KNOWLEDGE AND UTILIZATION OF CONTRACEPTION AMONGST TEENAGERS ATTENDING AN URBAN INDIAN GENERAL PRACTICE

Submitted in partial fulfillment of the requirements for the Degree of Master of Family Medicine

in the Department of Community Health University of Natal

Prakash Jugnundan

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"If I could get up to the Highest Place in Athens, I would lift up my voice, and ask the citizens why they are turning every stone to scrape wealth together, yet taking so little care of their children, to whom they must relinquish all."

Socrates
SUMMARY

During the six month period June to December 1990, 300 Indian teenagers attending the urban general practice of the researcher were interviewed.

Data pertaining to age, sex, knowledge and utilization of contraceptives were recorded.

The results showed that the majority of teenagers (57%) had a good knowledge of contraceptives. Utilization, however remained low. Most (56%) knew where their local Family Planning Clinic was, but only a small percentage (15%) attended.

Recommendations directed towards implementing increased utilization of various contraceptive methods and decreasing teenage pregnancies are submitted.
CHAPTER 1
INTRODUCTION

The devastating affects of teenage pregnancy in South Africa and Internationally is of great concern.\textsuperscript{1}

A recent African study showed that of all patients admitted to hospital for illegal abortions between 1985-1988, 72\% were teenagers.\textsuperscript{2}

In the United States more than 50\% of teenagers have engaged in sexual activity by the age of 18\textsuperscript{3} with an alarming teenage pregnancy rate of >1 million/year.\textsuperscript{4}

Our urban Indian general practice also sees many pregnant teenagers. Thus this current study was undertaken to ascertain whether the knowledge and utilization of contraceptives, one of the major factors related to teenage pregnancies, was deficient. However, only by taking into consideration all the factors in this multifactorial problem, and by acting with imagination and compassion, can we have hopes for a less troubled future.
CHAPTER 2
OBJECTIVES

The purpose of the study was to determine the knowledge and utilization of contraception amongst teenagers attending an urban Indian general practice.

1. To determine in respect of teenagers -
   i. their knowledge of contraception and where the knowledge was acquired.
   ii. the contraceptive methods used.
   iii. the place of acquisition of contraceptives.

2. To make recommendations where appropriate to combat the rising teenage pregnancy rate.
CHAPTER 3

DEFINITION OF CRITERIA

1. **Urban Indian General Practice.** The researchers practice located at Springfield, Durban was utilized.

2. **Teenagers.** All attenders to the practice between the ages of 13-19 years were included.

3. **Contraceptive methods.**
   a. **Natural**
      - abstinence
      - rhythm
      - coitus interfemoris
      - coitus interruptus
      - breast feeding
   b. **Barrier**
      - condom
      - cap, foams, douche
   c. **Clinical**
      - oral contraceptive pill
      - injections
      - intra-uterine contraceptive device (IUCD)
      - post-coital (pill/IUCD)
CHAPTER 4

REDUCTION OF BIAS

1. **Interviewing.** All interviews were conducted by the researcher.

2. **Adherence to research protocol.** A standard collation sheet was used throughout the study for collection of data.

3. **Sampling.** Sampling error was eliminated by the inclusion in the sample of all attenders who met the criteria for inclusion.
1. The study was conducted over a six month period at the practice of the researcher.
2. All teenagers during the study period were requested to participate.
3. No teenagers completed the questionnaire more than once.
4. Three hundred teenagers (150 males : 150 females) were interviewed.
5. Confidentiality and anonymity was assured.
6. Data was collected and recorded on a standardized questionnaire which had been piloted previously.
7. The questionnaire included only fixed response questions.
CHAPTER 6
LIMITATIONS OF THE STUDY

1. The study period was short (6 months).
2. The total number of subjects interviewed was small (300).
3. The questionnaire included only fixed response questions.
4. Objectivity of answers was not guaranteed.
5. It cannot be inferred that subjects are representative of the community.
6. The questionnaire was limited to only one aspect of the multiple factors associated with teenage pregnancies.
Knowledge of contraceptive methods in Indian teenagers.

