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# CONDOM USE IN 15-19 YEAR OLD ADOLESCENT GIRLS BEFORE AND AFTER INITIATING HORMONAL CONTRACEPTION

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

in

Nursing

by
Mary Louise Placencia
June 2002

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Approved by:

Dr. Ellen Daroszewski, Chair, Nursing

Dr. Janice Layton

Kristine Blans

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#### ABSTRACT

The purpose of this study was to determine condom use in 15-19 year old adolescent girls before and after initiating hormonal contraception in urban school-based clinics.

The convenience sample of medical records from the 25 subjects were reviewed. The medical records included care provided between September 2001 and February 2002. Condom use was measured based on self-report at last sexual encounter prior to each visit. Condom use was measured in a "yes" or "no" response before initiating the hormonal contraceptive method and at each subsequent visit.

Adolescent girls receiving a hormonal contraceptive method reported using condoms more frequently after initiating a hormonal contraceptive (64%; n=16), than before initiating the hormonal contraceptive method (20%; n=5).

This study provides data which suggests the condom education students receive in these school-based clinics when initiating a hormonal contraceptive method is effective, therefore improving safe sexual practices and reducing the risks of sexually transmitted diseases.

#### ACKNOWLEDGMENTS

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I would like to recognize the Fontana Unified School District Comprehensive Health Department for allowing this research study, with a special thanks to Donna Church a colleague and friend who stood by my side through it all.

I would like to give thanks to my family who patiently stood by and supported me, from start to finish. With a extra special thanks to my biggest inspirational forces, my two wonderful daughters, Jenny and Kathleen Salas who help me see the value of succeeding in life. I would also like to thank my husband, Ruben Salas for his patience and support. And lastly, I would like to thank Raymond Placencia, my father and, Romelia Placencia my mother for instilling in me the importance of an education. Thank you all for believing in me.

## DEDICATION

To my two daughters Jennie and Kathleen Salas.

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#### CHAPTER ONE

#### BACKGROUND

## Background

The California Public Health Department provides easy access for reproductive health care to sexually active adolescents with services such as education, counseling, contraception, diagnosis and treatment of sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV).

According to Santelli and Davis (1995) increases in sexually transmitted diseases and the current HIV pandemic have caused many in the family planning community to promote the need for consistent barrier protection against STDs, since the risk of acquiring an STD is highest among adolescents. In 1999 the Centers for Disease Control reported, about 1 million teenagers become pregnant each year; 95 percent of those pregnancies are unintended, and almost one third end in abortion.

### Statement of the Problem

The office of Women's Health-United States

Department of Health and Human Services (2000) defines

contraception as the many different methods, devices, medicines, and approaches that people use to prevent pregnancy. While it is important for those who are sexually active to use some method of contraception to prevent pregnancy, it is crucial to understand that not all methods of contraception protect against STDs.

Adolescent girls initiating a hormonal contraceptive method are no longer preoccupied with the risk of an unintended pregnancy, and, therefore are less likely to use condoms for the prevention of sexually transmitted diseases (Roye 1998; Darney, Callegari, Swift, Atkinson, & Robert, 1998; CDC, 1996).

According to Roye (1998), despite the importance of condom use to prevent the transmission of HIV and other STDs, adolescents are more concerned about pregnancy prevention. The use of hormonal contraceptive methods raises serious concerns that rates of STDs and HIV may rise in adolescents, because teens using these methods may not use condoms, perceiving the probability of pregnancy to be very low.

The Centers for Disease Control (1998) analyzed data from the Youth Risk Behavior Surveillance Survey (YRBSS) from 1991 to 1997 and found: 1) yearly approximately

three million cases of sexually transmitted diseases occur among teenagers, 2) approximately one million teens become pregnant, and 3) HIV infection is the sixth leading cause of death among persons aged 15 to 24 years in the United States.

According to Goodman and Hirschl (1996) the United States has by far the highest adolescent pregnancy rate in the western industrialized world. It is estimated that one in five sexually active young women will become pregnant, and that one out of every four teens will become infected with an STD by the age of 21.

Darney et al. (1998) reported that despite the efforts and interventions of health care providers and policy makers, rates of teen pregnancy in the United States remain high. Everett, Warren, Santelli, Kann, Collins, and Kolbe (2000) reported that 78 to 82 percent of teen pregnancies are unintended.

