

COLLEGE MALES' AWARENESS OF AND ATTITUDES TOWARD
THE HUMAN PAPILLOMAVIRUS

By

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by

Megan J. Homer

This document is dedicated to my grandmother, Dorothy Landsberg, and to my grandfather, Dr. Melvin Homer. Thank you for watching over me.

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The human papillomavirus (HPV) is an extremely common and contagious sexually transmitted disease (STD). High-risk strains of HPV can lead to cervical cancer, anal and penile cancers, and male and female infertility. Low-risk strains of HPV can cause genital warts.

Despite its prevalence and risk, previous HPV research revealed that people are not aware of the STD and rarely is there information about HPV in the media. One problem with this previous research was that it ignored the males' role in the HPV issue. The studies used only female participants.

In this study, five focus groups were conducted with a total of 46 college male participants. Focus groups provided a forum to collect opinions and attitudes about HPV from a large number of males in a relatively short period of time. First, participants answered questions about their general sexual health awareness and STD concerns. Then

they read an HPV fact sheet. Finally, participants responded to open-ended questions specifically about HPV.

Five themes were identified from the data. The first theme was about how males' standards for their sexual partners and method of STD protection are determined by the length of the relationship. The second theme was about how males categorize the threat of STDs. Males are most concerned about STDs that are incurable and have serious consequences, like death. The third theme was regarding males' disbelief about HPV's pervasiveness. The fourth theme pertained to participants' reservations about adjusting their sexual habits after learning about HPV. The final theme was regarding participants' skepticism about discussing HPV with friends and sexual partners and their desire for there to be more mass communication about HPV.

Overall, college males knew little about HPV. Their major concerns were about the prevalence of the disease and their personal risk for HPV. Also, they were distraught that there is no accurate HPV testing method for males and no way to prevent HPV other than abstinence or monogamy with an uninfected partner. These facts contributed to their low sense of self-efficacy for dealing with the HPV issue. In turn, males did not expect to give HPV much consideration in the future. However, they felt that if the health community wanted the public to consider HPV a serious issue, then there needs to be more mass communication about the STD.

This study is unique because it revealed the male perspective on HPV. Information from this study can be used to develop upcoming HPV communication that targets the male population. In the future, more research should be conducted with male participants in order to determine further how to increase their sense of power for dealing with HPV.

CHAPTER 1 INTRODUCTION

The human papillomavirus (HPV) is an extremely common and contagious sexually transmitted disease (STD) that infects approximately 5.5 million new people each year and has approximately 20 million active carriers. High-risk strains of HPV can cause cervical, anal and penile cancers and can lead to male and female infertility. Low-risk strains of HPV cause genital warts. Despite the fact that the human papillomavirus is one of the most common STDs in the United States, it is generally overlooked by the media (Homer, 2004), which may explain why there is a widespread lack of HPV awareness regardless of age and socioeconomic status (Baer et al., 2000; Dell et al., 2000; Mays et al., 2000; Hoover et al., 2000; Weigold et al., 2001; Weigold & Treise, 2002). Many studies that test for HPV awareness suggest the need for an educational program to raise HPV knowledge levels; however, while more organizations recognize HPV as a serious issue, there has been little in the way of a well-known HPV awareness campaign.

Human papillomavirus presents a number of challenges to health communicators, which may contribute to its lack of media coverage and in turn to the lack of HPV awareness. First, the media may be tentative about discussing HPV because there is a negative stigma associated with STDs and the stories may not be well-received. While there have not been any studies specifically testing how people respond to news stories about HPV, there has been a study about how students reacted to an HPV public service announcement (PSA). Investigators found that most participants did not plan to change any of their behaviors after reading the HPV PSA (Weigold & Treise, 2002).

While the PSA was able to affect the participants' opinions of HPV's severity, it did not make the participants feel more susceptible to the virus. The study also found that negative stigma associated with having an STD had a stronger influence on many of the participants than the information provided in the PSA. The PSA in the study encouraged participants to get tested for HPV, yet most participants said that they would not follow this advice (Weigold & Treise, 2002).

A different study that investigated HPV's negative stigma found that people who test positive for HPV may be under the false impression that they are being punished and experience self-hate. The study found that people thought HPV was a visibly apparent physical deformity and would prefer not to know their HPV status (Nack, 2002); therefore this may explain why people may avoid any information in the media about testing efforts because they do not want to risk getting the test and having a positive result.