Out of the total of 300 teenagers interviewed, 171 (57%) had some knowledge of contraception. More females (66%) as opposed to males (48%) had knowledge of contraception (Table 1, Figure 1).

FIGURE 1. Knowledge of contraception in Indian teenagers attending an urban Indian general practice.

Knowledge related to age.

Knowledge of contraception increased with the increasing age of teenagers. In the 13-14 year age group 12 (21%) and 9 (25%) for males and females respectively as compared to 36 (80%) and 60 (87%) for males and females in the 17-19 year age group (Table 2, Figure 2).
Knowledge of contraceptive methods in Indian teenagers.

These results are presented in Table 3, Figure 3a and 3b. Knowledge of methods increased with age. In the 13-14 year age group the commonest method known by females was the 'pill' (78%), while in the males it was barrier methods (75%). In the other two age groups, i.e. 15-16 and 17-19 years, the methods more commonly known were the oral contraceptive pill, barrier and natural (Table 3, Figures 3a and 3b).
FIGURE 3a Knowledge of contraceptive methods in male Indian teenagers attending an urban Indian general practice.

FIGURE 3b Knowledge of contraceptive methods in female Indian teenagers attending an urban Indian general practice.
Source of contraceptive knowledge.

Most contraceptive knowledge among male teenagers was gained from the media and books, 36(50%), while in the female group most knowledge was gained from their friends, 39(39%) (Table 4, Figure 4).

FIGURE 4  Source of contraceptive knowledge amongst 171 Indian teenagers attending an urban Indian general practice.
Preferred source of contraceptive knowledge.

The majority of teenagers, 47(33%), preferred the medical staff to discuss contraceptives with them. Twenty-five percent preferred the Family Planning Clinic, while 14% preferred schools and 11% wanted their parents to educate them on contraceptives (Table 5, Figure 5).

Contraceptive methods utilized.

The majority of males, 20(56%) and females, 16(27%), utilized barrier methods for contraception. Seventeen percent of males and females utilized some form of natural contraception, while 8(13%) of females utilized the oral contraceptive pill (Table 6).
Source of obtaining contraceptives.

Most males got their contraception from the pharmacist, 36(60%), whilst females obtained it from medical staff 18(33%); Family Planning Clinic 12(22%), supermarkets 8(16%) and the pharmacy 10(18%) (Table 7, Figure 7).

FIGURE 6. Source of obtaining contraceptives amongst Indian teenagers attending an urban Indian general practice.
OBJECTIVES

Knowledge of contraception.

The devastating effects of teenage pregnancy is well known. However, some 60% of first sexual experiences amongst youngsters are still unprotected.

In this study, knowledge of the various contraceptive methods was uniformly high in all age groups. More than 60% of females and 55% of males had knowledge of at least one method. Eighty percent of females had known of the oral contraceptive pill with more than 50% of both males and females knowing of some traditional contraceptive method.

Despite these figures we continue to see a large number of pregnant teenagers at our practice. A series gap thus exists in research and education concerning adolescent decision-making.

There seems to be no direct correlation between teenage knowledge of contraception and utilization of contraceptives. This trend has been shown in other studies. Turner showed that although 98% of Egyptian women knew of at least one contraceptive method, less than 57% had ever used one method.

In Ujah's (1991) study, although 88.8% of females (57% students) had knowledge of contraception, less than half used any method. Sixty-three percent had some sexual experience before the age of 18 and 54.5% had a history of previous termination of pregnancy.

Other International studies produced similar results.
Waldo Fielding et al. (1983) showed that although only 2.2% of patients had no knowledge of contraception, 55.7% had not used any type of contraception prior to an unwanted conception and of this group 71.6% were teenagers.

Locally, Pick (1990) showed in Cape Town that of all teenagers interviewed only 20% had used some form of contraception. He also showed that socio-economic status had no relationship with either the use or non-use of contraception, or with the method used. Mathews et al. (1990) showed similarly in 4 Cape Town schools that of all sexually active students only 11.4% had ever used a condom. All teachers thus needed to be trained to convey the 'right' message.

