicse Bubuvuvu Andilwazi ucwangciso yintoni Ukunye: |
| 15. | Amabhinga odwa: Wawukhe wakhulelwa na? (Khetha ibhokisi)  Ewe Hanyi   |
|     | Enkosi!!  |

| Page

# **Addendum D**

#### Permission letter

Dear Sir/Madam

You are cordially invited to take part in a research project initiated by Dr Elmari de Klerk, a Masters student in Family Medicine at the University of Stellenbosch under the supervision of Dr Louis Jenkins.

The research project aims at determining the factors that influence the use of contraception amongst 16 year old adolescents attending high schools in George. We aim to improve the understanding regarding and use of contraceptives amongst these adolescents.

This study has been approved by the Health Research Ethics Committee at Stellenbosch University and will be conducted according to the ethical guidelines and principles of the International Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council Ethical Guidelines for research.

Your school has been randomly picked to take part in this research project. It will involve the 16 year old scholars in your school whose parents/guardians give consent to their participation. They will take part voluntarily and anonymously by filling out a questionnaire (please see attached).

The results of the analyzed data will be presented to the schools, health institutions and local authority for consideration in future endeavours concerning this current topic.

Your favourable consideration for participation in this project will be greatly appreciated.

Any queries regarding this matter will be answered to the best of our abilities.

Yours sincerely

Dr Elmari de Klerk

Cell nr: 0839889633

# Addendum E

#### Inligting aan die ouer/voog & toestemmingsvorm

#### Titel van die navorsingsprojek:

Die faktore wat die gebruik van voorbehoedmiddels bepaal/beinvloed onder 16 jarige tieners in hoerskole in George, Suid-Afrika

#### Verwysingsnommer:

N10/03/078

#### Navorser:

Dr E de Klerk George Provinsiale Hospitaal Davidsonweg George 6529 0839889633

U word uitgenooi om aan 'n navorsingsprojek deel te neem. Neem asseblief die tyd om die inligting rakende die projek te bestudeer. U is welkom om enige tyd die navorser te kontak indien enige iets onduidelik is of u enige ander vrae het. Dit is baie belangrik dat u tevrede is dat u alles vestaan rondom die navorsingsprojek. U deelname is heeltemal vrywillig. Daar sal geen negatiew gevolge wees as u besluit om u deelname van die hand te wys nie. U is welkom om op enige stadium van die proses te onttrek as u so voel.

Hierdie studie is goedgekeur deur die Etiese Komitee vir Navorsing by die Universiteit van Stellenbosch. Dit word volgens die etiese riglyne van die Internasionale Verklaring van Helsinki, Die Riglyne vir Goeie Kliniese Praktyk van Suider Afrika en die Mediese Navorsingsraad se etiese riglyne vir navorsing gedoen.

#### Wat behels die navorsingsprojek?

Die doel van die navorsing is om uit te vind watter faktore bepaal/beinvloed die gebruik van voorbehoedmiddels onder 16 jarige tieners in hoerskole in George. Die inligting wat ons uit hierdie projek gaan kry, sal ons in staat stel om beter te verstaan hoe die tieners dink en voel oor voorbehoedmiddels. Ons beoog om die inligting op 'n positiewe wyse in te span om die tieners in staat te stel om besluitneming rondom hierdie belangrike saak volwasse aan te pak en sodoende 'n beter toekoms vir hulself te verseker. Hierdie studie beoog om uitgevoer te word by vier ewekansige gekose hoerskole in George. Alle leerders wat 16 jaar oud is sal ingesluit word by die steekproef. Deelname is onderworpe aan toestemming van die ouer/voog asook die deelnemer. Deelname behels die vrywillige voltooiing van 'n vraelys wat streng anoniem hanteer sal word regdeur die hele

proses. Ons beoog om terugvoer aan die deelnemende skole asook die plaaslike gesondheidsowerhede te gee met die doel om die tieners se lewens te verbeter.

#### Hoekom is jy uitgenooi om deel te neem?

Jy is 16 jaar oud, woon 'n hoerskool by wat in George gelee is. Jou opinie is belangrik vir ons.

#### Wat is jou verantwoordelikhede?

Beantwoord die vraelys eerlik en opreg, heeltemal vrywillig met toestemming van jou ouer/voog.