Darney et al. (1998) reported that in addition to unintended pregnancies, the persistently high rate of sexually transmitted infections among teens is a significant threat to their health. One in eight teens in the United States contracts an STD each year. Sexually transmitted diseases pose a threat to our adolescent

population, due to high-risk sexual behaviors (Everett et al., 2000; Darney et al., 1998).

## Purpose of the Study

The purpose of this study was to determine condom use in 15-19 year old adolescent girls before and after initiating hormonal contraception in school-based clinics.

#### Theoretical Framework

Action has explained and predicted a wide range of human behaviors since 1967. The theory was developed to explain the factors associated with human behavior and the subsequent decision-making process. The Theory of Reasoned Action demonstrates how a person's intention to perform or not to perform a behavior is the immediate determinant of the action. The Theory of Reasoned Action suggests that the intent to perform a behavior is the best predictor that a desired behavior will actually occur and both attitude and norms influence one's intention to perform a behavior. In order to use the

and measure the behavior of interest and identify the determinants of intention.

Ajzen and Fishbein (1980) divided the determinants of intention into two parts, the personal and social influence determinants. The personal determinants involve the person's attitude toward the behavior, which is based on his or her evaluation of performing the behavior.

The most important determinant of behavior is a person's behavioral intention. The direct determinants of an individual's behavioral intention are his attitude toward performing the behavior and his subjective norm associated with the behavior. Attitude is determined by the individual's beliefs about outcomes or attributes of performing the behavior, weighted by evaluation of those outcomes and attributes. Thus, a person who holds strong beliefs that mostly positively valued outcomes will result from performing a behavior will have a positive attitude toward that behavior. The Theory of Reasoned Action assumes a casual chain: behavioral beliefs and normative beliefs are linked to behavioral intention and behavior via attitude and subjective norm.

Theory Application ...

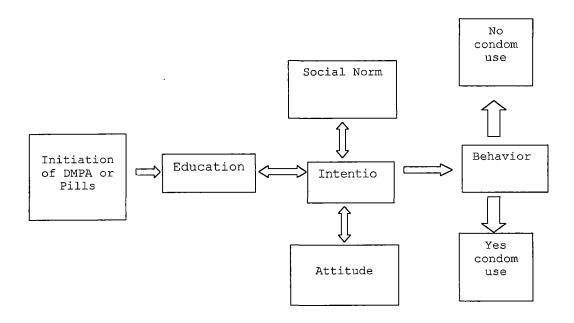
According to Craig, Wade, Allison, Irving, Williams, and Hlibka, (2000) attitudes were consistently, positively predictive of intentions to use condoms in combination with pills for both male and female students. Previous studies also reported attitudes to be a significant predictor of high school age student's intentions to use condoms or pills.

The adolescent girl initiates a hormonal method at a school-based clinic, and the clinic staff provides education which emphasizes the importance of using condoms to reduce the risk of contracting a sexually transmitted disease. The goal of the educational component is to influence the attitude of the adolescent girl in her decision-making process to use condoms for protection from HIV and STDs.

According to the Theory of Reasoned Action, ultimately the decision to use condoms will depend on the girl's perception of the outcome in her particular situation (Ajzen & Fishbein, 1980). She will decide based on her perception what is socially accepted and will acquire an attitude about condom use based on these

factors resulting in a choice on whether or not to use condoms.

Figure 1. Theory of Reasoned Action and Condom Use



## Limitations of the Study

This study was designed to better understand the condom use by girls who utilized the school-based clinics in a large school district in Southern California.

Although findings would be helpful to our clinicians, there would be some limitations that must be acknowledged. Because the clinics are located in the school health office for general service many students

hesitate to utilize the school-based services for fear of being recognized, and privacy can be an issue. Following students throughout the study period was difficult due to students missing appointments when they were absent during clinic hours, moving out of the area or were transferred to other schools. As this was a self-reporting study students may have misrepresented information to the nurse or clinician. The small sample size and geographic area limit results to an isolated area. The age group of 15-19 year old girls utilizing family planning services in the school-based setting made the findings less likely to be generalized to other adolescent populations.

#### CHAPTER TWO

#### REVIEW OF THE LITERATURE

## High Risk Behavior

Findings suggest that young girls who use hormonal contraception to prevent pregnancy may be at an increased risk for HIV, and other sexually transmitted diseases (Roye, 2000; Darney et al., 1998; Santelli & Davis, 1995). The Center for Disease Control (1996) indicated that many women who were potentially well protected against pregnancy were under protected against STDs.

