

NOTE: This paper is above average, but it is not perfect. Sample Student did not take the thesis & expand it into an introduction very well. The Lit Rev is too short.

**THE SOCIAL FACTORS AFFECTING LIKELIHOOD  
OF TESTING FOR HUMAN PAPILLOMA VIRUS**

**By**

**Sample Student**

**Sociology Capstone**

As a student of the University of Virginia's College at Wise, I pledge that I have neither received nor given aid on this assignment.

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## Introduction

This paper examines cervical cancer, with a focus on the social factors affecting the diagnosis of cervical cancer in the past as compared to today, the social factors affecting the incidence of cervical cancer, the demographics of cervical cancer sufferers, through the methodologies of a socio-historical analysis of the causes and treatments of cervical cancer in the 1950's as compared to today, a comparative analysis of the number of cases diagnosed and what treatments were available and what age groups are effected, the social factors contributing to and limiting the incidence of cervical cancer of teens focusing on medical history and healthcare availability, and will conclude with an analysis of the extent and the nature of cervical cancer and it's prevention in the future, and suggestions for social policies to reduce cervical cancer and improve it's treatment.

The purpose of this paper is to define cervical cancer, compare statistics, and determine if the number of cases diagnosed are increasing or decreasing. This paper will examine the number of cases diagnosed, availability of treatments, and the age groups affected. This research will look at the social factors and risk factors associated with the development of cervical cancer. This research will look at women's health care concerns and issues that prevent them from getting the care they need and to what extent they are familiar with the HPV (human papillomavirus). This paper will examine what educational tools and prevention material is available for young adults about STD's (sexually transmitted diseases), HPV, and cervical cancer risk factors.

## Literature Review

### **Changing demographics in the United States: implications for health professionals.** Marilyn Frank-Stromborg.

Summary: This article discusses the changing demographics in the United States. The baby boomers will turn sixty-five years old between 2000 and 2020. Because the elderly require more health care, health care plans will need to consider this in the future. The information in this article will lead to further research in the area of ethnicity and aging and determine if their prediction is true now. The Hispanic population is growing at a rate five times greater than the rest of the United States. Almost one-half of all cervical cancers in Texas occur in Hispanic women.

Evaluation: There is interesting information in this article. The only problem is that it is outdated information. It was written in 1991 and is also very brief. It is helpful to see that these types of ethnicity make a great impact on health care because certain cancers are more prevalent in certain ethnic groups.

Linkage: This article is

Importance: This article is helpful because it discusses how women are living longer than men and how healthcare must continue to reform in order to meet the needs of the elderly. Women are living longer than men and have fewer financial resources.

### **Human Papillomavirus Testing: Vaccine to Prevent HPV Infection and Dietary Factors.** National Cancer Institute

There are things we can do to make screening for cervical cancer more effective. The important thing is to prevent the precancers and treat precancers before they become cancerous or by avoiding risk factors. A vaccine to prevent HPV (human papillomavirus) infection would have the potential to reduce cervical cancer.

This article has a lot of useful information about HPV testing, however it is complicated and hard to understand. It provides nutritional information about certain vitamins that could serve as risk reducers for cervical cancer.

There are an estimated six million woman in the United States with a persistent HPV infection. A vaccination for prevention of HPV could make a dramatic reduction in the number of cervical cancer cases. This article will lead me to other sources to do further research on vaccinations and other possible preventive methods.

The information in this article satisfies the part of my research pertaining to the reduction of cervical cancer and improving the treatments. This is part of the expectations for the future and developments of cervical cancer.

### **Dealing with cancer. Cervical cancer: The One That's Preventable.**

This article examines what will happen when you are diagnosed with cervical cancer. The three stages of abnormal growth are explained along with the symptoms. There are different kinds of treatments which this article discusses as well as the side effects that women suffer from. It also explains the advantages and disadvantages of the different treatments.

This article is useful because it discusses the process from diagnosis of cervical cancer to follow up care treatments. It also explains your chances of being cured and expresses reasons for optimism. A lot of the information in this article is repetitious of other sources examined.

There is a new test called the Hybrid Capture HPV test that is being considered for use as a widespread screening tool to detect cervical cancer. This information will lead me to other sources in order to find out more about this new test.

Part of the research on cervical cancer includes focusing on the nature of the disease and also its prevention in the future. This article will be very helpful for my research topic realizing that researches for new testing techniques are still being examined. There is a need for

continually developing new and improved screening methods.

### **Physicians can do more to promote regular Pap tests.** Laurie Jones

This article examines what physicians can do to promote regular Pap tests. Each year approximately 4400 women die from cervical cancer. Statistics show that black women, women over 65, low income women and rural women are most likely to have never had a Pap test. This disease is nearly 100% treatable if caught early. Physicians should routinely alert women to have a Pap done or send out reminders.

The context of this article was very enlightening. Physicians can share some of the responsibility for reducing cervical cancer cases. There are behaviors that physicians can display to make the Pap smear experience more relaxed. The only problem with this information is that the statistics are from 1992. From viewing other sources, it is obvious that these statistics have changed over the last ten years.

The statistics mentioned in this article are outdated however, they can still be used. As more statistics are gathered they will have to be placed in the appropriate area for that particular time.

The information in this article can be used in my research in the prevention of cervical cancer and also as part of the comparative analysis to show the numbers of cervical cancer deaths are continually changing. The comparison will be from 1992 to the present.

### **What are the risk factors for cervical cancer?** American Cancer Society

There are several risk factors involved with the number of women diagnosed with cervical cancer. Some of those are HPV (human papillomavirus), HIV (human immunodeficiency syndrome), diet, oral contraceptives, chlamydia infection, age and screening, high sexual activity, socioeconomic and ethnic factors, inherited genetic factors, smoking, and

exposure to chemicals. Cervical cancer is one of the slowest growing cancers and can be almost completely prevented.

This article brings out a few different risk factors such as low socioeconomic status, ethnic factors, and exposure to chemicals. There is little information on each risk factor, but the information is easy to understand. Most of the facts stated in this article are fairly recent.

This source will lead me to other sources because there is a broader range of risk factors than the other sources. Since there are more risk factors involved than I originally thought, now it will be a quest to find even more. All of the basic information viewed so far has been fairly consistent. In order to find more socio-historic information about cervical cancer, I will have to explore other sources.

The article is significant because it offers information about social and risk factors that leads to cervical cancer. It offers information about Caucasian, African, and Hispanic American women and their incidences of cervical cancer.

**Social stigma and negative consequences: factors that influence college students' decisions to seek testing for sexually transmitted infections.** Karen R. Barth; Robert L. Cook; Julie S. Downs; Galen E. Switzer; Baruch Fischhoff.

This article examines social stigma and negative consequences as a barrier to delay or avoid seeking testing for sexually transmitted infections (STI's). It contains an in depth study of 41 college students' ages 18 to 23 years old. Health professionals and educators should work to reduce the barriers to screening, including social stigmas and negative consequences.

This is an important article because the information is specific and detailed, but yet is easy to understand. The sample included sufficient representation from students of different gender, ethnicity, number of sexual partners and STI testing history. They interviewed 41 students for 30-45 minutes each. The participants were paid \$15.00 and each provided written informed consent.

The students made many detailed comments during their interview about why they delay STD screening. These give much insight about how students feel and the reasons why social stigma and negative consequences is a barrier. This article will lead to ideas of conducting a similar study.

This paper will examine this information and will use it in the topic of social factors affecting the incidence of cervical cancer.

