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THESIS

Contraceptive Behavior in Young Women

Major Janine M. Saulpaugh

AFIT Student Attending: Arizona State University

AFIT/CI/CIA- 92-112

AFIT/CI  
Wright-Patterson AFB OH 45433-6583

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Janine M. Saulpaugh

Arizona State University

College of Nursing

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CHAPTER 1

Introduction

Teenage birth, abortion, and pregnancy rates in the United States are among the highest of the developed countries in the world. Although American adolescents are no more sexually active than teens in other developed countries, they are less likely than their counterparts in those countries to use effective methods of contraception (Jones et al., 1985). The reasons for less effective contraception in the adolescent are complex and multifactorial; however, a common contributing factor in teenage unintended pregnancy is delay in seeking contraceptive services (Zabin, Stark, & Emerson, 1991). This study will investigate the sexual and contraceptive behavior in young women and factors contributing to seeking professional contraceptive services.

Over one million teenage girls become pregnant in the United States each year. Recent statistics show the birth rate among teens in the U.S. is rising. In 1987, 1,014,620 teenagers became pregnant; 472,623 resulted in live births, 406,790 were aborted and the remainder were miscarriages or stillbirths. In 1988, teen

pregnancies resulting in live births rose from 472,623 to 488,941 (Center for Population Options, 1990).

Although most teenage pregnancies are unintended, the majority of new teen mothers will choose to keep their babies (Center for Population Options, 1990). Teens choosing motherhood will most likely endure lifelong economic and social consequences, such as less education, lower income, and greater dependence on public welfare.

The economic and social impact of teenage childbearing is far-reaching. For example in 1987, 70% of families maintained by mothers under age 25 lived below the poverty level. The projected 20 year public costs to support teenage families has increased from \$5.7 billion in 1987 to \$6.3 billion in 1989 (Center for Population Options, 1990). The costs of teenage childbearing extend far beyond those incurred by government; the family of a teenage parent is also at risk. Too-early childbearing initiates a cycle of poverty, low educational attainment, and dependence on public assistance. Teen mothers are less likely to complete high school than their peers who delay childbearing, which generally results in lower paying jobs with little chance for advancement. Additionally,

children of teenage mothers are more likely to experience cognitive delays, failure in school, behavioral problems, and to become a teen parent themselves than are children of older mothers (Brooks-Gunn & Furstenberg, 1986). Although these problems may be related to inadequate prenatal care, there has not been conclusive evidence of any single cause.

Subsequent pregnancies in adolescent parents are of particular concern. Although little research has been conducted in this area, the rates of subsequent pregnancies are reported to range from 30-58% within two years after the birth of the first child (Adams, 1990). Because two thirds of single adolescent parents live below the poverty level, second pregnancies in this group increase the likelihood of remaining on public assistance (Center for Population Options, 1990).

Prevention of unintended pregnancy has become a primary health concern in the U.S. Studies show the majority of unintended pregnancies are the result of misuse or failure to use contraceptives (Jones & Forrest, 1989). Zabin & Clark (1981) indicated many sexually active teenagers delay seeking contraceptive services for a variety of reasons and are subsequently

at increased risk of pregnancy. Obtaining professional contraceptive counseling on initiation of sexual activity is essential for reducing the risk of unintended pregnancy.

Health care providers play an important role in providing education and counseling for the family with adolescents. Nurses employed in adolescent and young adult health care settings should be prepared to provide patients and their parents, if appropriate, nonjudgemental support and information on sexual health issues. Adolescents and adults should be routinely queried on their sexual activity, and if sexually active, their understanding of contraception, the risks of pregnancy and of sexually transmitted disease should be ascertained.

#### Statement of Problem

Since many young women are becoming sexually active at an earlier age, there is a need to examine reasons women give for use or non-use of contraceptives (Hofferth, Kahn, & Baldwin, 1987). Therefore, the problem of this study is to describe young women's patterns of sexual activity and contraceptive behavior.

Additional research is necessary to better understand sexual and contraceptive behavior in the

adolescent as it relates to their developmental stage. This information is essential in the development of effective educational programs on pregnancy prevention in the teenager.

#### Statement of Purpose

The purpose of this study is to determine; 1) the sexual behavior in young women, (2) their patterns of contraceptive use, (3) the factors contributing to their seeking contraceptive clinic services and, (4) what variables influence contraceptive use.

#### Research Questions

What are the sexual behaviors as described by young women?

What are the patterns of contraceptive use in young women?

What factors contribute to young women seeking professional contraceptive services?

What are the variables that influence contraceptive use?