Among women who used hormonal contraception, 70 percent had not used a condom at last intercourse with a main partner, and 42 percent had not used a condom at last intercourse with their casual partner.

## Survey Studies

Many different studies have been published regarding condom use. Most studies reviewed focused on condom use or intention to use condoms while currently on a hormonal contraceptive. The most common strategy for data collection was the use of questionnaires and surveys. The age groups studied were from 11-46 years of age, depending on the study. A theoretical or conceptual

framework was unidentifiable in most studies. One source successfully used the Theory of Planned Behavior to discuss intention of condom use.

Everett et al. (2000) examined the use of contraception at last sexual intercourse among currently sexually active adolescents. The analyzed data was collected from the national school-based Youth Risk Behavior Surveillance Surveys (YRBSS) conducted in 1991, 1993, 1995, and 1997. In 1997 more than half (56.8%) of the sexually active high school students reported that they or their partner had used condoms at the last sexual encounter. Male students reported significantly more condom use than females (62.5% vs. 50.8%) and black students (64%) were significantly more likely than white (55.8%) and Hispanic students (48.3%) to report condom use. Overall, condom use significantly increased from 46.2% in 1991 to 56.8% in 1997. This increasing trend also was identified among all gender and racial/ethnic subgroups (Everett et al., 2000), which is consistent with other studies (Pesa & Mathews, 2000; Critelli & Suire, 1998)

The YRBSS was designed as a behavioral surveillance tool and was not designed to provide in-depth information

about behavior. The declines in condom use among sexually active females were consistent with the findings of other studies indicating that condom use generally decreases with age (Santelli & Davis, 1995).

According to Craig et al. (2000) the study indicated that attitudes were consistently, positively predictive of intentions to use condoms, oral contraceptives (OCs), and condoms in combination with OCs for both male and female students.

Roye (2000) presents with the goal to ascertain whether teens who use hormonal agents are less likely to use a condom during intercourse. The questionnaire, which was based on prior studies, addressed sexual behaviors, contraceptive use, history of pregnancy and STDs, and communication about sexuality in adolescents.

Roye (2000) describes consistency of condom use as 52 percent of all subjects who had been sexually active in the last four weeks and had used a condom at least once. Consistency of condom use was similarly low. Less than 20 percent of teens always used condoms, while 20 percent never did. Twenty-three percent did not use any method of contraception in the last month. A further analysis examined condom use by the three groups of young

women: OC users, users of long-acting contraceptives, and those who did not use hormonal contraception. Adolescents in the latter group were better users of condoms.

An analysis was performed to determine if communication factors affected consistency of condom use. Age was controlled in this analysis because of the supposition that older teens might be more comfortable talking about sexuality with other young teens. Communication with friends about sexuality was a significant predictor of more frequent condom use. Communication with partners did not appear to affect consistency of condom use. Communication with a partner did not vary by ethnicity. However, there was a significant difference between the two groups on communication with friends. Further analysis revealed that African-American women were significantly more likely to have talked to their friends about sexuality than Hispanic women (Roye, 2000).

Roye (2000) suggests that teenage girls who use hormonal contraceptives are less likely than other sexually active teens to use condoms. There was no difference in condom use between users of oral contraceptives and those who used long-acting agents.

While few teens in the sample were consistent condom users, they were even less likely to use condoms if they were using oral contraceptives or long-acting agents.

Data strongly suggests that condom use by teenagers declines when teens are protected from pregnancy by hormonal contraceptives. Only a history of STD was found to be positively associated with condom use (Roye, 2000). These findings are consistent with other studies (Darney et al., 1999; Santelli, & Davis, 1995).

Roye (2000) reports adolescents tended to be more concerned about immediate rather than long term consequences of sexual behavior. Pregnancy prevention may be a primary motivator because the consequences are swifter. In addition, it is well known that knowledge is only one factor involved in behavioral change and not the most important. For example, if the risk of condom use, (e.g., losing a boyfriend because he does not want to use condoms) outweigh the perceived benefits, then the teen will often opt not to use a condom. Teens using hormonal agents who do not perceive themselves to be at risk of HIV may be even less likely to use condoms (Roye, 2000).

Roye's (2000) findings are consistent with other studies regarding adolescent use of injectable

contraceptives. The findings suggest that young women who use hormonal contraception to prevent pregnancy may be at increased risk for HIV and other STDs. Clinicians must provide appropriate counseling to mitigate against the potential increased risk of STDs when hormonal agents are prescribed (Roye, 2000; Darney et al., 1999; Santelli, & Davis, 1995)

## Spermicides and Condoms

Macalusa, Cheng, and Akers (2000) applied a prospective follow-up study of low-income

African-American women attending an STD clinic.