#### Hoe trek jy voordeel uit hierdie projek?

Die uitkoms van die studies al die owerhede vergewis van jul opinie aangaande die belangrike onderwerp van voorbehoedmiddels. Hierdie inligting kan 'n belangrike rol speel in toekomstige besluitneming rakende hierdie belangrike saak en sodoende jul lewe raak.

#### Is daar enige risiko's verbonde aan jou deelname?

Daar is geen gesondheidsrisiko's verbonde aan jou deelname nie.

#### Wat gebeur as ek nie wil deelneem nie?

Deelname is heeltemal vrywillig. Daar sal geen negatiewe gevolge wees as jy nie deelneem nie. Onttrekking op enige stadium van die proses is moontlik.

#### Verklaring van deelnemer:

Ek, die ondergetekende, stem hiertoe in dat my kind/die kind in my sorg deel kan neem aan die navorsingsprojek: Die faktore wat die gebruik van voorbehoedmiddels bepaal/beinvloed onder 16 jarige tieners in hoerskole in George, Suid Afrika.

#### Ek verklaar dat:

- Ek het die inligting aangaande die projek gelees en verstaan dit.
- Ek is geleenthede gegun om enige onduidelikhede uit te klaar.
- Ek verstaan dat deelname heeltemal vrywillig is.
- Ek verstaan dat ek enige tyd myself kan onttrek van die projek sonder enige negatiewe gevolge.

| Geteken te (plek)          | op (datum)      | 2011      |
|----------------------------|-----------------|-----------|
|                            |                 |           |
|                            |                 |           |
|                            |                 |           |
|                            |                 | •         |
| Handtekening van deelnemer | Hantekening van | ouer/voog |

# Addendum F

#### PARTICIPANT INFORMATION LEAFLET AND ASSENT FORM

#### TITLE OF THE RESEARCH PROJECT:

The factors that influence the use of contraception amongst 16 year old adolescents attending high schools in George, South Africa.

#### **REFERENCE NUMBER:**

N10/03/078

#### **PRINCIPAL INVESTIGATOR:**

Dr Elmari de Klerk

ADDRESS:

**Davidson Road** 

George

6529

#### **CONTACT NUMBER:**

0839889633

You are being invited to take part in a research project. Please take time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary, with the permission of your parents/guardian** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee at Stellenbosch University** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

#### What is this research study all about?

This study will be conducted in high schools in the town of George amongst 16 year olds. Four schools will be selected randomly and all adolescents born in 1994 will be invited at every site to make a study population of at least two hundred adolescents.

The aim of this project is to find out what factors influence the use of contraceptives amongst 16 year old adolescents that attend high schools in the town of George. We aim to improve the understanding regarding and use of contraceptives. With this information we would like to be able

to improve the adolescent's knowledge to enable them to make informed and educated choices to improve their future.

The data will be collected with a questionnaire in an anonymous way and all the data will be treated anonymously throughout the process. After the data has been analyzed, feedback will be given to the schools health institutions and the local authority regarding the outcome with the sole purpose to improve the adolescent's lives.

#### Why have you been invited to participate?

You are 16 years old and live in the town of George and this study would value your input.

#### What will your responsibilities be?

Only to answer the questionnaire presented to you truthfully, anonymously and **totally voluntarily** with the permission of your parents/guardians.

#### Will you benefit from taking part in this research?

The outcome of this study will eventually benefit you, the participant, as it would give the authorities your collected views on a very current issue.

#### Are there in risks involved in your taking part in this research?

There is no health risks involved in your taking part.

#### If you do not agree to take part, what alternatives do you have?

Participation is TOTALLY voluntary. You can opt out at any stage of the process.

#### **Declaration by participant**

| By signing below, I   | . agree that I voluntarily want to take part in a |  |
|---|---|--|
| research study entitled: The factors that influer               | nce the use of contraception amongst 16 year      |  |
| old adolescents attending high schools in George, South Africa. |   |  |

#### I declare that:

- I have read this information and consent form
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.

| Signature of participant      | Signature o | f witness |
|-------------------------------|-------------|-----------|
|                               |             |           |
|                               |             |           |
|                               |             |           |
|                               |             |           |
|                               |             |           |
|                               | •           |           |
| Signed at ( <i>place</i> ) on | (date)      | 2011.     |
|                               |             |           |