#### Conceptual Framework

Two models guide this research; the Contraceptive decision-making model developed by Luker (1975) and the career model developed by Lindemann (1974, 1977). The models explain two different aspects of contraceptive

behavior; the decision making process and the stage in a contraceptive career.

Luker (1975), in a study of 500 women age 14-44 years who were candidates for abortion, developed a decision making model based on contraceptive behavior. The model was derived from data collection during in-depth interviews of 50 women from the sample of 500 candidates for abortion. The underlying assumption of the study was that unwanted pregnancy was a consequence of contraceptive risk-taking behavior and a result of conscious decision-making.

The model assumes that individuals perceive options, then assign values to the options, select one option as preferable to another and then act to implement that option. The values assigned to perceived options are determined by weighing the costs and benefits of expected outcomes. Individuals will select the course which will maximize benefits and minimize costs (Luker, 1975).

In developing her decision making model, Luker organized the data from interviews into four categories; costs of contraception, benefits of pregnancy, probabilities of pregnancy, and probability of reversing the pregnancy. The first two categories



represent the components of cost/ benefit assessment.

In the first category, the costs of contraception were acknowledgement of sexual activity, accepting an active, decisive role in a relationship, and planning a sexual encounter. The benefits of pregnancy, the second category, were viewed as proof of femininity and fertility, a means of independence from parents, and a test of a partner's commitment.

Contraceptive risk-taking is based on the immediate costs of contraception and the anticipated benefits of pregnancy although the benefits are often outweighed by costs once pregnancy occurs. Women choosing cost-benefit options favorable to risk-taking in categories one and two, must then negotiate two other decision junctures identified as categories three and four: the probability of pregnancy and the probability of reversing pregnancy (Luker, 1975).

In the third category, Luker (1975) found the perceived probability of pregnancy to be low due to the subjects' uncertainty of becoming pregnant and their history of successfully avoiding pregnancy despite inconsistent contraceptive use. In addition, the immediate costs of contraception were considered to be greater than the long term costs of unintended

pregnancy.

The fourth category, the probability of reversing an unwanted pregnancy, was determined by the subjects' knowledge of the abortion option. Luker found nearly every woman interviewed to be informed about abortion through friends or acquaintances that had experienced safe and legal abortions. This observation increased the probability that most subjects were more likely to take contraceptive risks, perceiving the probability of reversal to be high (Luker, (1975).

Luker's model identified four categories in contraceptive decision-making in women who were candidates for abortion. The results could not be generalized to contraceptive behavior of women not seeking abortions, however, the categories of her model are consistent with aspects examined in current research on adolescent contraceptive behavior. In this study, categories one, two and three of the contraceptive decision making model will be examined.

The career model, according to Lindemann (1974, 1977), is from the sociology of occupations and describes an individuals movement through a system. In a contraceptive career, a women moves through stages of contraceptive behavior.

Lindemann (1974,1977) described a contraceptive career consisting of three stages; the natural stage, the peer prescription stage, and the expert stage. During the natural stage, intercourse is rare and unplanned. The woman does not see herself as a sexual being; therefore, she does not accept responsibility for sexual or contraceptive behavior. In the second stage, sexual activity increases and a moderate amount of responsibility is accepted. Non-prescriptive contraceptive use may be sporadic. There is reluctance to seek contraceptive advice outside an intimate circle of friends, which results in misinformation. As a woman becomes more comfortable with her sexuality, she enters the expert stage. She will seek professional contraceptive advice and is more likely to be compliant.

The career and decision models examine two different aspects of contraceptive behavior; the longitudinal process of practicing responsible contraception and the decision process at any point in time. The two models can be used to determine where the young woman is in relation to her sexual and contraceptive behavior.

## Operational Definitions

### Definition of Terms

Sexual Behavior. Actions regarding sexual intercourse. Sexual activity will be measured by responses on a questionnaire developed by Zabin and Clark (1981).

Contraceptive behavior. Actions taken prior to sexual intercourse to prevent conception, using either prescription or non prescription methods. Contraception will be measured by responses on a questionnaire developed by Zabin and Clark (1981).

## CHAPTER 2

### Review of Literature

The review of literature is divided into three sections: (1) sexual and reproductive behavior in young women, (2) impact of teenage childbearing, and (3) contraceptive use and family planning services. A review of each section will be included in the summary.

Sexual and reproductive behavior in young women.

Teenagers are becoming pregnant at the rate of over one million each year, and the vast majority of the pregnancies are unintended. Although the rate of sexual activity among American teenagers is comparable

to that of teens in other developed countries, the rate of pregnancy, abortion, and childbearing are much higher (Alan Guttmacher Institute, 1988). The reason for the high pregnancy rate in American teens appears to be less adequate contraception.