Consistent use of the male condom and vaginal spermicides was promoted to reduce the risk of sexually transmitted diseases. Consistency of condom use during the 30-day period prior to entry into the study was highest among women who used barrier methods for birth control purposes, and lowest among women who used no method of birth control. Older age, lower educational level, and being single were statistically significant predictors of increased consistency of barrier use, while being married, having children, and having a history of a

sexually transmitted disease were significant predictors of decreased consistency of use.

In Macalusa, el al. (2000) women who were using barrier methods for birth control at entry were more likely than other women to use condoms and spermicides for STD prevention during follow-up. The average barrier use rate in this group increased from 11% during the 30-day period preceding the initial study visit to 60% during the first month of follow-up and increased further during the following months, approaching the use rate of women who used barrier methods at baseline. Younger contraceptors were more receptive to condom use, possibly because they were targeted more intensely by public health efforts promoting family planning and STD prevention.

In summary, although the study group clearly was not representative of the population at large, it consisted of women whose risk profile was highly relevant for the study of STD epidemiology and represented an important target for public health interventions (Macaluso et al., 2000). The findings suggested that young girls who used hormonal contraception to prevent pregnancy were at increased risk for HIV and other STDs. Clinicians must

provide appropriate counseling to reduce the potential increased risk of STDs when hormonal agents are prescribed (Darney et al., 1998; Roye, 1998; Santelli, & Davis, 1995).

As research continues in this area, we can better understand how to heighten the awareness of the risks related to poor compliance of condom use in the adolescent population. As Roye (1998) stated, more research is needed to study the consistent use of condoms with hormonal contraception hopefully reaching a level of better compliance. This study focused on condom use before and after initiation of a hormonal method.

## Hypothesis

The null hypothesis for this study is that condom use will not change following the initiation of a hormonal contraceptive method.

#### CHAPTER THREE

## METHODOLOGY

This study utilized a descriptive design with a retrospective chart review to examine condom use before and after a hormonal contraceptive method had been initiated. Data was collected from previous clinic visits.

#### Setting

The data collection for this study was conducted in the comprehensive health school-based clinics at three high schools in the Fontana Unified School District. The clinical providers included physicians, nurse practitioners, and registered nurses. The comprehensive health services provided are state mandated immunizations, school entry physical exams, vision and hearing screenings, sports exams and family planning services to those students currently enrolled in the school district.

The three high schools are situated in a large urban city in Southern California. The socio-economics of the population served by the school district is low to middle-class status. Because of the high incidence of

poverty, access to health care is an issue. Many families rely solely on the health services provided by the school-based clinics.

The services offered in the Fontana Unified School District clinics are confidential. Every school year a consent form for these services is sent home to parents (see Appendix A), who then give permission to allow their teen to receive care and education in the school-based health clinics, understanding that confidentiality will be granted to the teen as per California State law.

When a teen chooses to access confidential family planning clinic services, they are then enrolled in the State-Only Family Planning Program. As part of the program enrollment the Client Eligibility Certification Form (see Appendix B) is completed. The teen consents for medical record information to be used to monitor health outcomes and for program evaluation purposes.

## Subjects

The convenience sample selected for this study were adolescent girls aged 15-19 years old from all ethnic backgrounds, who initiated a hormonal contraceptive method at a school-based clinic. The hormonal

contraceptives available were depot medroxyprogesterone acetate (DMPA), and oral contraceptives. Potential subjects were excluded if they: 1) were prescribed a long term hormonal contraceptive agent prior to initiating care at a school-based clinic, 2) became pregnant during the period of the study, and 3) transferred to another school district.

The medical records for review included students who initiated a hormonal method from September 2001 and continued receiving services, based on inclusion criteria, up to February 2002. The total number of medical records that met the inclusion criteria were 25. The medical records contain confidential medical information. The information obtained from the medical records for the purpose of this study were: 1) history of condom use, 2) condom use after initiating the hormonal contraceptive method, 3) age at initiation of hormonal contraception, 4) type of hormonal method, 5) parity, 6) race, and 7) ethnicity.

Records were gathered and kept in a secure file cabinet housed in a locked records room. Data collection was done privately when no students or other staff, were in the room.