### **Sexually transmitted diseases: The Female Body.**

When it comes to STD's (sexually transmitted diseases) women seem to have an unfair disadvantage when compared to men. Women are twice as likely to get some diseases such as chlamydia and gonorrhea. These diseases for women can be much more complicated than they are for men. Having an STD can threaten a woman's fertility and can cause childbirth complications as well as endangering the newborn.

This book offers specific information about sexually transmitted diseases. There are a few statistics provided about STD's. Much of the focus is on prevention. The strengths of this book offer more insight on prevention of STD's. It also brings men into the picture which seems to be unusual according to the research examined so far.

This source will lead me to examine more statistics on STD's. The information provided is given for women with no specific age given. Since a portion of this paper is focusing on young women and their knowledge and understanding of cervical cancer, then more information will be necessary.

This article is important because it offers information about STD's that may lead to cervical cancer. It also brings out the role men play pertaining to cervical cancer. It also discusses prevention techniques that men and women can use to help protect themselves from becoming a statistic.

**Attitudes about sexual disclosure and perceptions of stigma and shame.**  
S.D. Cunningham; J. Tschann; J.E. Gurvey; J.D. Fortenberry; J.M. Ellen.

The main focus of this article is to discuss the stigma and shame of having a sexually transmitted disease. One barrier that is significant in the area of importance is the disclosure of sexual behaviors to health professionals. This one factor can cause a delay in diagnosis and treatment which can allow for continued transmission.

Although this article contains some very interesting thoughts about stigma and shame, it is very hard to understand. It includes information about a study that was done to determine the association between stigma and shame of having a sexually transmitted disease and related care seeking. The study was done using a small sample which leads me to believe that the information may not be very accurate.

This information this article contains will lead me to read more about how studies are conducted and how to get reliable information. It also made me think about reasons why women don't get regular health care.

This article satisfies the part of my thesis statement pertaining to the social factors contributing to and limiting the incidence of cervical cancer of teens focusing on their medical history.

## Primary Methodology

The first step in determining methodology is to pinpoint the research objective. What do you want to know and why? The concept has to be generalizable, logical, explainable and testable. The theory must use definitions, facts, assumptions, and concepts to explain the relationship among variables.

There are several ways to design research surveys. Mail out surveys is fairly expensive and many people won't complete them. Using individual face to face interviews, you can obtain very rich information. This method is more difficult to analyze. Telephone surveys are time consuming. Questionnaire surveys can be done in small groups and is not expensive or time consuming. It is also possible to combine the methods in order to get the information needed.

When designing research questions, it is necessary to look at the population that you are planning to survey. Diversity in age, race, class, gender and education is required for some research. The questions must be appropriate for that particular population. Many young people tend to be impatient and don't like to take the time to write responses, therefore any possible option should be included that could be easily answered with a check mark or a circle. Also, the vocabulary must be easy for the population to understand in order for them to answer the question appropriately. The wording of a question is very important in order to avoid bias that would affect the response.

The demographic questions required for the cervical cancer research were age, race, class, gender and education. Each of these is necessary in order to determine which, if any, characteristics relate to an increase of sexually transmitted diseases. The next decision was to choose between open or closed ended questions. Open ended questions are difficult to analyze, although the information is very rich. Closed ended question contain clear cut options, but is easier to analyze. When selecting questions, it is best to reverse some similar questions for validity. Focusing on formulating the appropriate research questions is the most important part of research design. Asking the right questions can provide a very rich source of information.

Initializing good survey questions provides a way to measure demographics, attitudes, and beliefs. Decide how many people it will be necessary to survey in order to obtain the information that is needed. Also, the number of questions on the survey is important. If the survey is too long, the respondents may become frustrated and mark anything just to finish or may not finish it at all. Focus on the objective in order to ask the best questions to obtain the best information with as few questions as possible.

The first research objective is to find if any demographic characteristics relate to an increase of sexually transmitted diseases. The second is to determine if family background/history correlate to an increase in sexually transmitted diseases. The third is to determine the awareness level among young people 16 to 24 years of age. The last is to find if a greater knowledge about sexuality leads to better healthcare. In order to address each of these effectively, a master survey should be done in the Excel program. This process organizes research objectives, concepts, variables and the relationship of variables. It also serves as a way to see the thesis statement and begin to design your questions. Sensitive questions should be as few as possible and it's probably best to begin with questions that are easier to answer.

By using the master survey as a guide, it becomes clear if the research objectives, concepts, and variables will provide the information that is needed. The number of subjects to be surveyed is important because it is necessary to get enough information to analyze. A pretest of surveying about ten people would be a good idea in order to see if changes need to be made before the final survey.

A letter of permission must be written to the director of a facility or institution prior to giving the survey. If permission is granted, then the survey can be given at their convenience.

In any survey research, the subjects have the right to privacy. A consent form must be created in order to explain who is doing the research, the purpose of the survey, how the information will be used and if there are any risks involved. If the participants are under eighteen, then an adult has to sign the consent form for them. Participation is always voluntary and no pressure should be used to try to force someone to participate.

The researcher must explain the information on the consent form. The researcher and the respondent must sign and date the consent form. All consent forms are put in the same envelope and then the survey is handed out. Names are not to be put on the survey itself. After the surveys are completed, they are all put in the same envelope. By using this procedure, the surveys are anonymous.

After receiving permission from the Center Director at Flatwoods Job Corps, the surveying was scheduled for the week of March 14 – 18, 2005. The first day, twenty-seven surveys were done. There were eighteen African American males, four African American females, three white males and two white females. The concept was to get fifty surveys, half male and half female. Out of these males and females, a diverse blend of ethnic groups was the goal for the subjects. Surveys were given in groups of six or seven at a time. Because some of the questions were sensitive, it was necessary to survey smaller, more spread out groups to maintain confidentiality. The surveys took about fifteen minutes for each group or individual to complete. On Tuesday, March, 15, the ideal population became more difficult to find. Fifteen more surveys were completed that day. Some of the white females were off center on a trip, so the surveying had to be postponed. On Friday, March 18, four white females completed the survey. Forty-seven surveys were completed. Some populations are difficult to find when surveying. The more surveys completed, the richer the information becomes.

### Summary of Results of Data

The next step was to enter the data in the SPSS Program. All responses had to be coded and entered in each cell. Once this was completed, it was time to utilize the capabilities of the program.

**DESCRIPTIVE STATS:** The first test was called descriptive statistics. The age of respondents varied from a minimum age of sixteen to a maximum of twenty-four years of age. The mean age was 18.68 and the standard deviation was 2.044. The next analysis was called a frequency test. There were 38.3% female and 61.7% male respondents. This test also showed that 91.5% of the respondents had an educational level of some high school or a high school grad. There was no significant difference in the class income of all respondents. There was also no significant difference in the frequency of obtaining regular medical healthcare checkups. Of all the respondents, 57.4% had anywhere from one to ten different sexual partners and 31.9% had from eleven to thirty plus.

A couple of questions addressed the relationship the respondents have with their parents. The survey revealed that 50% of the respondents have a poor relationship with their father and 76.6% have a good relationship with their mother. The frequency table showed that 53.2% have good self esteem. The respondents were asked if they would feel more comfortable being taught sex education by a particular person. There was no significant difference in their responses. The respondents were asked about listing a topic about sexuality that they felt would be helpful to them. Responses reflected that 26.9% felt the topic of sexually transmitted diseases would be helpful for them to learn more about.