Contraceptive practice in the United States is directly related to age; the youngest adolescents are the least likely to use a method of contraception (Brooks-Gunn & Furstenberg, 1989). In addition, Miller and Moore (1990) identified a relationship between early onset of sexual activity and less effective contraceptive use, unintended pregnancy, and becoming a parent.

During the 1980's, there was a continued increase in the incidence of sexual intercourse among teens. Data show by age 15 approximately 25% of females have had sexual intercourse, and by age 19, 80% have had sexual intercourse. A comparison of data between 1982 and 1988 shows sexual activity among teenagers rose from 47% to 53% (Alan Guttmacher Institute, 1989).

Few teens have sex only once. In fact, more than two thirds have sexual intercourse within six months of their first experience (Moore & Peterson, 1989). About one in four sexually active adolescents does not use

contraceptives. This group accounts for 75% of all unintended teenage pregnancies, 50% of which occur in the first six months of sexual activity (Zabin, Kantner, & Zelnik, 1979).

The sexual and contraceptive histories of adolescents during their first family planning visits have been studied by several researchers. Mosher and Horn (1988) analyzed data collected from 1,533 women aged 15-24 from the National Survey of Family Growth to determine delays from first intercourse to first contraceptive clinic use. They found the median delay was 23 months for 73% of women surveyed. Zabin, Stark, and Emerson (1991) examined the reasons why 435 female teenagers delayed clinic utilization for contraception. They found the sample of teens perceived birth control as being dangerous to their health. Other important reasons included postponement until the relationship with their boyfriend became closer and the fear of parents knowledge of their contraceptive use. A similar study, conducted by Zabin and Clark (1981), surveyed 1,200 female teenagers during their first visit to an urban family planning clinic. Reasons cited for delay in seeking contraceptive services were fear of parents knowledge, fear of a pelvic exam and the belief that

birth control was dangerous to their health. Additionally, procrastination was frequently cited; however, the vagueness of the term caused the researchers to omit this response choice in the 1991 study.

Adolescents generally tend not to associate actions with consequences. They seem to have a feeling of invulnerability making them more prone to risk taking behaviors (Chilman, 1983). Gerrard, McCann and Geis (1983) found the willingness to take risks to be a common characteristic of women with unwanted pregnancies. Additionally, studies by Flick (1986), Gerrard et al., (1983), and Proctor, (1986) identified relationships between attitudes and achievements, and an increased risk for unplanned pregnancy. The group that was future oriented and achievement oriented used birth control more effectively and was at at lower risk for unplanned pregnancy. In contrast, teenage women with low socioeconomic status, low grades and low aspirations were at the greatest risk for unplanned pregnancy.

Peer and parental influence also play an important role in the sexual and contraceptive behavior of young women. Shah and Zelnik (1981) surveyed 2,139 women aged

15-19 regarding their views on premarital sex. They found that as teens transition from early to late adolescence, peers become an increasingly important reference group. For example, adolescent girls are more likely to have views on premarital sex similar to those of their peers rather than parents. Shah and Zelnick (1981) also found that sexually active young women influenced by friends are more likely to use effective methods of contraception, however, they tend to be inconsistent in their use. This behavior is consistent with the peer prescription stage of Lindemann's model of a contraceptive career.

Another factor influencing attitudes and behaviors during sexual maturation in the adolescent is their developmental stage. Holt and Johnson (1991) examined risky sexual behavior in the adolescent from a developmental task approach, using Erikson's developmental stage theory. Adolescent behavior as defined by Erikson (1963) is the developmental crisis of Identity versus Role Confusion. Adolescents tend to identify with "in groups," whose values may differ from their family's. As they form their identity, they must decide whether to assume the group values although it may violate their family values. Adolescents seek



independence from parents and achievement of adult identity by integrating gender and intellectual identity. A period of sexual experimentation generally precedes formation and acceptance of gender identity (Kastner, 1984). Kastner observed that teens using birth control more effectively are more likely to have accepted their sexuality.

A woman's acceptance of her sexuality is explained by Lindemann's (1974, 1977) contraceptive career model. Responsibility for sexual or contraceptive behavior gradually increases through three stages. Stage three, the expert stage, is demonstrated by the use of professional contraceptive services and compliance with effective contraceptive use.

The process of accepting one's sexuality, personalizing the possibility of pregnancy, negotiating contraception with a partner and repeating this behavior regularly is very complex for the adolescent. Cognitive and emotional development often lag behind their biological development (Miller & Moore, 1990). Although physically capable of sexual and reproductive behavior, teens may lack the cognitive and behavioral skills necessary to make responsible choices and understand long term consequences of their actions.