**Source of contraceptive knowledge.**

The majority of teenagers acquired their knowledge of contraceptions from friends and the media; 33% + 31% respectively.

In Wavers study (1990) 63% received their information on family planning from the media, 30% from clinics and 29% from friends. Most teenagers preferred to receive their knowledge from medical staff (33%) and Family Planning Clinics (25%). It is therefore important for the doctors to communicate well and develop an open and non-judgmental relationship with teenagers concerning contraception and sexuality.

The general practitioner is becoming increasingly involved in health education and practical preventative medicine like contraception.

In the last decade there has also been a large increase in family planning provisions by the general practitioners. It is important therefore for the clinics and general practitioners to work together, imparting the same messages to sexually active teenagers. This is because they tend to move between clinics and general practitioners whilst taking a functional view of the
various services offered. It is important that while only 2% acquired knowledge from their parents, 11% preferred them to be their educators. It is possible that because of the conservative Indian culture and traditions most parents choose not to educate their children on sexuality and contraception.

Chelala (1990)\(^{17}\) showed that when parents are more involved with their children and have better communication with them, there is a delay in the initiation of sexual activity among teenagers.

Contraceptive knowledge from schools was less than 5%. This is because Government Departments are hesitant to include controversial formal sex education classes into their curriculum. It is also very important that all teachers be trained to convey the 'right' messages.

It takes more than just giving teenagers instruction. Education must be a two-way process and should enable them to make choices about their lifestyle, based on an awareness of the full implications of early sexual activity.

To achieve this, effective communication channels and an element of counselling should be used. Individual and small group counselling is usually the most effective way of changing peoples behaviour. Talks should be interesting with visuals and messages should be chosen carefully without using fear.

Teenagers are also familiar with computers and video games and consider computer-assisted instruction a logical extension for learning. Computer-assisted instructions can be therefore a useful intervention tool to most teenage pregnancies.\(^{18}\)

All these strategies could be incorporated into the campaign against AIDS in South Africa, which aims to make all children AIDS-literate by the time they reach secondary school.\(^{19}\)
Contraceptive methods utilized.

The commonest contraceptive methods used were barrier methods, viz. condoms.

This is probably because of the recommendations of friends and the easy availability of condoms.

Bledin et al. (1984) referred to the importance of personal recommendations of relatives, friends and workmates as sources of information for contraceptives. Durant & Jay suggest that the frequency of sexual intercourse is the initiator variable in the adolescent's decision process to use or not to use contraception. They suggest that if the women believes her sexual activity will not result in pregnancy or that the probability of pregnancy is quite low, she will not be compliant with her birth control. Abstinence was a positive choice for some teenagers. With the advent of AIDS this method should be reinforced and encouraged by health care providers and where this is not the choice appropriate contraceptive options should be offered.

Contraceptive sources.

Most teenagers obtained their contraceptives from the pharmacist (40%), 20% from doctors, 15.9% from friends, 15.9% from Family Planning Clinics and 7% from supermarkets.

Since data indicate that most teenagers exposed to contraceptive information are not making use of their knowledge, easy accessibility to contraceptive methods should be promoted.

Analysis by the World Fertility Survey in seven developing countries has shown that knowledge of a family planning outlet is significantly and positively related to an increase in contraceptive use. Rodrigues also showed that greater availability and accessibility of family planning services was associated with an increased use of contraception, independent of education and urban residence. The Netherlands has the lowest incidence of teenage pregnancies (14:1000) as compared to England (45:1000) and the United States (96:1000).
because of their acceptance of the reality of adolescent sexuality, formal and informal sex education and easily accessible contraceptive services.¹

In our study (Table 8) only 15.0% attended the local Family Planning Clinic for their contraceptives. Pick²³ in Cape Town, also showed that teenagers were poor attenders at the local Family Planning Clinic. Zelnik & Shah²³ found that only a small number of teenagers used any method of contraception on first coitus and even in the relatively few who did plan a method of contraception, more than two thirds of them depended on their partner to provide the method. It is thus important that in reaching out to teenagers we start out at where they are, eg. cinemas, pop festivals (AIDS bus) etc.