**CAUSES & EFFECTS:** The next SPSS test used was called crosstabulation. By using this method, it is a simple process to compare variables in order to find if there is a correlation. This test creates a Chi-Square test which shows if there is a correlation.

The **first correlation** was between the age of the respondents and the number of people they know that had been diagnosed with a sexually transmitted disease. The younger respondents, sixteen to eighteen years of age know more people with sexually transmitted

diseases than respondents nineteen to twenty-four years of age. The significance level was below .01.

The **second correlation** was the crosstabulation between the age of the respondents and their knowledge of the human papillomavirus. Out of thirty five responses, thirty one did not know what the human papillomavirus is and four answered correctly. Twenty six of the thirty five respondents were sixteen to twenty two years of age. The significance difference was below the .05 level.

The **third correlation** found was between the educational level of the respondents and their perceived knowledge of sexually transmitted diseases. Out of forty six respondents, forty two had some high school or were high school graduates and twenty eight reported that they had much knowledge about sexually transmitted diseases. The significance level was below .01.

The **fourth correlation** was between the educational level of the respondents and how many people they know with a sexually transmitted disease. Out of forty three respondents, thirty nine had either some high school education or were high school graduates. Twenty six out of this group knew more people with sexually transmitted diseases. The significance difference was below the .01 level.

The **fifth correlation** was whether or not the respondent had ever had an abnormal PAP test and if they knew about HPV. Out of twenty nine respondents, three had an abnormal PAP and four knew about HPV. The significance difference was below the .05 level.

The **sixth correlation** was found between the respondents' knowledge of HPV and the behaviors contributing to HPV. Out of thirty four respondents, only four knew about HPV and four knew behaviors contributing to HPV. The significance difference was below the .05 level.

This data will be discussed in greater depth, and analyzed in the context of the literature on sexually transmitted diseases below, in Chapter VI: An Analysis of the Results.

## Chapter I

### An Introduction to Cervical Cancer

The cervix is the lower, narrow part of the womb which is located in a woman's lower abdomen. Most cancers are named for the part of the body where they begin; therefore cervical cancer begins in the cervix. Each year about 15,000 women in the United States are diagnosed with cervical cancer.

The early stages of cervical cancer may be completely asymptomatic (Canavan & Doshi, 2000). Vaginal bleeding, contact bleeding or (rarely) a vaginal mass may indicate the presence of malignancy. Also, moderate pain during sexual intercourse and vaginal discharge are symptoms of cervical cancer. In advanced disease, metastases may be present in the abdomen, lungs or elsewhere.

Symptoms of advanced cervical cancer may include: loss of appetite, weight loss, fatigue, pelvic pain, back pain, leg pain, single swollen leg, heavy bleeding from the vagina, leaking of urine or feces from the vagina,<sup>1</sup> and bone fractures.

The most important risk factor in the development of cervical cancer is infection with a high-risk strain of human papillomavirus. Women who have many sexual partners (or who have sex with men who had many partners) have a greater chance.

More than 60 types of HPV are acknowledged to exist. Types 16 and 18 are generally acknowledged to cause about 70% of the cancer cases. Although most HPV infections clear up on their own, the infections could increase to major abnormalities or cervical cancer.

The presence of strains 16, 18 and 31 is the prime risk factor for cervical cancer, and Walboomers *et al.* (1999) reported that the presence of HPV is a necessary condition for the development of cervical cancer. A virus cancer link with HPV has been found to trigger

alterations in the cells of the cervix, leading to the development of cervical intraepithelial neoplasia and cancer.

Genital warts although caused by different HPV types have no relation to cervical cancer.

The medically accepted paradigm, officially endorsed by the American Cancer Society and other organizations, is that a patient must have been infected with HPV to develop cervical cancer, and is hence viewed as a sexually transmitted disease, but not all women infected with HPV develop cervical cancer (Snijders *et al*, 2006). Use of condoms does not always prevent transmission. Likewise, HPV can be transmitted by skin-to-skin-contact with infected areas. In males, HPV is thought to grow preferentially in the epithelium of the glans penis, and cleaning of this area may be preventative.

Despite the development of an HPV vaccine, some researchers argue that routine neonatal male circumcision is an acceptable way to lower the risk of cervical cancer in their future female sexual partners. Others maintain that the benefits do not outweigh the risks and/or consider the removal of healthy genital tissue from infants to be unethical as it cannot be reasonably assumed that a male would choose to be circumcised. There has not been any definitive evidence to support the claim that male circumcision prevents cervical cancer, although some researchers say there is compelling epidemiological evidence that men who have been circumcised are less likely to be infected with HPV. However, in men with low-risk sexual behaviour and monogamous female partners, circumcision makes no difference to the risk of cervical cancer.

In the Canadian provinces of Ontario, Prince Edward Island, Newfoundland and Nova Scotia, free vaccinations to protect women against HPV are slated to begin in September 2007 and will be offered to girls 11-14 in age. Similar vaccination programs are also being planned in

British Columbia and Quebec.

Australia has decided to fund the HPV vaccine under the National Immunisation Program commencing in the 2007 school year. In the U.K. a similar free vaccination program is being considered, while in the United States, many states are preparing bills to handle issuing the HPV vaccine.

Precancerous cells in the cervix, called cervical dysplasia, do not cause any symptoms and cervical cancer usually doesn't cause symptoms until it has been growing for some time. Sometimes abnormal cells go away. Cervical cancer is gauged in five different stages. Stage 0 begins when abnormal cells are found in the first layer of cells of the lining of the cervix and Stage IV ends when cancer has spread to other parts of the body. The stage is gauged by the amount of penetration in the cervix.

The cervix is made up of many types of cells which normally divide to produce more cells as the body needs them. When the cells divide and are not needed, then a mass of tissue forms which is called a tumor. Tumors can be benign or malignant. Benign tumors are not cancer and can usually be removed with no further complications. Malignant tumors are cancer and can grow and invade other parts of the body.

## Chapter II

### History of Cervical Cancer Screening

Epidemiologists working in the early 20th century noted that:

Cervical cancer was common in female sex workers.

It was rare in nuns, except for those who had been sexually active before entering the convent. (Rigoni in 1841)

It was more common in the second wives of men whose first wives had died from cervical cancer.

It was rare in Jewish women.

In 1935, Syverton and Berry discovered a relationship between RPV (Rabbit Papillomavirus) and skin cancer in rabbits. (HPV is species specific and therefore cannot be transmitted to rabbits)

This led to the deduction that cervical cancer could be caused by a sexually transmitted agent. Initial research in the 1950s and 1960s put the blame on smegma (e.g. Heins *et al* 1958), but it wasn't until the 1970s that human papilloma virus (HPV) was identified. A description by electron microscopy was given earlier in 1949 and HPV-DNA was identified in 1963. It has since been demonstrated that HPV is implicated in virtually all cervical cancers. Specific viral subtypes implicated are HPV 16, 18, 31 and 45.

A Pap (Papanicolau) test is a screening exam used to examine cells from the cervix of a woman. It was first introduced in the 1940's. A scraper is used to collect a sample of cells from the cervix, placed on a glass slide and sent to a lab for diagnosis. Since this test was introduced, the death rate for cervical cancer in the United States has declined by nearly seventy percent. However, 12,900 new cases are diagnosed in a year and nearly 4,600 will die from the disease.