Teens gain the capacity for reflective thought; however, during times of stress, they may revert to concrete thinking, unable to consider pregnancy and its consequences. An example of this was reported by Zabin, Stark, and Emerson (1991). In their study, 435 junior and senior high school students were surveyed to determine reasons why they delayed using contraceptives. Younger adolescents frequently cited "too young to get pregnant" as a reason for delaying contraception; yet all of those sampled had reached menarche, and 83% knew this meant pregnancy could occur. Ninety three percent knew pregnancy could happen even if they had sex only once. As age and cognitive maturity increase, adolescents are better able to deal with conception and contraceptive issues (Cvetkovich & Grote, 1981).

The developmental abilities of the adolescent appear to be a key determinant in decision making regarding risky sexual behavior. Acceptance of one's sexuality and responsibility for contraception are developmental skills many adolescents have not yet acquired when sexual activity begins. The result, all too often, is pregnancy and parenthood.

Impact of teenage childbearing. Teenage childbearing

places a heavy burden on families and communities and contributes to our country's high rates of low birthweight and infant mortality. More than half of all pregnant teens delay seeking prenatal care or fail to obtain prenatal care contributing to poor health outcomes for their newborns (Center for Population Options, 1990).

Findings by Ketterlinus, Henderson, and Lamb (1990) suggest that young mothers who delay or do not receive prenatal care are at increased risk for premature delivery. Low birthweight, often associated with premature delivery, is the greatest health risk for infants born to teens. These infants are more likely to suffer neurological disabilities, congenital anomalies and chronic respiratory conditions (Frager, 1991). The long term consequences for children growing up in a low income household headed by a single teen parent, are high rates of school failure and behavioral problems (Center for Population Options, 1990).

The risk of living impoverished lives is high for families begun by teens. In 1987, 70% of families maintained by women under age 25 lived below the poverty level (Center for Population Options, 1990). The majority rely on federal and state governments to

provide support. A study by the Center for Population Options projected the 20 year public costs to support all teenage families started in 1989 would be \$6.35 billion. The costs included in the 20 year projection are the three major support programs, Aid to Families with Dependent Children (AFDC), Medicaid, and Food Stamps.

About 50% of all adolescent mothers, married or single, enroll in AFDC within four years after the birth of their first child. Among single adolescent mothers, the percent enrolled in AFDC is much higher at 75% (Brooks-Gunn & Chase-Lansdale, 1991). Each child born to a teen mother increases the burden of public support.

A number of multiple factors make it difficult for teen mothers to gain economic independence. For example, teen mothers are more likely to have lower educational levels which result in lower paying jobs and higher reliance on public assistance. Even those with high school diplomas confront obstacles of inadequate literacy and work skills, as well as difficulty finding and affording adequate child care. Certain factors such as poverty, poor intellectual ability, and low motivation increase the risk of

pregnancy. The result is a cycle of poverty for teen mothers and their children (Brooks-Gunn & Chase-Lansdale, 1991).

Clearly, the best prospect for breaking this cycle of poverty lies in preventing unintended teenage pregnancy. For the sexually active teenager, preventing pregnancy requires an understanding of contraception and adherence to contraceptive use.

Contraceptive use and family planning services.

Contraceptive behavior in the adolescent is a complex, multifactorial issue. Whitley and Schofield (1986) conducted a meta-analysis of 134 studies on adolescent contraceptive use and identified three general factors influencing contraceptive use in young women. One factor influencing contraceptive use was a critical level of psychosexual maturity; acceptance of oneself as a sexual being responsible for contraception. A second factor was the decision making process. Women weigh the advantages and disadvantages of contraceptive use against the risk of pregnancy. The process is influenced by the quality and amount of information they have concerning reproduction and contraception and by the opinions of their social support network. A third factor was the situation in

which intercourse took place. For example, unplanned and unprotected intercourse may take place in women not involved in an on-going relationship. Whitley and Schofield found that women's contraceptive use was positively related to the perceived risk of pregnancy, positive attitudes towards contraception, positive subjective norms reflected in partner and social support, and good problem solving skills. These factors influencing contraceptive use explain, in part, why many sexually active teenagers fail to consistently use contraceptives despite their widespread availability (Whitley & Schofield, 1986).

Recent studies show that more than one third of sexually active teenage females have engaged in risky sexual intercourse at some time (Center for Population Options, 1990). The Center for Population Options (1990) reported that 41% of 15-19 year old females surveyed reported using an ineffective method or no method of contraception at first intercourse. Additionally, 29% of 15-19 year old females surveyed reported failure to use an effective method or any method of contraception at last intercourse. Ineffective methods were identified as withdrawal, rhythm, or douching.