It is very unfortunate that contraceptives are not often available to those who need them most, which includes teenagers in all parts of the world who are presently at the storm-centre of a transition in sexual behaviour.²⁴
CHAPTER 9
CONCLUSIONS

Teenage pregnancy is an important condition in the urban general practice of the researcher. This phenomenon appears not to be due to a lack of contraceptive knowledge; as data indicated that more than half the teenagers exposed to contraceptive information were not making use of their knowledge.

This, apathetic behaviour is probably related in part to the inherent confusion in adolescence itself in which nature authorizes what society forbids. The gap between sexual and social adulthood is increasing so it seems almost inevitable that teenage sexual activity outside marriage will increase.

With the advent of serious sexually transmitted diseases, like human papilloma virus and human immunodeficiency virus, the time has come to mount a major and urgent campaign to alter this trend of teenage behaviour.

The Government and communities must recognize the adverse complications associated with illegal abortions and auto-immune deficiency syndrome and formulate rational policies that would accelerate reproductive health education and encourage the use of modern contraceptives.

While it is important for doctors to point out the possible medical sequelae of sexual activity at an early age, the contribution of others in society are even more important when it comes to prevention of teenage pregnancies.
CHAPTER 10

RECOMMENDATIONS

1. Education should be geared towards changing social attitudes and values.

2. Sex education should be introduced into the school curriculum. Students are about to take important decisions about lifestyle, including sexual behaviour, thus they should be educated to adopt and maintain healthy behaviour patterns that eliminate the risk of becoming pregnant or HIV infected.

3. Contraceptives should be made available at schools. A teenage pregnancy is a greater health hazard than any family planning agent.

4. A health promotion nurse should be employed at schools to ensure that all sexually active students are counselled and are using their necessary sex education and contraceptives.

5. Health care professionals and mass media should encourage condom usage.

6. The media should fulfill its important social responsibility. They should ensure that messages meant to be received by teenagers are presented factually and are relevant to their health priorities.

7. Teenage Family Planning Clinics should be started where appropriate.

8. The training sessions for all health care providers should be modified to emphasize more strongly the importance of providing value-neutral family planning services.

9. Parents should be educated on teenage sexuality and contraceptive use. This can be achieved at work, University, local doctors, media, etc.

10. Parents must be encouraged to discuss sex freely with their children.

11. Parents should reinforce abstinence as a positive choice, but where necessary make contraceptives available at home, rather having a safe sexually active child than a pregnant or HIV positive child.
12. Traditional cultural attitudes should be addressed and religious institutions asked to adopt a more tolerant standpoint.

13. Opportunities of work, sport and art should be available to teenagers to redirect their creative energies.

14. A sense of responsibility in respect of making sexual decisions should be engendered to all teenagers through comprehensive education by schools, media, peer groups, parents and all health care professionals.
### TABLE 1.

<table>
<thead>
<tr>
<th>SEX</th>
<th>NUMBER (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>150 72 (48%)</td>
</tr>
<tr>
<td>Female</td>
<td>150 99 (66%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>300 171 (57%)</td>
</tr>
</tbody>
</table>

Knowledge of contraception in Indian teenagers attending an urban Indian general practice (number and percentage).

### TABLE 2.

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nil</td>
<td>yes</td>
</tr>
<tr>
<td>13-14 years</td>
<td>45(79%)</td>
<td>12(21%)</td>
</tr>
<tr>
<td>Male (n=57)</td>
<td>Female (n=36)</td>
<td></td>
</tr>
<tr>
<td>15-16 years</td>
<td>24(50%)</td>
<td>24(50%)</td>
</tr>
<tr>
<td>Male (n=48)</td>
<td>Female (n=45)</td>
<td></td>
</tr>
<tr>
<td>17-19 years</td>
<td>09(20%)</td>
<td>36(80%)</td>
</tr>
<tr>
<td>Male (n=45)</td>
<td>Female (n=69)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>78(52%)</td>
<td>72(48%)</td>
</tr>
</tbody>
</table>

Knowledge of contraception in 300 Indian teenagers related to age (number and percentage).
TABLE 3  
Knowledge of contraceptive methods in Indian teenagers attending an urban Indian general practice (number and percentage).