In 1988, a more up to date method of analyzing Pap tests results was developed

called the Bethesda system. The old method used Class I, Class II and so on. The new method uses descriptive terms such as normal, atypia or dysplasia in the section reporting cell examination (The Female Body, 1996, p.161). The Bethesda system has been revised, once in 1991 and again in 2001(ACS, 2002, p.4).

In 1990, a screening and early detection program was established. It grew from eight states in 1991 to fifty states, six U.S. territories, the District of Columbia, and twelve American Indian/Alaska Native organizations in 2000. More than 2.7 million breast and cervical cancer screening tests have been provided by the program to more than 1.7 million women. A total of 912,688 women received 1,480,590 Pap tests. During the same period, the program diagnosed 39,456 cases of precancerous cervical conditions and 667 cases of invasive cervical cancer. This program also provides educational information to women and health care providers about the need for these life saving screening tests (CDC, 2001, p.1).

## Chapter III

### Availability and Barriers of Cervical Cancer Screening

Congress passed the Breast and Cervical Cancer Mortality Prevention Act of 1990. The Act authorized the Center for Disease Control to provide breast and cervical cancer screening services to older women, women with low incomes, and underserved women of racial and ethnic minority groups. Many health departments offer low or no cost cervical cancer screenings. They use a sliding scale to determine the fee based on your income. Sometimes communities provide health fairs and have no cost adult screenings.

There are things that can be done to make your Pap test as accurate as possible. Try not to schedule a Pap during your menstrual. Do not douche, have sex, use foams, jellies, creams or medications for forty-eight hours prior to the test.

The widespread introduction of the Papanicolaou test, or *pap smear* for cervical cancer screening has been credited with dramatically reducing the incidence and mortality of cervical cancer in developed countries. The pap smear suggests the presence of cervical intraepithelial neoplasia (pre-malignant changes in the cervix) before a cancer has developed, allowing for further workup. Recommendations for how often a Pap smear should be done vary from once a year to once every five years. The American Cancer Society recommends that cervical cancer screening should begin approximately three years after the onset of vaginal intercourse and/or no later than twenty-one years of age. If pre-malignant disease or cervical cancer is detected early, it can be treated relatively noninvasively, and without impairing fertility.

The HPV test is a newer technique for cervical cancer screening which detects the presence of human papillomavirus infection in the cervix. It is more sensitive than the pap smear (less likely to produce false negative results), but less specific (more likely to produce false positive results) and its role in routine screening is still evolving. Since more than 99% of invasive cervical cancers worldwide contain HPV, some researchers recommend that HPV testing be done together with routine cervical screening (Walboomers *et al*, 1999). But, given the prevalence of HPV (around 80% infection history among the sexually active population) others

suggest that routine HPV testing would cause undue alarm to carriers.

Although, the Pap test has been very successful in preventing cancer, it is not perfect. The tests are examined by humans, therefore error is inevitable. A newer method which is a liquid-based Pap test is now being used as well as computerized instruments that can recognize abnormal cells that are sometimes missed by technologists. Some insurance's won't pay for the newer methods because they believe that they are not necessary (ACS, 2002, p.3).

Stigma is defined as an undesirable attribute in a person that is viewed as setting that person apart from the rest of society. Shame is an intense negative emotion that results from a person experiencing failure in relation to personal or other people's standards, feeling responsible for that failure, and believing that the failure reflects an inadequate self. Although shame can occur privately, it has also been described as an affective reaction that follows public exposure of some deviation from accepted norms (Sexually Transmitted Infections, 2002, p. 334).

A study was done using 142 African-American youths, 13-19 years old. They were questioned about STD (sexually transmitted disease) related stigma and perceptions about disclosure of sexual behaviors to a doctor or nurse. Stigma about STD's may influence how female adolescents perceive reactions to disclosure of their sexual behavior to healthcare providers. It may also be an important factor in their decision to seek STD related care. Delay in seeking treatment for STD's can allow for continued transmission (Sexually Transmitted Infections, 2002, p.334).

Another survey was done using forty-one college students for the purpose of identifying and describing key factors that influence STI (sexually transmitted infections) test seeking behavior. (See Appendix A) One on one interviews were done using hypothetical scenarios and open-ended questions. Perceived negative consequences were among the most commonly mentioned reasons for rejecting STI tests, with the greatest concern being what other people would think. They were concerned about being perceived as loose, dirty, stupid, irresponsible, and not caring about oneself. The effects of gossip were mentioned often and that women were

judged more harshly than men. Embarrassment and scared to find out was mentioned a lot. Negative personal emotions associated with testing, guilt and shame of having a disease were a concern. The data collected suggested that there is minimal media attention paid to STI's other than HIV may convey a message that these infections are unimportant therefore reducing interest in STI screening.

Selecting a health care provider was a big concern. Some students felt that the best place to be tested was with your own family doctor although confidentiality and the reputation of the clinic were the main issues (Journal of American College Health, 2002, p.153).

Another concern in the area of cervical cancer screening is the problem of serving women who speak multiple languages. Translating from English to Spanish can be difficult especially dealing with medical terminology. Translations can vary depending on the educational level of the translator, where the learned Spanish and their own interpretation of the material presented.

Sometimes ethnically appropriate educational materials are not readily available because there may be disagreement about their appropriateness. Videos on cervical cancer are difficult to find in any language.

Another challenge is knowledge and sensitivity to historical issues. In some Spanish-speaking communities, using free or government-sponsored health care services is perceived as a risk to future U.S. citizenship. African American women were reluctant to participate in agencies viewed as serving primarily Caucasian women or that are located in areas perceived to be anti-African American.

Reaching low-income women from diverse ethnic and cultural communities for the purpose of breast and cervical cancer screening is a challenge. The challenges are even greater when the target population is also a minority group. Many women do not take advantage of these services because of the linguistic, cultural, and social barriers (Family and Community Health, 2003, p.307).

## Chapter IV

### Risk Factors and Relationships

A risk factor is anything that increases the chance of getting a disease such as cancer. Being aware of risk factors may cause lifestyle changes that would lessen the chance of developing the disease.

There are several risk factors that can increase the chance of developing cervical cancer. Women without any of these risk factors rarely develop cervical cancer. When a woman develops cervical cancer or precancerous changes, it is not possible to be certain that a particular risk factor was the cause.

The most important risk factor for cervical cancer is the infection by the human papillomavirus or HPV. This is a group of more than one hundred viruses that can cause warts. These warts can be on your hands and feet, lips or tongue, female and male genital organs and the anal area. These HPV types are passed from one person to another through sexual contact. Some viruses are low risk which is not usually linked to cervical cancer, but the high risk ones are. There is no cure for the papillomavirus infection; however the warts and abnormal cell growth can be treated effectively. Most women with HPV infection do not develop cervical cancer. Many times, the infection may even disappear without any treatment because of the woman's immune system has succeeded in fighting the virus. HPV infection can cause changes in the cells of the cervix which can be detected by a Pap test. Certain types of sexual behaviors can increase a woman's chance of getting HPV. They are intercourse at an early age, having many sexual partners and having unprotected sex at any age. HPV can be present for years with no symptoms and does not always produce warts. You can have the infection and pass it on without even knowing it. This virus can be passed from person to person by skin to skin contact with an infected area of the body.