The data was collected at individual sites, and was recorded in aggregate to protect the subjects. All data was coded and maintained on a database. The database was accessible only by the investigator and the thesis committee. Data collected will be kept secured for at least three years and if determined unnecessary will be shredded.

## Study Variables

Condom use was measured in a "yes" or "no" response before initiating the hormonal contraceptive method, and at each subsequent visit. Condom use was measured based on self-report of last sexual encounter prior to each visit. The socio-demographic variables obtained from the medical records included, age at time of initiation of hormonal method, race (White, African-American, Asian-American, or unidentified), ethnicity (Hispanic or not), and parity (never pregnant, history of abortions, and any live births).

#### Procedure

A letter of permission granting access to confidential records maintained by the Fontana Unified School District was obtained for the purpose of data

collection for this study (see Appendix C). The
California State University San Bernardino Graduate
School of Nursing thesis committee reviewed and granted
permission for the study, and California State University
San Bernardino Institutional Review Board also granted
permission to initiate the study (see Appendix D).

A standard chart audit tool (see Appendix E) was specifically designed for this study. The data collection tool was assessed for content validity by three nursing content experts, and then pilot tested on five medical records by two data collectors for interrater reliability prior to utilization in this study. The duration of the data collection was 9-days.

#### CHAPTER FOUR

## FINDINGS AND RESULTS

## Data Analysis

The data analyzed included the convenience sample of adolescent girls aged 15-19 years old, who initiated a hormonal contraceptive method at a school-based clinics. Potential subjects were excluded if they: 1) were prescribed a long-term hormonal contraceptive method prior to initiating care at a school-based clinic, 2) became pregnant during the period of the study, and 3) transferred to another school district.

The socio-demographic variables included in the medical records reviewed were: 1) history of condom use,

2) condom use after initiating the hormonal contraceptive method, 3) age at initiation of hormonal contraception,

4) type of hormonal method, 5) history of pregnancies, 6) race, and 7) ethnicity.

Condom use was measured as a "yes" or "no" response before initiating the hormonal contraceptive method, and at each subsequent visit. Condom use was measured based on self-report of last sexual encounter prior to each visit.

The data collected was of a nominal level and group differences were studied using the Chi-Square statistical test. The Chi-Square test measures significant differences between observed frequencies and expected frequencies in data, whether the identified groups are independent or related.

The null hypothesis for this study was that condom use would not change following the initiation of a hormonal contraceptive method. The Chi-Square analysis tested the viability of the null hypothesis.

Data was entered and analyzed using computer software SPSS 7.5 for Windows SPSS Inc, Chicago, IL.

### Presentation of Findings

Demographic data collected from the medical records revealed the mean age of study subjects (N = 25) to be  $16.16 \ (SD = 0.75)$  (see Appendix F). The age distribution of the 25 subjects was five 15 year olds, eleven 16 year olds and nine 17 year olds (see Appendix G) Race was predominately white at 88% (n = 22), with eight percent (n = 2) African Americans and four percent (n = 1) Asian Americans (see Appendix H). Hispanic girls represented 76% (n = 19) of the ethnic category (see Appendix I). No

medical records revealed history of previous abortions or live births.

The study variable findings indicate that 20% (n=5) reported using condoms at last sexual encounter before initiating a hormonal contraceptive method. The balance of the medical records 80% (n=20) indicated no condom use before initiating a hormonal contraceptive method (see Appendix J & K).

Following an extensive educational component and reinforcement at return visits improvement was noted utilizing a Chi-square analysis. Data indicated 64% (n=16) reported condom use at last sexual encounter compared with 36% (n=9) reporting no condom use at last sexual encounter.

The null hypothesis, there is no difference in condom use before or after initiating a hormonal contraceptive method, was rejected ( $X^2 = 9.934$ ; p = .002). These findings indicated that there was significant evidence to conclude an improvement in condom compliance at last sexual encounter for girls who initiated a hormonal contraceptive method at a school-based clinic.

Table 1. Chi-Square Contingency Table for Condom Use Before and After Initiating a Hormonal Contraceptive Method

		Condo	m Use	Total
		Yes	No	
Condom use before initiating a hormonal	Count	5	20	25
contraceptive method	Expected Count	10.5	14.5	25.0
	Percent	20%	80%	100%
Condom use after initiating a hormonal	Count	16	9	25
contraceptive method	Expected Count	10.5	14.5	25.0
	Percent	64%	36%	100%
Total	Count Expected	21	29	50
	Count	21.	29.0	50.0

#### CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

#### Conclusions

The Chi-square analysis generated expected outcomes for both categories, condom use at last sexual encounter before and after initiating a hormonal method. Condom use was reported as "yes" at last sexual encounter by five subjects before initiating a hormonal contraceptive method. The expected value was 10.5. Condom use was reported by 16 subjects at last sexual encounter, after initiating a hormonal contraceptive method. The expected value for this category was 10.5. It was concluded that more subjects reported condom use than expected after initiating a hormonal contraceptive method, as compared to less than the expected before the initiation of a hormonal conceptive method.