<table>
<thead>
<tr>
<th>METHOD</th>
<th>AGE GROUP (YEARS)</th>
<th>(13-14)</th>
<th>(15-16)</th>
<th>(17-19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>n=</td>
<td>(12)</td>
<td>(9)</td>
<td>(24)</td>
<td>(30)</td>
</tr>
<tr>
<td>Natural</td>
<td>06(50%)</td>
<td>05(56%)</td>
<td>12(50%)</td>
<td>16(53%)</td>
</tr>
<tr>
<td>Barrier</td>
<td>09(75%)</td>
<td>03(33%)</td>
<td>17(71%)</td>
<td>20(67%)</td>
</tr>
<tr>
<td>Mechanical</td>
<td>02(17%)</td>
<td>03(33%)</td>
<td>05(21%)</td>
<td>10(33%)</td>
</tr>
<tr>
<td>Oral</td>
<td>05(42%)</td>
<td>07(78%)</td>
<td>19(79%)</td>
<td>26(87%)</td>
</tr>
<tr>
<td>Injection</td>
<td>02(17%)</td>
<td>02(22%)</td>
<td>03(12.5%)</td>
<td>08(27%)</td>
</tr>
<tr>
<td>Post-coital</td>
<td>0</td>
<td>01(11%)</td>
<td>03(12.5%)</td>
<td>06(20%)</td>
</tr>
</tbody>
</table>

TABLE 4  
Source of contraceptive knowledge amongst Indian teenagers attending an urban Indian general practice (number and percentage).

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>18(25%)</td>
<td>39(39%)</td>
<td>57(33%)</td>
</tr>
<tr>
<td>Books/media</td>
<td>36(50%)</td>
<td>18(18%)</td>
<td>54(31%)</td>
</tr>
<tr>
<td>Schools</td>
<td>03(04%)</td>
<td>06(06%)</td>
<td>09(05%)</td>
</tr>
<tr>
<td>Parents</td>
<td>0</td>
<td>03(03%)</td>
<td>03(02%)</td>
</tr>
<tr>
<td>Family planning clinic</td>
<td>06(08%)</td>
<td>09(09%)</td>
<td>15(09%)</td>
</tr>
<tr>
<td>Medical staff</td>
<td>09(13%)</td>
<td>21(21%)</td>
<td>30(18%)</td>
</tr>
<tr>
<td>Partner</td>
<td>0</td>
<td>03(03%)</td>
<td>03(02%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>72(100%)</td>
<td>99(100%)</td>
<td>171(100%)</td>
</tr>
</tbody>
</table>
TABLE 5  Preferred source of knowledge on contraception amongst Indian teenagers attending an urban Indian general practice (number and percentage).

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>06(08%)</td>
<td>03(03%)</td>
<td>09(05%)</td>
</tr>
<tr>
<td>Books/media</td>
<td>15(21%)</td>
<td>06(06%)</td>
<td>21(12%)</td>
</tr>
<tr>
<td>Schools</td>
<td>12(17%)</td>
<td>12(06%)</td>
<td>24(14%)</td>
</tr>
<tr>
<td>Parents</td>
<td>06(08%)</td>
<td>12(12%)</td>
<td>18(11%)</td>
</tr>
<tr>
<td>Family planning clinic</td>
<td>06(08%)</td>
<td>36(36%)</td>
<td>42(25%)</td>
</tr>
<tr>
<td>Medical staff</td>
<td>27(38%)</td>
<td>30(30%)</td>
<td>57(33%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>72(100%)</td>
<td>99(100%)</td>
<td>171(100%)</td>
</tr>
</tbody>
</table>

TABLE 6  Contraceptive methods utilized by 171 Indian male (n=72) and female (n=99) teenager according to age and gender (number and percentage).