Teenagers who use effective methods of contraception most often use oral contraceptives. Sixty four percent of sexually active females age 15-19 practicing contraception rely on the pill, 21% rely on the condom, 6% use a diaphragm, and 1% use an IUD. The remaining 8% use other methods (Alan Guttmacher Institute, 1990).

Contraceptive method effectiveness, determined by rates of failure or conception, varies from couple to couple. Factors such as the frequency of intercourse and the likelihood of pregnancy for the female, whether long term or short term contraception is provided, the patient's ability to follow directions and their motivation to prevent pregnancy can affect reported rates of contraceptive failure. The rates provide only a general idea of the effectiveness of a particular method (Trussell, Hatcher, Cates, Stewart & Kost, 1990).

The lowest expected failure rates reported on the contraceptive methods available in the U.S. range from .04% for the subcutaneous implants to 9% for the rhythm method. The typical expected failure rates of the same methods based on the variables listed above, range from .04% to 20%. Oral contraceptives, the most commonly

used method by adolescents, have a typical failure rate of 3% and a lowest expected failure rate of .1%. The condom, the second most frequently used method by adolescents, has a typical failure rate of 12% and a lowest expected failure rate of 2%. Without professional contraceptive services, adolescents are more likely to achieve typical failure rates rather than the lowest expected rates for contraceptive methods (Trussell et al, 1990).

In order to determine the motivation of teens to use family planning services, knowledge of their perceived needs is necessary. Zabin and Clark (1983) examined the reasons why 1,200 teenagers chose particular urban family planning clinics for their first visit. The five principal reasons cited were as follows: a policy of confidentiality, the staff had a caring attitude toward teens, the clinic was located near home, friends recommended the clinic, and it was the only clinic known to the respondent. The reasons cited by the respondents in this survey did not prevent 86% from delaying an initial clinic visit from a few weeks to two years after sexual activity began. In fact, 36% reported coming to the clinic for an initial visit because they suspected pregnancy.



One strategy to promote timely and effective contraception in the sexually active teenager is the implementation of school based clinics in some urban areas. A study of six school based clinics was reported by Kirby, Waszak and Ziegler (1991). Although access to the services are governed by state parental consent laws, the teenagers who used the services demonstrated a higher rate of contraceptive compliance. There was, however, no reduction in the pregnancy rate or increase in contraceptive use in the general school population (Kirby, Waszak, & Ziegler, 1991). This suggests specially designed clinics (for adolescents) promote contraceptive compliance in their clients.

The Consent and Confidentiality Laws impact the potential effectiveness of many adolescent family planning programs. Legislation regarding contraceptive services for minors is politically volatile resulting in states adopting widely diverging policies on this issue (Alan Guttmacher Institute, 1987). Consent and Confidentiality Laws for minors are not clearly defined in many states creating confusion for many health care professionals (Neinstein, 1987). Conflicts between the needs of teenagers and their parents may create ethical dilemmas for health professionals. However, laws

addressing the availability of contraceptives are clear.

The Supreme Court ruled that contraception must be made available to minors, and states may not prohibit such access. Presently, all states permit minors access to some types of contraceptives without requiring parental consent, although specific state laws may not address this subject. Parental notification, however, may be required by some states. In states without guidelines on parental notification, the provider must decide what is in the best interest of the adolescent (Neinstein, 1987).

Fear of parental notification presents another obstacle for the sexually active teenager desiring contraception. In addition to requiring a critical level of psychosexual maturity and decision-making skills, many teenagers must have not only the motivation to seek professional contraceptive services, but the assurance that their use of the services will remain confidential.

#### Summary

The review of literature focused on the sexual and reproductive behavior in young women, the impact of teenage childbearing, and contraceptive behavior in

young women.

The literature on the cognitive development and sexual behavior in adolescents suggests a strong relationship between cognitive skills and responsible decision making in sexual matters. Sexually active teenagers are delaying contraceptive counseling due to fear of their parents knowledge of their sexual activity and fear that contraceptives may be harmful to their health (Zabin et al.,1990). As a result, teen pregnancy is on the rise and many teens are opting to keep their babies.

Research shows teenage childbearing often creates a cycle of poverty due to limited educational and career opportunities for a teen mother. Additionally, children born to teen mothers often have poor health outcomes due to limited, if any, prenatal care. Teenage childbearing also impacts the Federal budget. The majority of single, head of household, teen mothers will rely on public assistance soon after the birth of their first child (Brooks-Gunn and Chase-Lansdale, 1991) .

Finally, a review of contraceptive use among sexually active, older adolescents shows a significant number do not consistently use contraceptives. Factors

influencing the decision to use contraceptives include their knowledge on sex and reproduction, acceptance of their sexuality, and whether or not intercourse is planned. Although there is widespread availability of contraceptives, many sexually active teens do not seek professional contraceptive services until they suspect pregnancy.