There are several other risk factors linked to cervical cancer. Smoking affects more than the lungs. Cancer causing chemicals are absorbed by the lungs and carried in the bloodstream

throughout the body. These substances damage the DNA of cells in the cervix and may contribute to the development of cervical cancer. Women who smoke are about twice as likely as nonsmokers to get cervical cancer. HIV (human immunodeficiency virus infection) damages the body's immune system which makes women more susceptible to HPV infections. Chlamydia is a common kind of bacteria that can infect the female reproductive system. It is spread by sexual contact. Many women do not know that they are infected. Women who have past or current chlamydia infection are at a greater risk for cervical cancer. Diets low in fruits and vegetables are associated with an increased risk of cervical cancer. There is some statistical evidence that use of oral contraceptives for five or more years may increase the risk of cervical cancer. Women with low socioeconomic status are at risk for cervical cancer. Their incomes may not allow them to have proper health care. They may also be undernourished. DES (diethylstilbestrol) is a hormonal drug that was prescribed for women who were thought to be at risk for miscarriages. There is a slight chance that the daughters of these women are at risk for cervical cancer. Recent studies suggest that women whose mother's or sister's had cervical cancer are more likely to develop the disease (American Cancer Society, 2002, p.1-4).

There are more than fifty sexually transmitted diseases. Of the twelve million people who get an STD every year about six million are women. Women are twice as likely to get chlamydia and gonorrhea as men. The toll that these infections take on women's health can be far greater than it is for men. Women's fertility can be threatened, childbirth can be complicated and a newborn's health can be endangered (The Female Body, 1996, p.341).

Personal incentive is a key factor when choosing what level of health care maintenance to pursue. Self-esteem, attitudes and social stigma are all factors that contribute to lifestyle choices. These choices can include health care and preventive solutions such as avoiding risky behaviors.

Imagine John-Boy trying to buy condoms from Ike Godsey. Would Mary Ellen stop in at Condom Kingdom in Philadelphia to check out the latest colors and styles? Times have changed and so have relationships. In times past, condoms were pretty much an option. Of course, there was the risk of pregnancy and now the risk is life threatening. Before sleeping with a new

partner, should you ask him or her if they have been exposed to any STD's? No matter how they respond, can you be sure? The answer is no because they may be infected and not be aware of it. Should a trip for testing be a prerequisite for any sexual relationship? Should you take a chance and sleep with your partner with the light on so you can check out the skin's surface for sores, bumps or inflammation? The answer is no. Are relationships suffering from anomie? It seems that the media portrays relationships as short term and non-committal. Is our expected social behavior rapidly changing? Relationships should be built on love and trust. The way in which the media portrays relationships makes it appear as though it's a game. In movies and television, a couple meets and usually sleeps together that same night. This type of social behavior has become the norm. Commitments are what tie people to particular beliefs or patterns of behavior. Modern society seems to be accepting of less commitments and more personal sexual satisfaction. Extramarital affairs, divorce, couples that choose to live together and couples that meet and sleep together right away are some examples that come to mind.

Emile Durkheim was a social reformer. He believed in seeking ways of improving the functioning of society. He felt that social disorders were not a necessary part of the modern world and could be reduced by social reforms. It seem as though his theories could be applied to the area of cervical cancer and the risk factors associated with it. Society is rapidly changing and along with it are moral and social issues that need to be addressed. By studying social facts and our common morality, it should be possible to reduce some of the disorder that exists today (Modern Sociological Theory, 2000, p.17).

Increases in sexual intercourse have occurred mainly in the middle and upper-middle classes. Lower-class adolescents always had a much higher incidence of sexual intercourse. Both middle and lower class adolescents are moving toward the adoption of much more freedom in sexual attitudes and beliefs. Peer groups are very important to adolescents. Given the amount of time spent with their peers they begin to conform to the group norms. This becomes their source of their immediate sense of social esteem, identity and prestige (The I, The Me and You, 1977, p.120-125).

Today's society must address ways in which to improve moral order. Social reform is an important basis of maintaining a stable society. If safe sex is to become the norm, then birth control and protected sex must be stressed. On the other hand, if lasting commitments and relationships are to become the norm, then less sex and abstinence must be reinforced.

## Chapter V

### Future Developments and Expectations

No one knows with any certainty what the future holds for relationships and the stigma associated with seeking healthcare. Healthcare treatments for cervical cancer are continually improving.

Microinvasive cancer (stage IA) is usually treated by hysterectomy (removal of the whole uterus including part of the vagina). For stage IA2, the lymph nodes are removed as well. An alternative for patients who desire to remain fertile is a local surgical procedure such as a loop electrical excision procedure (LEEP) or cone biopsy.

If a cone biopsy does not produce clear margins, one more possible treatment option for patients who want to preserve their fertility is a trachelectomy. This attempts to surgically remove the cancer while preserving the ovaries and uterus, providing for a more conservative operation than a hysterectomy. It is a viable option for those in stage I cervical cancer which has not spread; however, it is not yet considered a standard of care, as few doctors are skilled in this procedure. Even the most experienced surgeon cannot promise that a trachelectomy can be performed until after surgical microscopic examination, as the extent of the spread of cancer is unknown. If the surgeon is not able to microscopically confirm clear margins of cervical tissue once the patient is under general anesthesia in the operating room, a hysterectomy may still be needed. This can only be done during the same operation if the patient has given prior consent. Due to the possible risk of cancer spread to the lymph nodes in stage 1b cancers and some stage 1a cancers, the surgeon may also need to remove some lymph nodes from around the womb for pathologic evaluation.

A radical trachelectomy can be performed abdominally or vaginally and there are conflicting opinions as to which is better. A radical abdominal trachelectomy with lymphadenectomy usually only requires a two to three day hospital stay, and most women recover very quickly (approximately six weeks). Complications are uncommon, although women who are able to conceive after surgery are susceptible to preterm labor and possible late miscarriage. It is generally recommended to wait at least one year before attempting to become pregnant after surgery. Recurrence in the residual cervix is very rare if the cancer has been cleared with the trachelectomy. Yet, it is recommended for patients to practice vigilant prevention and follow up care including pap screenings/colposcopy, with biopsies of the remaining lower uterine segment as needed (every 3-4 months for at least 5 years) to monitor for any recurrence in addition to minimizing any new exposures to HPV through safe sex practices until one is actively trying to conceive.

Early stages (IB1 and IIA less than 4 cm) can be treated with radical hysterectomy with removal of the lymph nodes or radiation therapy. Radiation therapy is given as external beam radiotherapy to the pelvis and brachytherapy (internal radiation). Patients treated with surgery who have high risk features found on pathologic examination are given radiation therapy with or without chemotherapy in order to reduce the risk of relapse.

Larger early stage tumors (IB2 and IIA more than 4 cm) may be treated with radiation therapy and cisplatin-based chemotherapy, hysterectomy (which then usually requires adjuvant radiation therapy), or cisplatin chemotherapy followed by hysterectomy.

Advanced stage tumors (IIB-IVA) are treated with radiation therapy and cisplatin-based chemotherapy.

On June 15, 2006, the US Food and Drug Administration approved the use of a combination of two chemotherapy drugs, hycamtin and cisplatin for women with late-stage (IVB) cervical cancer treatment. Combination treatment has significant risk of neutropenia, anemia, and thrombocytopenia side effects. Hycamtin is manufactured by GlaxoSmithKline.