This study provides data suggesting that adolescent girls who receive education and hormonal contraceptive methods at a school-based clinic in the Fontana Unified School District, are more likely to have a significant improvement in condom use, which improves safe sex practices and reduces the risks of sexually transmitted

diseases. The small population size used in this study limits the generalizability to other populations.

#### Recommendations

Adolescent girls who participate in high risk behaviors such as early sexual involvement are at increased risk for sexually transmitted diseases and require specialized education to reduce or minimize this risk. This study found that the education provided by nurses in school clinics was conducive to learning and behavior change improving condom use in conjunction with hormonal contraception. Condom use in conjunction with hormonal contraceptive use both decreases the risk of unintended pregnancy and sexually transmitted disease.

Ajzen and Fishbein's (1980) theory of reasoned action suggested that intent to perform a behavior is the immediate determinant of the action. The adolescent girls who participated in this study demonstrated a change in behavior in regards to condom use following one or more educational sessions in the school based clinics. Thus, their intention to use condoms was positively influenced by the education received and did impact their decision to use condoms.

The study findings supported the importance of the practice of offering reproductive services in school based clinics, thus providing the convenience adolescents need to improve their compliance with contraceptive methods. School based clinics provide sexually active teens with regular reproductive services, especially the pertinent education leading to better compliance, which may have a direct impact on the incidence of unintended pregnancy, and sexually transmitted diseases.

Replication of this research should be considered utilizing a prospective approach with concurrent interviews and data collection, so that reasons may be identified as to why, after an educational component, some see the necessity to use condoms and why others are not concerned enough to continue condom use. Findings from follow-up studies can provide understanding and valid assessment criteria for advanced practice nurses to use with teens who are more apt to respond to education. This data will allow the design of programs focusing on the needs of the teen population. Replication of this study, with a larger sample and in varied settings, could expand the knowledge needed for more careful planning and development of successful programs by advanced practice

nurses to support education and interventions for sexually active adolescent girls who need to understand the risks related to poor condom compliance.

As health care providers it is our goal to promote preventive health, therefore continued research and educational programs should be developed and evaluated to continue this positive trend.

# APPENDIX A TEEN HEALTH CENTER CONSENT FORM

### Fontana Unified School District TEEN HEALTH CENTER CONSENT FORM

The Teen Health Center(s) will have a physician and/or certified nurse practitioner available for comprehensive health services. These comprehensive services will address a wide range of adolescent health problems and concerns; including but not limited to physical examinations, oral assessments, treatment for routine illness/minor injuries, health education, nutrition, weight control, smoking cessation, drug and alcohol referrals, prenatal and postnetal support, including birth control (which will be dispensed or provided by a physician), and sports exams. The center will encourage students to learn and develop skills related to health and wellness. The health center will provide confidentiality as mandated by California State law. Lalso give my permission for district personnel to transport my child to the appropriate clinic for such services.

If you wish your son or daughter to receive physician/certified nurse practitioner services or dentist/dental hygiene services, please sign, date and return this form to your student's school. has permission to be seen by a physician/nurse practitioner, or DATE OF BIRTH FIRST NAME dentist/dental hygiene for dental screening, dental cleaning and placement of dental sealants at the Teen Health Center. This authorization shall remain in effect for the 19 \_\_\_\_\_\_ 20 \_\_\_\_ school year. This consent shall remain in effect until revoked by you in writing and PARENT/GUARDIAN SIGNATURE PARENT/GUARDIAN SIGNATURE DATE DATE Allergies (if any) Chronic Medical Illness (past/present):\_ Current Medication (if any):\_\_\_ Date of Last Tetanus Shot Other Important Health History: Family Dentist Family Doctor 4/99