### CHAPTER 3 Methodology

The purpose of this study is to examine the sexual and contraceptive behavior of young women and identify the reasons given for seeking contraceptive clinic services. An overview of the design, sample, instrument, setting, and data analysis follows.

#### Design

The design for this research will be a descriptive survey. A survey questionnaire developed by Zabin (1981) will be used to obtain data to answer the research questions.

#### Sample

The sample for this study will be comprised of 30 young women, age 18-21, attending an OB/GYN clinic at a southwestern Air Force base. Selection criteria will

be: (1) female, (2) age 18-21, and (3) single.

Instrument

The questionnaire to be used in this study was obtained from Laurie S. Zabin, PhD., who examined reasons teenagers delayed contraceptive clinic use in a 1980 study of 1,200 teenagers visiting an urban family planning clinic for the first time. The questionnaire also allows responses to other questions regarding sexual and contraceptive behavior. Verbal permission to use the questionnaire was obtained from Dr. Zabin.

The questionnaire elicits information regarding demographics, sexual behavior, contraceptive use and reasons for delaying or seeking contraceptive services. There are twenty three items, seven addressing demographics and 16 addressing sexual and contraceptive behaviors. A forced choice response is offered for each item. Items inquire about the subject's sexual history, contraceptive use patterns, reasons for delaying clinic utilization and reasons for choosing a particular clinic at this time. One item inquires about the subjects' perceived risk of pregnancy in a five part question with forced choice responses. Subjects are also asked to rate methods of birth control listed on the questionnaire for their

perceived effectiveness. Response choices of poor, fair, good, or very good are provided.

#### Reliability and Validity

Reliability statistics were not obtained on this questionnaire according to Dr. Zabin. Content validity, however, was established by a review of the questionnaire by a panel of experts in adolescent pregnancy from The Alan Guttmacher Institute and The Johns Hopkins School of Hygiene and Public Health (Zabin, 1981).

#### Demographic information

Demographic information to be included in the questionnaire includes: age, education level, ethnicity, religion, menarche date, number of pregnancies, and previous use of contraceptive services.

#### Procedure

The questionnaire will be administered by the staff in the OB/GYN clinic area of an Air Force hospital during routine clinic appointments. Arrangements to collect data will be scheduled in advance with the clinic personnel. Initial contact with prospective participants will be made by a clinic staff member. If the subject indicates interest in

participating, the purpose of the study, the procedure for collecting data and the method of ensuring confidentiality will be explained. Additionally, instructions for completing the questionnaire will be explained to each participant verbally and in writing.

#### Rights of Human Subjects

This proposal for research will be reviewed by the Institutional Review Board of Arizona State University and the Air Force Institute of Technology for compliance with U.S. Air Force Regulation 30-23, Request to Conduct Research within the Military. Upon their approval the proposed research will begin.

Participation in the study will be voluntary. The prospective participant will be given a letter regarding the study from the clinic staff (Appendix A). The letter defines the general purpose and involvement of the study, and includes an invitation to participate. The letter explains that all information gathered will remain confidential with the investigator, and that participation in the study involves no foreseeable risk or injury, and is completely voluntary. If the client chooses to participate, the questionnaire (Appendix B) will be

completed and returned to a secure container. Subjects will be informed that they may withdraw from the study or choose not to participate at any time and that doing so will in no way affect the care they receive. No names will be obtained to ensure confidentiality.

#### Data Analysis Plan

The data collected on the 30 subjects completing the questionnaire will be analyzed using descriptive statistics. The analysis will include frequency distributions, measures of central tendency and variability. The mean age of subjects at time of survey, at menarche, and at first intercourse will be reported as well as the mean number of months from first intercourse to first clinic visit. The percentage distribution of respondents by reasons for their first clinic visit and reasons for their delay in seeking contraceptive services will also be reported.



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APPENDIX A

Dear Participant:

My name is Janine Saulpaugh, RN, and I am a graduate student in the College of Nursing, under the direction of Carolyn Feller, RN, Ph.D. The purpose of this research is to examine factors contributing to contraceptive use in young women.

You will be asked to complete a questionnaire which will take approximately 10 minutes. Your participation is strictly voluntary, and there are no risks to you. You may withdraw at any time without affecting any change in your health care. The benefits that might be obtained from your participation include assistance to health care providers in evaluating the contraceptive needs of young women.

Please understand that the results of the research study may be published, but your name or identity will not be revealed. The questionnaire is anonymous, thereby ensuring confidentiality of responses. Return of the questionnaire will be considered your consent to participate.