If infection is not the cause of abnormal Pap results, your doctor will recommend further diagnostic tests for cancer. These are a colposcopy, endocervical curettage (ECC), loop electrocautery excision procedure (LEEP), or conization. Each of these involves a biopsy of cervical tissue. Depending on the stage of the cancer and other factors, your doctor may recommend a partial or a complete hysterectomy. This treatment is an emotional issue for women. Regardless of whether a woman still wants to or is able to have children, removal of the uterus can affect her identity as a female. If abnormal cells are only on the cervix, then cryosurgery and laser surgery can be done. Sometimes a second treatment is done to ensure that all of the abnormal tissue has been destroyed. If a biopsy confirms that the abnormal cells are carcinoma or invasive cancer, then a dilation and curettage (D&C), computed tomography scan (CT or CAT scan) or magnetic resonance imaging (MRI scan) may be done to identify the diseased areas. At this point, the treatments can include surgery, radiation, and chemotherapy or a combination of the three.

There is good reason for optimism. If the disease is diagnosed early and treated effectively, then a woman should be able to have a complete recovery. Every woman needs to make a commitment to have a yearly Pap test at age eighteen or when she becomes sexually active. Using condoms, quitting smoking and a diet of green leafy vegetables, citrus fruits and juices may help reduce your chance of developing cervical cancer. High dietary carotene, vitamin C, E and folate are linked to cervical cancer reduction. Studies have shown that a low intake of vitamin A is associated as a risk. The typical Pap smear does not detect chlamydia, gonorrhea, HIV/AIDS or syphilis. If there is a chance that you may be infected, then mention this to your doctor so that he can do the appropriate tests.

Because of the association of HPV and its relationship to cervical cancer, a vaccine is being tested. If this vaccine is found to be effective in preventing HPV infection, then it has the potential to reduce cervical cancer (National Cancer Institute, 2003, p.6-7).

The baby boomers will reach their sixty-fifth birthdays between the year 2000 and 2020. Because the elderly require a large portion of the medical services, reasonable health care plan providers will have to consider this. Women typically live five years longer than men. A woman's life expectancy is 79.4 years. The trend towards an older population will be complicated by the increasing plurality of older women. Women generally have fewer financial resources than men. This alteration will have a direct impact upon the economics of health care. Another shift is the growing number of Hispanics in the United States. Almost half of all cervical cancer cases in Texas occur in Hispanic women. The rates of certain cancers vary among different ethnic groups, and it is clear that these differences must be taken into account in health care planning (Cancer, 1991, p.1772).

Of all the respondents in my questionnaire survey, 91.3% felt that more sex education should be taught in school. Almost half of the respondents suggested having less sex, using condoms and practicing abstinence. Possible more visual teaching methods such as showing pictures of diseases may help in the prevention of sexually transmitted diseases. Some respondents suggested waiting until marriage or getting to know your partner well first and also offering one on one discussions in the classroom.

The number of cervical cancer cases will probably decrease in the future because there is a new vaccination for HPV that is available now. However, STD's will probably increase because sex is occurring more often and at a younger age.

## Chapter VI

### Analysis of Results

Because, as the data showed, there was no variation in the class of the respondents, it could not be determined if class affected any of the factors examined in this paper. For example, the literature showed that middle class and above individuals are more likely to both seek preventative care, such as an examination for the human papilloma virus, as well as to seek care for a known illness. The higher classes are more likely to seek medical care because they can afford it and because it is more socially acceptable.

An analysis of the data from the survey established that of the sample population, the older one is, the less likely one is to know someone with a sexually transmitted disease. This finding confirmed discussions in the literature that age is an important factor in understanding sexually transmitted diseases. The younger one is, the more likely they are to be ignorant of sexually transmitted diseases, think that they are unlikely to contract one, and be unlikely to take precautions to prevent their spread. And yet, as demonstrated by this study and as stated in the literature, the younger one is, the more likely they are to contract an sexually transmitted diseases, and have the human papilloma virus.

Paralleling this result was the finding in the data from the survey that the younger one was the less likely they were to have any knowledge of the human papilloma virus. The literature examined does not discuss the knowledge base of people concerning the human papilloma virus; however, one can extrapolate that the same processes affecting the knowledge of sexually transmitted diseases also affects the knowledge of the human papilloma virus. The young do not have knowledge of the human papilloma virus, those that do believe they are unlikely to contract it, and they take little or no precautions in relationship to it.

The data confirmed the discussion in the literature that the higher one's education, the more likely one is to is to have a higher knowledge of sexually transmitted diseases. This result from the survey confirms several conclusions found in the literature. First, education in general is a

deterrent to early or 'pre-mature' sexual activity, to unprotected sex, to unwanted pregnancy, to 'careless' sex, i.e. an unplanned fling or one night stand, and so on. A generally high level of education is more important in this type of deterrent than even sexual education in middle or high school. From the data, the findings, the negative correlation between education and early promiscuity (i.e. if education goes up, youthful promiscuity goes down), is the closest this survey comes to comparing class and sexual practices. Since education is positively correlated with education, even though there was no finding in relation to class, this paper can extrapolate that the data demonstrated, weakly, that the middle and higher classes are more likely to seek medical care in relation to sexually transmitted diseases and the human papilloma virus and to know more about it and adjust behavior accordingly.

The data demonstrated that for females, the more they knew about the human papilloma virus, the more likely they were to have had a PAP test. This finding confirms an earlier finding in the data as well as the conclusions in the literature. As discussed above, higher one's education, the more likely one is to have a higher knowledge of sexually transmitted diseases, and the less likely one is to engage in behaviors that are 'dangerous' in relation to sexually transmitted diseases. The current finding, that knowledge about the human papilloma virus increases females' likelihood of seeking medical care, i.e. a preventative test for the human papilloma virus, a PAP test. This finding is confirmation of the relationship between general education and sexual behavior, but at a specific level around a specific test. While the survey did not test for the relationship between knowledge and other specific sexual behaviors, one could extrapolate that the more likely one is to get regular PAP tests, the more likely one is to engage in other 'safe' sexual behaviors such as protection, monogamy, abstinence, etc.

The last finding in the data was that the more people knew about the human papilloma virus, the more likely they were to avoid behaviors contributing to catching or transmitting the virus. This confirms the general discussion in the literature that knowledge leads to safer sexual practices all the way around.

In conclusion the data was confirmed by the literature in every instance. There was no

case where the data as determined by the findings of the survey were contradicted by the literature. One of the most important findings in the data, and confirmed in the literature was that the younger one was, the more likely they were to engage in risky sexual behavior, this also being true in relation to behaviors impacting contraction and transmission of the human papilloma virus. Another important finding in the data, and confirmed in the literature was that the higher one's general education the less likely they were to engage in risky sexual behavior, this also being true in relation to behaviors impacting contraction and transmission of the human papilloma virus. The last important finding in the data, and confirmed in the literature was that the higher one's sex education, or knowledge about sexuality or the human papilloma virus, the less likely they were to engage in risky sexual behavior, this also being true in relation to behaviors impacting contraction and transmission of the human papilloma virus.

Given these important findings, the next section discusses the social policies that could address the problems concerning the social factors affecting the contraction and transmission of the human papilloma virus.

## Chapter VII

### Recommendations for Social Policy

Many women do not receive annual Pap tests. This article suggests that physicians could do more to promote regular Pap tests. Doctors fail to follow up and encourage them to be tested. Although the cure rate approaches 100% for cervical cancer caught early, 4,400 women die each year of the disease. Black women, women over sixty-five, poor women and rural women are most likely to have never had a Pap test. Sometimes doctors forget to mention the test. Only one in four women reported receiving a Pap test reminder from her doctor. Another one stated that she always get a reminder from her dentist to get her teeth cleaned (American Medical News, 1992, p.6).