## APPENDIX B HEALTH ACCESS PROGRAMS

### HEALTH ACCESS PROGRAMS FAMILY PACT PROGRAM LIENT ELIGIBILITY CERTIFICATION (CEC)

This form is the propert	y of the State of California,	Department of Health	Services, Office of Fa	mily Planning, and car	nnot be changed or alten	ed.
Please <i>print</i> answers	to all questions. The	g questions about	your family size,	income, and healt	h care insurance ar	e to
<ul> <li>Providers must kee</li> </ul>	igible for Family PACT.I ep. a. copy of this form	in the client's me	dical record. (Se	e PPBI, Client Elig	ibility Certification Fo	orm)
Completion Section	for code determinations	s <b>)</b>				
	Provider use only:		Lair (Section 1, sec	V salasa i azimete	ss INO	No Ma
			or Colored teaching A colored by the service	on vialuum. Serika	A topic of the same of the sam	
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### APPENDIX C

PERMISSION LETTER

# APPENDIX D INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



January 18, 2002



The California State University

Ms. Mary Placencia Professor Ellen Daroszewski Department of Nursing California State University 5500 University Parkway San Bernardino, California 92407

Dear Ms. Placencia:

Your application to use human subjects, titled, "Condom Use in 17:-19 Year Old Adolescent Girls Before and After Initiating Hormonal Contraception" has been reviewed by the Institutional Review Board (IRB). Your informed consent statement should contain a statement that reads; "This research has been reviewed and approved by the Institutional Review Board of California State University; San Bernardino."

Please notify the IRB it any substantive changes are made in your research prospectus and/or any maintelepated risks to subjects arise. If your project lasts longer than one year, you must reapply of approval at the end of each year. You are required to keep copies of the informed consent forms and data for at least three years.

If you have any questions regarding the IRB decision, please contact Michael Gillespie, IRB Secretary. Mr. Gillespie can be reached by phone at (909) 880-5027, by fax at (909) 880-7028, or by email at nigillesp@csusb.edu. Please include your application identification number (above) in all correspondence.

Best of luck with your research.

1 1/04

Joseph Lovett, Chair Institutional Review Board

JI /mg

cc: Professor Ellen Daroszewski, Department of Nursing

5500 University Parkway, San Bernardino, CA 92407-2397



5500 University Parkway, San Bernardino, CA 92407-2397

March 5, 2002

Methodology Change Full Board Review IRB File # 01023

Ms. Mary Placencia. Professor Ellen Daroszewski. Department of Nursing California State University. 5500 University Parkway San Bernardino, California 92407

#### Dear Ms. Placencia:

Your letter to request a Methodology, Change in your original application, titled, "Condom Use in 17-19 Year Old Adolescent Girls Before and After Initiating Hormonal Contraception" has been reviewed by the Institutional Review Board (IRB). Your informed consent statement should contain a statement that reads, "This research has been reviewed and approved by the Institutional Review Board of California State University, San Bernardino."

Please notify the IRB if any substantive changes are made in your research prospectus and/or any unanticipated risks to subjects arise. If your project lasts longer than one year, you must reapply of approval at the end of each year. You are required to keep copies of the informed consent forms and data for at least three years.

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Best of luck with your research.

Sincerely

Joseph Löver, Chair Institutional Review Board

JL/mg

cc: Professor Ellen Daroszewski, Department of Nursing

The California State University Bakeripeld : Channel Islands - Chico - Domingues Hills - Frenc - Pullerion + Hoyward + Humboldt - Long Beach - Los Angeles - Maritime Academy Montery Bay - Northidge - Pomona: Secrementa - San Bernardino - San Diego - San Francisco - San Lius Obigo - San Marcos - Sanoma - Stantislau

## APPENDIX E DATA COLLECTION FORM

### Data Collection Form

Date of Data Co	ollection:	i promo	Collection (	Code:
Age at time of	Race:	Ethnicity:	Parity:	History of STD
hormonal	1 = White	1 = Hispanic	1 = No	1 = Yes
initiation:	2 = African	2 = No	Pregnancies	2 = No
	American	Hispanic	2 = Abortions	·
	3 = Asian		3 = Live Births	
	American			
	4 = Other			
Study Variables			2nd follow-up	
Hormonal	1 = Yes	1 = Yes	1 = Yes	1 = Yes
contraceptive	2 = No	2 = No	2 = No	2 = No
Condom use				
<u>before</u>	1 = Yes			
hormonal				
method	2 = No			
initiated				
Condom use				
<u>after</u>		1 = Yes	1 = Yes	1 = Yes
hormonal				
method		2 = No	2 = No	2 = No
initiated			<u> </u>	
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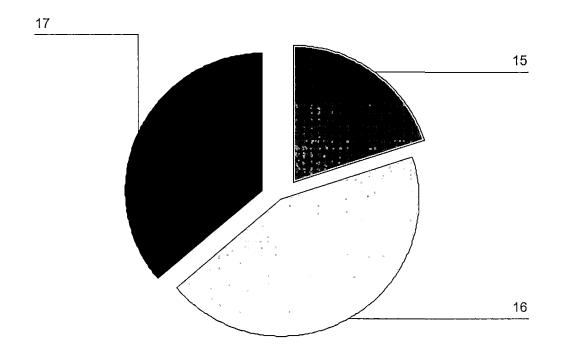
APPENDIX F