Please complete the attached card if you would like a copy of the results of the study. The card will be removed upon receipt to assure that there will be no way to identify you.

If you have any questions you may contact me at 831-2337, or Carolyn Feller at 965- 3244.

Sincerely,

Janine Saulpaugh, RN

APPENDIX B



## DO NOT WRITE YOUR NAME ON THE QUESTIONNAIRE

Please respond to the following questions by checking the best answer or filling in the blanks where needed.

1. What is your date of birth? \_\_\_\_\_ (month/day/year)
2. Are you (1) \_\_\_\_\_ a high school student?- In what grade? \_\_\_\_\_  
 (2) \_\_\_\_\_ a high school graduate?  
 (3) \_\_\_\_\_ enrolled in college?- What year are you in? \_\_\_\_\_  
 (4) \_\_\_\_\_ a college graduate?- years completed \_\_\_\_\_  
 (5) \_\_\_\_\_ none of the above- last grade completed \_\_\_\_\_
3. What is your ethnic group?
  - (1) \_\_\_\_\_ Anglo/White
  - (2) \_\_\_\_\_ Asian/Oriental
  - (3) \_\_\_\_\_ African American/Black
  - (4) \_\_\_\_\_ Mexican American/ Hispanic
  - (5) \_\_\_\_\_ Native American Indian
  - (6) \_\_\_\_\_ Other (Please Specify) \_\_\_\_\_
4. What is your religious affiliation?
  - (1) \_\_\_\_\_ (Protestant, Catholic, etc.)
  - (2) \_\_\_\_\_ No Affiliation
5. When was your first menstrual period? \_\_\_\_\_ (month/year)  
 If you do not remember the date, how old were you? \_\_\_\_\_
6. Total number of pregnancies \_\_\_\_\_.  
 Number of live births \_\_\_\_\_.  
 If you've had children, how many live with you? \_\_\_\_\_.
7. Have you ever been to a clinic for birth control before?  
 \_\_\_\_\_ Yes  
 \_\_\_\_\_ No  
 If Yes, when did you go? \_\_\_\_\_ (month/year)
8. Read this list and CHECK ALL YOUR REASONS FOR COMING TO THE CLINIC AT THIS TIME.
  - (1) \_\_\_\_\_ I haven't had sex (intercourse, made love) but I expect to have sex soon for the first time.
  - (2) \_\_\_\_\_ I just started to have sex.
  - (3) \_\_\_\_\_ I just started to have sex with a new partner/boyfriend.
  - (4) \_\_\_\_\_ I have a closer relationship with my partner than I had before.
  - (5) \_\_\_\_\_ I just started having sex again after a time without sex.
  - (6) \_\_\_\_\_ I have been having sex more often lately.
  - (7) \_\_\_\_\_ I expect to have sex more often soon.
  - (8) \_\_\_\_\_ I thought I might have an infection or sexually transmitted disease
  - (9) \_\_\_\_\_ I was afraid I might be pregnant.
  - (10) \_\_\_\_\_ I am pregnant. It was unplanned/planned. (Circle one)
  - (11) \_\_\_\_\_ One of my friends (or family) got pregnant and it worried me.
  - (12) \_\_\_\_\_ I just found out where I could get birth control.

- (13) \_\_\_ I just found out I could get birth control without telling anyone in my family.
- (14) \_\_\_ I just talked to my friend/ partner about sex for the first time.  
(Circle one)
- (15) \_\_\_ I just talked to my mother/other adult about sex for the first time.  
(Circle one)
- (16) \_\_\_ My (mother/father/partner/friend/doctor/counselor) wanted me to come.  
(Circle one)
- (17) \_\_\_ Other. My reason for coming to the clinic right now is (Please specify) \_\_\_\_\_.

Which reason listed above is the most important reason for deciding to come to the clinic at this time? \_\_\_\_\_ (Enter the response number).

9. If you did not go to a birth control clinic before having sex for the first time, CHECK ALL THE REASONS WHY IT WAS HARD FOR YOU TO GET BIRTH CONTROL FROM A CLINIC BEFORE.