<table>
<thead>
<tr>
<th>METHOD</th>
<th>(13-14)</th>
<th>(15-16)</th>
<th>(17-19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male (12)</td>
<td>Female (9)</td>
<td>Male (24)</td>
</tr>
<tr>
<td>Natural</td>
<td>0</td>
<td>0</td>
<td>03(13%)</td>
</tr>
<tr>
<td>Barrier</td>
<td>0</td>
<td>0</td>
<td>05(21%)</td>
</tr>
<tr>
<td>Mechanical</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oral</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Injection</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Post-coital</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### TABLE 7
Source of obtaining contraceptives amongst Indian teenagers attending an urban Indian general practice (number and percentage).

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>12(20%)</td>
<td>06(11%)</td>
<td>18(16%)</td>
</tr>
<tr>
<td>Medical staff</td>
<td>06(10%)</td>
<td>18(33%)</td>
<td>24(21%)</td>
</tr>
<tr>
<td>Family planning clinic</td>
<td>06(10%)</td>
<td>12(22%)</td>
<td>18(16%)</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>36(60%)</td>
<td>10(18%)</td>
<td>46(40%)</td>
</tr>
<tr>
<td>Supermarket</td>
<td>0</td>
<td>08(16%)</td>
<td>08(07%)</td>
</tr>
</tbody>
</table>

### TABLE 8
Knowledge of location and visits to the local Family Planning Clinic amongst Indian teenagers attending an urban Indian general practice (number and percentage).

<table>
<thead>
<tr>
<th>FAMILY PLANNING CLINIC</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of location</td>
<td>50(69%)</td>
<td>46(46%)</td>
<td>96(56%)</td>
</tr>
<tr>
<td>Visited</td>
<td>12(16%)</td>
<td>14(14%)</td>
<td>26(15%)</td>
</tr>
</tbody>
</table>
REFERENCES


8. Turner R. Contraceptive knowledge and use. Int F P Perspectives Digest 1990:16(3);116-118.


Many thanks are due to the following people, whose help was essential in completing this thesis.

Dr. S.R. Ramkissoon, for permission to use his practice. Dr. K. Naidoo and Dr. A. Ramkissoon for their guidance throughout the project. Ms. Eleanor Conner for typing the manuscript, and finally most of all, thanks to all those teenagers who participated in this study.
APPENDIX A
PROTOCOL

DR. PRAKASH JUGNUNDAN
M PRAX MED (PART 2)

PURPOSE: TO DETERMINE THE KNOWLEDGE AND UTILIZATION OF CONTRACEPTION AMONGST TEENAGERS ATTENDING AN URBAN INDIAN GENERAL PRACTICE.

OBJECTIVES:
1. TO DETERMINE AMONGST TEENAGERS:
   a. Their knowledge of contraception and where the knowledge was acquired.
   b. The methods used.
   c. The place of acquisition of contraceptives.

2. TO MAKE RECOMMENDATIONS APPROPRIATE TO IMPROVING THE KNOWLEDGE OF CONTRACEPTION AND UTILIZATION IN TEENAGERS THAT ARE SEXUALLY ACTIVE.

DEFINITIONS:
1. TEENAGERS 13-19 years.

2. CONTRACEPTION
   a. Natural: Abstinence (no sex)
      Rhythm (safe period)
      Coitus interruptus (withdrawal)
      Coitus interfemoris
      Breast feeding
   b. Barrier: Condom (FL)
      Diaphragm (Cap)
      Spermicides (Foam)
   c. Mechanical: IUCD (loop)
   d. Oral: Pill
   e. Injection: Depo Provera
   f. Post-coital: Pill
      IUCD

Urban Indian general practice - the practice located at 283 Quarry Road, Springfield, Durban.
REDUCTION OF BIAS
INTERVIEWEE: All teenagers attending the practice will be included.
INTERVIEWER: All interviews to be conducted personally by the researcher.

METHOD OF DATA COLLECTION
1. Standard precoded questionnaire (see Annexure B).
3. Informed consent will be acquired from all teenagers.

APPRAISAL OF LITERATURE
This will be on-going throughout the study period.

COLLATION AND EVALUATION OF DATA
This will be done using a computer by the researcher.

PUBLICATION OF FINDINGS
A dissertation in partial fulfillment of the M Prax Med will be submitted to the University of Natal.
An article suitable for publication will be submitted to a scientific journal.