DEMOGRAPHIC ...

Demographic Findings				
	N	Mean	Standard Deviation	Percent
Age at Hormonal				
Initiation				
• 15 year olds	5			20%
• 16 year olds	11	16.16	.75	44%
• 17 year olds	9			36%
Total:	25			100%
Race				
• White	. 22			888
• African Am	2			8%
• Asian Am	1			36%
• Other	0			0%
Total:	25			100%
Ethnicity				
• Hispanic´	19			76%
• Non Hispanic	6	•	• •	24%
• Total:	25			100%

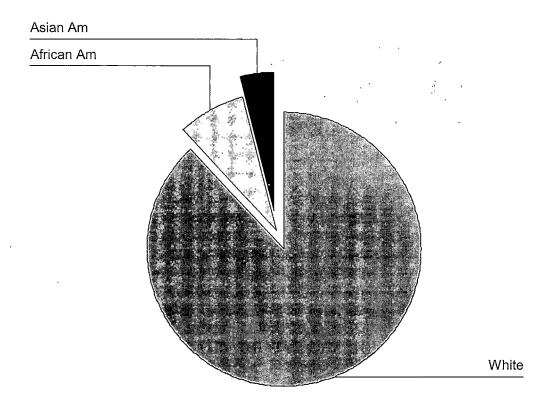
## APPENDIX G AGE DISTRIBUTION

### Age at Hormonal Initiation



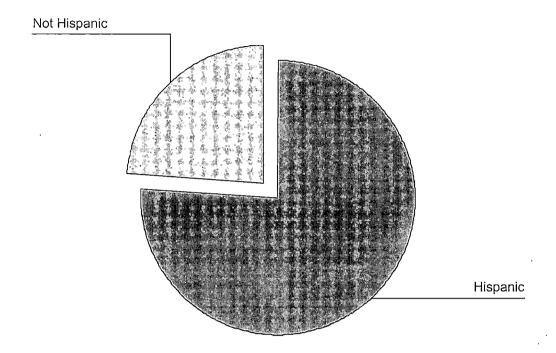
## APPENDIX H RACE DISTRIBUTION

### Race Distribution for Population Sample



## APPENDIX I ETHNICITY DISTRIBUTION

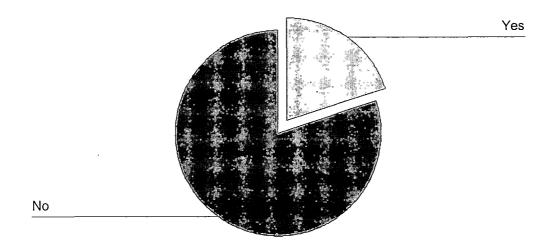
### Ethnicity Distribution for Population Sample



### APPENDIX J

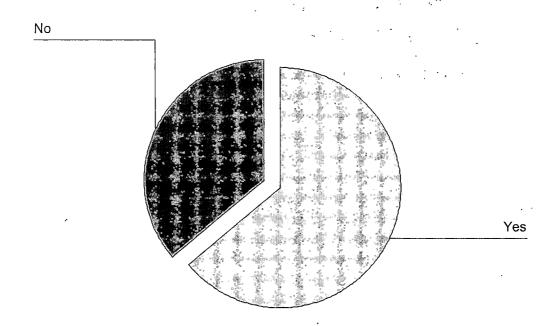
CONDOM USE AT LAST SEXUAL ENCOUNTER BEFORE INITIATING

# Condom Use at Last Sexual Encounter Before Initaiting a Hormonal Contraceptive Method



# APPENDIX K CONDOM USE AT LAST SEXUAL ENCOUNTER AFTER INITIATING

# Condom Use at Last Sexual Encounter After Initiating a Hormonal Contraceptive Method



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