- (1) \_\_\_ It was not hard; I went to a clinic before I had sex the first time.
- (2) \_\_\_ I was afraid my family would find out if I came.
- (3) \_\_\_ I thought I wanted to get pregnant.
- (4) \_\_\_ My boyfriend didn't want me to use birth control.
- (5) \_\_\_ I was waiting until I had a closer relationship with my boyfriend.
- (6) \_\_\_ I thought it was wrong to use birth control.
- (7) \_\_\_ I thought it was dangerous to my health to use birth control.
- (8) \_\_\_ I thought I was too young to get pregnant.
- (9) \_\_\_ I didn't think I had sex often enough to get pregnant.
- (10) \_\_\_ I thought you weren't allowed to get birth control until you were older.
- (11) \_\_\_ I was afraid to be examined (pelvic/vaginal exam)
- (12) \_\_\_ I thought it cost too much.
- (13) \_\_\_ I didn't know where to get birth control.
- (14) \_\_\_ Because I was forced to have sex when I didn't want to.
- (15) \_\_\_ Because I had sex with a relative/family member and I didn't want to talk about it.
- (16) \_\_\_ Because I didn't expect to have sex; it was a surprise.
- (17) \_\_\_ I thought the kind of birth control I was using was good enough to keep me from getting pregnant.
- (18) \_\_\_ I never thought of it.
- (19) \_\_\_ I was too embarrassed to talk to the doctors/nurses.
- (20) \_\_\_ Other. Please Specify: \_\_\_\_\_

Which reason listed above is the most important reason for not going to a clinic for birth control? \_\_\_\_\_ (Enter the response number).

10. Have you ever had sex (intercourse, made love) with anyone?

YES

NO- If no, skip to question 22.

11. How old were you the first time you had sex? \_\_\_\_\_

When was the first time you had sex? \_\_\_\_\_ (month/year)

12. How many times did you have sex the first month you ever had it? \_\_\_\_\_

13. Last month, how many times did you have sex? \_\_\_\_\_

14. What is the average number of times you have sex in one month? \_\_\_\_\_

15. Since you started to have sex, have there ever been several (three or four) months in a row when you didn't have sex at all?

Yes

No

If Yes, when did you start to have sex again? (Check one).

Last month

1-2 months ago

3-6 months ago

7 months to 1 year ago

more than a year ago

I haven't started yet but expect to start soon

16. Please guess how many times you will have sex next month.

at least once

2-3 times

more than 3 times

I don't plan to have sex next month

17. Did you or your partner ever do anything to keep from getting pregnant when you had sex?

Yes

No

If Yes, please check any method you have ever used. Check as many as you have used, even if used only once.

(1)  birth control pill

(2)  IUD (loop,coil)

(3)  Cream, jelly, foam, or suppository

(4)  Diaphragm

(5)  knythm (safe time of month)

(6)  Douche

(7)  Sponge

(8)  Other- Please describe it: \_\_\_\_\_

Check any method of birth control your partner has ever used while having sex with you.

Condom (rubber)

Withdrawal (pulling out)

Other- Please describe it: \_\_\_\_\_

18. When did you or your partner first use some kind of birth control?

(1)  The first time I had sex

(2)  The second time I had sex

(3)  A few weeks later, after I'd had sex about \_\_\_\_\_ times.

(4)  A few months later, after I'd had sex about \_\_\_\_\_ times.

- (5)  A few years later, after I'd had sex about  times.  
 (6)  Never

19. Have you used birth control: (Please check only one)

- (1)  every time since you started to have sex?  
 (2)  every time since you started using birth control?  
 (3)  most of the time?  
 (4)  rarely?  
 (5)  never?

20. Think about the last time you had sex. Were you at the time in your monthly cycle when you could get pregnant?

- Yes  
 No  
 Don't know

21. What method(s) of birth control did you or your partner use the last time you had sex?

- (1)  None  
 (2)  Birth control pill  
 (3)  IUD  
 (4)  Cream, jelly, foam, or suppository  
 (5)  Diaphragm  
 (6)  Rhythm (safe time of month)  
 (7)  Condom (rubber)  
 (8)  Withdrawal (pulling out)  
 (9)  Sponge  
 (10)  Other- Please describe it: \_\_\_\_\_

22. Think about the time before you ever had sex.

Before you ever had sex, did you know having sex even once might result in pregnancy?

- Yes  
 No

Did you think you would have a good chance of getting pregnant if you had sex?

- Yes  
 No

Before you ever had sex, did you ever think of getting birth control for yourself?

- Yes  
 No

Before you ever had sex, did you or your boyfriend ever talk about the chance of your getting pregnant?

- Yes  
 No

Before you ever had sex did you or your boyfriend ever talk about birth control?

- Yes  
 No

23. How good do you think these methods of birth control are at keeping you from getting pregnant? For each method, check the column which describes how well the method prevents pregnancy.

	VERY GOOD	GOOD	FAIR	POOR
DIAPHRAGM				
CONDOM				
IUD				
RHYTHM				
FOAM, CREAM, JELLY, SUPPOSITORY				
BIRTH CONTROL PILL				
WITHDRAWAL				
SPONGE				

Please look over the questionnaire to be sure you have answered all the questions that apply to you. Thank you very much for your help!