A survey took place over a period of fifteen months from 2000 to 2002 of women attending a Well Woman Clinic in central London, U.K. The survey was done to assess women's knowledge of HPV. Over 1,000 women completed the survey during that time. The average age of the women was around thirty and they were mostly white, well educated, and in full-time employment. Most said they had between one and three sexual partners in the preceding twelve months. Less than a third of the women had ever heard of HPV and those who had tended to be older or had an abnormal test result in the past. Knowledge about the virus was poor. Fewer than half knew that the virus is the main cause of cervical cancer and only a third knew that genital warts do not themselves cause the disease. Most believed that condoms protect against infection with the virus, although the evidence for this is not clear. Only a half knew that the contraceptive pill does not protect against infection. Smokers were less likely to be well informed. The sample of women surveyed were well educated, therefore it is likely that awareness of HPV among the general population is probably even lower (Cancer Weekly, 2003, p.86).

As mentioned earlier, there is a weakness in the area of bi-lingual information about sexually transmitted diseases. As a society we must provide effective materials that can increase knowledge and change behavior. As physical maturity decreases with each generation there is more pressure on adolescents to sexually experiment at earlier ages. Advertising and the

entertainment media complicate things even further by making sexual behavior so readily available to see. By teaching students how to resist peer pressure to experiment with sex and understand that drugs and alcohol can effect their ability to make wise decisions is a good start to reduce STD's and cervical cancer.

The awareness level of HPV is an area that needs to be addressed. If young people are informed about more specific information such as the risk factors associated with STD's, then this may make an impact early on. If healthcare professionals could always send out reminder cards for yearly check ups, then possibly the number of cervical cancer cases would decrease. In home PAP tests would help reduce stigma and shame associated with seeking healthcare.

Some of the respondents in my survey suggested mandatory STD testing in Jr. High and High School. They also suggested a mandatory HPV vaccination. It was also mentioned that the sexual education teachers receive regular update information training and keeping up to date materials available to enhance the learning process for young people.

## **Conclusion**

This study has found that while the medical industry views sexually transmitted diseases and the human papilloma virus as a biological problem to be conquered, it is clear that social factors must be taken into consideration if the general problem of sexually transmitted diseases, and the specific problems of the human papilloma virus are to be addressed. Science has only recently found the 'biological key' to cervical cancer in the form of the human papilloma virus, the social sciences have understood for some time the etiology and nature of the social factors affecting sexually transmitted diseases and the human papilloma virus. This study found corroborating evidence for a number of those factors. The social factors most clearly supported by the data found from the survey of over 50 young adults were age, education, and knowledge. As confirmed by the literature, all three variables were positively correlated with 'safe' sexual behavior in general, and more specifically, knowledge about and safe practices around the human papilloma virus.

Society requires solution makers. Certain issues about sexuality are addressed in the school system. The health departments freely hand out birth control and so we could think of this as enabling. The key is to try to reach young people in a way that they will understand. If they can attach themselves to their dream, then they can learn to modify their behavior in order to see their dreams become reality. In reality, when you are teaching about sexually transmitted diseases, you are addressing behavior.

**APPENDIX A:**

**TABLE on Characteristics of Interviewees: 41 College Students  
Interviewed in a Study of the Decision to Seek  
Testing for Sexually Transmitted Infections**

(STI's), in Percentages

<b><u>Characteristic</u></b>	<b><u>Participants (%)</u></b>
<u>Age (in yrs)</u>	
18-20	58
21-23	42
<u>Race</u>	
Black	29
White	63
Asian	5
Hispanic	3
<u>Gender</u>	
Men	39
Women	61
<u>Previous sexual partners (n)</u>	
0	29
1-2	34
3-5	12
>5	25
<u>Ever tested for STI?</u>	
No	61
Yes-routine screening	27
Yes-symptoms noted	7
Yes-exposure to STI	5

## **APPENCIX C: Consent Form**

This research is for learning purposes only in order to increase the methodological skills of the student giving this survey. The results will not be utilized in any research project.

Principal Investigator: Sample Student                      Phone : 276-555-1212  
Faculty Supervisor:    Dr. Patrick Withen                      Phone: 276-376-4526  
Human Investigations Committee Chair: Dr. Stan Kunigelis      Phone: 276-328-0202  
Department of Social Sciences, UVaWise, 1 College Ave., Wise, VA, 24293  
Project Title: The Social Factors Affecting Likelihood of Testing for Human Papillomavirus  
Expected Duration: This survey should take twenty minutes to complete.

**Purpose and Background:** You are invited to participate in a study of the relationship between lifestyle and health. I am conducting this research because of my interest in this area, and as part of my Senior Capstone Project in Sociology, which is a requirement for graduation from UVaWise. This study examines social factors affecting the incidence of cervical cancer, number of cases diagnosed, the age groups effected, availability of treatments, availability of healthcare, and prevention in the future. This proposal has been reviewed using the Federal regulations governing research with human subjects and has been determined to pose little or no risk or harm to you.

**Procedures:** If you decide to participate, I, Sample Student will ask if you would like to **volunteer** to take this anonymous survey. Please do not write your name anywhere on the survey. This is an anonymous survey. If you agree, I will give you the survey to fill out. Upon completion, I will put your survey in an envelop with other anonymous surveys. I will not examine any surveys until I have at least five. At that time, they will be opened and the information will be reviewed.

**Risks/Discomforts:** There are no measurable potential risks or discomforts involved in this survey other than the possibility of anxiety caused by the survey questions. If you do not want to answer questions about cervical cancer, you can quit now or **at any time**. The survey is expected to take about twenty minutes. In the unlikely event that participating in this research project should cause you undue duress or a need to talk with a professional about personal issues that have arisen as a direct result of participating in this study, please feel free to contact the faculty member associated with this study. The faculty member will can give you a list of counseling services available in your area, should you need help in locating such services

**Benefits:** There may be no direct benefit to you from participating in this study. However, the information that I provide may help health professionals better understand how women's health can continue to improve.

**Confidentiality:** There can be no information that is identified with you since the survey is anonymous. The only information that will be released regarding the surveys is an analysis of the answers on all of the surveys. The answers will be compiled into one statistical analysis and presented to faculty and students of UVaWise. No names will, or can, be mentioned since this is an anonymous survey. After the surveys have been examined, the envelopes containing the consent forms and signatures will be destroyed.

**Costs:** There are no costs to the Participant

**Payment:** The Participant will receive no payment for participation

**Consent:** Participation in research is voluntary. You are free to decline to be in this study, or to withdraw from it at any point. Your decision as to whether or not to participate in this study will have no influence on your present or future status as a student. You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time after signing this form should you choose to discontinue participation in this study. You will be offered a copy of this form to keep.

**Questions:** If you have questions, please ask. If you have any additional questions later, I, Sample Student will be happy to answer them. If for some reason you do not wish to do this, you may contact the Faculty Supervisor or the Chair of the HIC, as listed above.

The Researcher, Sample Student has read the Informed Consent Document for an Anonymous Survey to me, and I voluntarily agree to participate in the research. I understand that I can withdraw at anytime for any reason.