TIME BARRIERS
1. Completion of protocol 30.05.90
2. Pilot study 01.06.90
3. Collection of data 02.06.90-31.12.90
4. Collation of data 15.01.91
5. Analysis of data 30.01.91
6. Completion of research report 28.02.91
7. Submission of paper 15.03.91
APPENDIX B

CONFIDENTIAL QUESTIONNAIRE

PLEASE TICK ANSWERS:

AGE: 13-14; 15-16; 17-19
SEX: M/F

DO YOU HAVE ANY KNOWLEDGE ON CONTRACEPTION/FAMILY PLANNING?

YES/NO

IF YES PLEASE CONTINUE
IF NO PLEASE STOP

A. DO YOU HAVE ANY KNOWLEDGE OF THE FOLLOWING CONTRACEPTIVE METHODS?

<table>
<thead>
<tr>
<th>Method</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>NATURAL</td>
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<tr>
<td>Abstinence (No Sex)</td>
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<tr>
<td>Rhythm (Safe Period)</td>
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<tr>
<td>Coitus Interrupts (Withdrawal)</td>
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<tr>
<td>Coitus Interfemoris</td>
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<tr>
<td>Breast Feeding</td>
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<tr>
<td>BARRIER</td>
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<tr>
<td>Condom (FL)</td>
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<tr>
<td>Diaphragm (Cap)</td>
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<tr>
<td>Spermicides/Foam</td>
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<tr>
<td>MECHANICAL</td>
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<td>IUCD</td>
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<tr>
<td>Loop</td>
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<td>ORAL</td>
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<tr>
<td>Pill</td>
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<tr>
<td>Injections (Depo)</td>
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<tr>
<td>Post Coital: Pill</td>
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<tr>
<td>'IUCD.</td>
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</tbody>
</table>

B. WHERE DID YOU GAIN MOST OF YOUR KNOWLEDGE OF CONTRACEPTION FROM?

PLEASE TICK ONE BOX

1. Friends/Peers ( )
2. Books/Media/TV/Papers, Etc ( )
3. Schools ( )
4. Parents ( )
5. Family Planning Clinics ( )
6. Medical Staff, Doctors, Nurses, Etc ( )
7. Other - Please Specify ( )
C. FROM WHOM/WHERE WOULD YOU LIKE TO GAIN YOUR KNOWLEDGE ABOUT CONTRACEPTION:

1. FRIENDS/PEERS ( )
2. BOOKS/MEDIA/TV/PAPERS, ETC ( )
3. SCHOOLS ( )
4. PARENTS ( )
5. FAMILY PLANNING CLINICS ( )
6. MEDICAL STAFF, DOCTORS, NURSES, ETC ( )
7. OTHER - PLEASE SPECIFY ( )

D. HAVE YOU USED ANY OF THE FOLLOWING CONTRACEPTIVE METHODS?

NATURAL:
- ABSTINENCE (NO SEX) ( )
- RHYTHM (SAFE PERIOD) ( )
- COITUS INTERRUPTS (WITHDRAWAL) ( )
- COITUS INTERFEMORIS ( )
- BREAST FEEDING ( )

BARRIER:
- CONDOM (FL) ( )
- DIAPHRAGM (CAP) ( )
- SPERMICIDES/FOAM ( )

MECHANICAL:
- IUCD (LOOP) ( )

ORAL:
- PILL ( )

INJECTIONS (DEPO):
- POST COITAL: PILL ( )
- IUCD ( )

E. FROM WHERE DO YOU OBTAIN YOUR CONTRACEPTIVES?

1. FRIENDS ( )
2. DOCTOR/HOSPITAL ( )
3. FAMILY PLANNING CLINIC ( )
4. PHARMACIST ( )
5. SUPERMARKET ( )
6. OTHER - PLEASE SPECIFY ( )
7. NOT APPLICABLE ( )

F. HAVE YOU EVER VISITED A FAMILY PLANNING CLINIC? (YES) (NO)

DO YOU KNOW WHERE YOUR LOCAL FAMILY PLANNING CLINIC IS? (YES) (NO)