---

Signature      Date

---

Signature of Investigator      Date

**APPENDIX H:  
HIC Status / Final Report**

HIC Approval Number:

Expiration Date:

Principle Investigator: Sample Student

Investigator Signature:

Department: Social & Behavioral Sciences: Sociology

Investigator Mailing address: 1115 Douglas Str. Coeburn, VA 24293

Work Phone: (276) 555-1212

Home Phone: (276) 444-1212

Faculty Advisor: Patrick Withen 276-376-4526 [pwithen@virginia.edu](mailto:pwithen@virginia.edu)

Advisor Signature:

Study Title: The Social Factors Affecting Likelihood of Testing for Human Papillomavirus

Number of Subjects studied in project: 47

    Since date of last approval: 47

    Total number to date: 47

    Number needed to complete study: 47

Summary of Results: Study has been completed    **YES**                    No

If yes, please attach reprints(s), if available, & summarized results of study on a separate page.

If no, in the form of a letter

1. See attached summary.
2. There is no new relevant information from other studies known to the researcher.
3. There were no changes in anticipated risks or benefits.
4. There were no known side effects or problems.
5. The present researcher has no plans to continue the study.
6. The HIC Cover Page is updated.
7. Find enclosed a copy of the original HIC Approval Form
8. Only HIC approved consent forms have been submitted.
9. No new instruments were used.

**APPENDIX S:  
Sample Survey**

This survey is confidential and will be used for practice research purposes only. It is important that you answer every question that applies to you even though some of the material is sensitive. Please **DO NOT** write your name on this survey. Thank you so much for your cooperation and assisting me with my senior research project.

1. How old were you on your last birthday? \_\_\_\_\_
2. Are you: \_\_\_African American \_\_\_American Indian \_\_\_Asian American \_\_\_Hispanic  
\_\_\_White \_\_\_Other
3. Are you: \_\_\_Male \_\_\_Female
4. What is the last grade or year of school you completed? \_\_\_Some elementary \_\_\_Some  
High School \_\_\_High School Grad/GED \_\_\_Some College \_\_\_College Grad \_\_\_Some  
Grad School \_\_\_Graduate
5. Were you raised in a low, lower middle, middle, upper middle or upper class family?  
\_\_\_\_\_
6. How often do you have regular medical healthcare checkups? \_\_\_Often \_\_\_Sometimes  
\_\_\_Rarely \_\_\_Never
7. I get healthcare when I need it. Would you? \_\_\_Strongly Disagree \_\_\_Disagree  
\_\_\_Neutral \_\_\_Agree \_\_\_Strongly Agree
8. How many different partners have you had sex with? None 1-5 6-10 11-15 16-20 21-25  
26-30 30+
9. I feel that I am very knowledgeable about sexually transmitted diseases. Would you:  
\_\_\_Strongly Disagree \_\_\_Disagree \_\_\_Neutral \_\_\_Agree \_\_\_Strongly Agree
10. What is HPV? \_\_\_\_\_
11. If you have had sexual intercourse, how old were you the first time? \_\_\_\_\_
12. When I have sex, I use protection (condoms \_\_\_0% of the time \_\_\_25% of the time \_\_\_50%  
of the time \_\_\_75% of the time \_\_\_100% of the time
13. What length of time have you attended sex education classes? \_\_\_1 day \_\_\_1 week \_\_\_1  
month \_\_\_\_\_Other
14. I have a very good relationship with my father. Would you: \_\_\_Strongly Disagree  
\_\_\_Disagree \_\_\_Neutral \_\_\_Agree \_\_\_Strongly Agree

This research is for learning purposes only in order to increase the methodological skills of the student giving this survey. The results will not be utilized in any research project.

15. I have a very good relationship with my mother. Would you:  Strongly Disagree  
 Disagree  Neutral  Agree  Strongly Agree
16. When I was growing up my parents were  married the whole time  married until 5  
then divorced  married until my teens then divorced  were never together  lived  
together
17. I was raised by someone other than my biological parents.  Yes  No
18. If yes, then how are they related to you? \_\_\_\_\_
19. I feel very good about myself and have a lot of self-esteem. Would you:  Strongly Disagree  
 Disagree  Neutral  Agree  Strongly Agree
20. Have you ever been diagnosed with a sexually transmitted disease?  Yes  No
21. If yes, was it  Chlamydia  HPV  Gonorrhea  Syphilis  HIV  
 Other
22. Do you feel that more sex education should be taught in school?  Yes  No
23. Have you ever had an abnormal PAP test?  Yes  No
24. If yes, then what further treatment did it require? \_\_\_\_\_
25. How many people do you know that have been diagnosed with a sexually transmitted disease?  
\_\_\_\_\_
26. What topic about sexuality do you think should be taught that would be helpful to you?  
\_\_\_\_\_
27. Have you ever felt shame when seeking healthcare?  Yes  No
28. If yes, then what were the reason/reasons? \_\_\_\_\_
29. Do you have any suggestions for prevention of sexually transmitted diseases?  
\_\_\_\_\_
30. Which person would you feel more comfortable teaching you sex education?  Parent  
 Teacher  Counselor  Friend  Other
31. Are you aware of any behaviors that can contribute to developing HPV?  Yes  No

This research is for learning purposes only in order to increase the methodological skill of the student giving this survey. The results will not be utilized in any research project.

32. If yes, can you name one or more? \_\_\_\_\_

33. Can you think of any reason/reasons why you would not seek healthcare when you felt that it was needed?

\_\_\_\_\_

34. How many PAP tests have you had in the past? \_\_\_\_\_

## Bibliography

- Barth, Karen R., Cook, Robert L., Downs, Julie S., Switzer, Galen E., Fischhoff, Baruch. Journal of American College Health, Jan. 2002v50i4p153 (7) Social stigma and negative consequences: factors that influence college students' decisions to seek testing for sexually transmitted infections.
- Cunningham, S.D., Tschann, J., Gurvey, J.E., Fortenberry, J.D., Ellen, J.M. Sexually Transmitted Infections, Oct.2002v78i5p334 (5) Copyright 2002 British Medical Association, Attitudes about sexual disclosure and perceptions of stigma and shame.
- Fernandez, Ronald. The I, The Me & You, 1977 by Praeger Publishers, Inc.
- Frank-Stromborg, Marilyn. Cancer, March 15, 1991 v67 n6 (1-2) p11772 (7) Changing demographics in the United States: implications for health professionals.
- Jones, Laurie. American Medical News, Nov 9, 1992 v35 n42 p6 (2) Physicians can do more to promote regular Pap tests.
- Morgan, Peggy., Saucer, Caroline., Torg, Elisabeth., and the Editors of Prevention Magazine Health Books, The Female Body, 1996
- Ritzer, George., Modern Sociological Theory, Fifth Edition, Copyright@2000,1996,1992,1988,1983 by the McGraw Hill Companies
- American Cancer Society, What are the risk factors for cervical cancer?  
[http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_4\\_2X\\_What\\_are\\_the\\_risk\\_factors\\_for\\_ce...](http://www.cancer.org/docroot/CRI/content/CRI_2_4_2X_What_are_the_risk_factors_for_ce...)
- PDR Family Guide to Women's Health & Prescription Drugs, Annual 2001 pNA  
Chapter, Dealing with cancer, 38/Copyright 2001
- National Cancer Institute, Human Papillomavirus Testing, [www.cancer.gov/cancerinfo/pdq/Prevention/cervical/HealthProfessional](http://www.cancer.gov/cancerinfo/pdq/Prevention/cervical/HealthProfessional)
- Student, Sample, March 14, 2005-Surveyed 27 students at Green Briar Job Corps in Richmond, VA
- Student, Sample, March 15, 2005 Surveyed 12 students at Green Briar Job Corps in Richmond, VA
- Student, Sample, March 18, 2005 Surveyed 7 students at Green Briar Job Corps in Richmond, VA