Beyond social stigma, one factor that limits the amount of information available about HPV is that the medical community still does not know a great deal about the virus. Two major HPV unknowns are how the virus can be prevented before the HPV vaccine is marketed and how HPV affects males. Condoms do not prevent HPV, and medical research is still being performed on possible HPV vaccines; however, there are too many strains of HPV to be prevented by one vaccine, and any vaccine would be ineffective if administered to someone who already was infected with HPV (Hoover et al., 2000). Regarding HPV testing, females can have a Pap smear or the HPV test, but currently there is no way to accurately test males for HPV (American Social Health Association (ASHA), n.d.). Without any suggestions for how to prevent getting the virus, beyond

abstinence, and because there is no way to test males for HPV, media coverage can do little to increase people's self-efficacy for dealing with the HPV issue (Maibach & Parrott, 1995). Furthermore, because there are several unknowns regarding HPV in the medical community, the little coverage that HPV does receive from the media changes and, at times, contradicts itself with each new HPV finding (Homer, 2004). In turn, the inconsistent messages about HPV may actually confuse readers more than inform them over a period time (Friedman et al., 1999). According to a study that investigated how HPV was framed in two newspapers, *The New York Times* and *The Guardian*, from January 1998 through October 2003,

Overall, coverage of HPV has been inconsistent. Over the past 5 years, 2000 had the greatest number of publications that mentioned HPV for both *The New York Times* and *The Guardian*; however, there was virtually no common subject among any of these articles. There were also contradictions with the percentage of cervical cancer cases caused by HPV and the reliability of different screening procedures and preventative measures indicating that human papillomavirus is still an enigma in the medical community, but also this coverage promotes public ignorance about this sexually transmitted epidemic (Homer, 2004, p. 22).

To summarize, media coverage about HPV either could have no effect as in the HPV PSA study, could confuse the readers, or could upset them by unveiling the public's vulnerability to yet another virus but not giving them much hope for prevention or treatment.

The second major HPV unknown, how HPV affects males, influences how HPV is portrayed to the public. Although extremely limited, there has been media coverage about HPV; however, most of these stories have framed HPV as a woman's issue (Homer, 2004). This is because a majority of medical research on HPV focuses on its relationship with cervical cancer. While "results from [these] diverse investigations have suggested that penile HPV in sexually active men is at least as prevalent as cervical HPV

is among women” (Baldwin et al., 2003, p.1064), little is known about the long-term results of HPV infection in men, and, as previously mentioned, there currently is no accurate test for HPV in males (ASHA, n.d). In fact, in 1999 the Centers for Disease Control and Prevention made learning more about the relationship between HPV and men a “high priority,” yet little progress has been made in that pursuit (CDC, 1999). A result of this lack of knowledge is that STD and general health resource centers, communication research, and public health campaigns, like the media, generally overlook heterosexual and homosexual men’s involvement with HPV.

Despite this trend in the communication field, both *men* and women can contract and transmit HPV. Statistics show that young men, like their female counterparts, are extremely sexually active and are potential HPV carriers. Approximately two-thirds of students have had sex by the time they graduate high school (Kaiser Family Foundation, 2003), and teenagers “are the most high-risk group when it comes to contracting STDs because they frequently have multiple partners and often do not use condoms during sex” (Weigold et al., 2001). This sexual behavior explains why “HPV prevention efforts must be aimed at both men and women to be effective” (Baer et al., 2000, p.69). Furthermore, it has been argued that “interruption of transmission of HPV requires that both men and women be knowledgeable about the infection and the complexity of prevention strategies” (Baer et al., 2000, p. 75).

Conducting research to learn how males react to HPV information may give greater insight into how best to communicate HPV-related news in order to create greater HPV awareness and promote HPV prevention. Just as news coverage predominantly has focused on women’s role with HPV, so have a majority of the HPV awareness and

opinion studies used only female participants, which can cause problems with how the public perceives HPV (Baer et al., 2000). As one research group noted, for research “to focus exclusively on women sends a clear message to both men and women that prevention of HPV infection is solely a women’s problem. It also tends to minimize the significance of HPV infection for men” (Baer et al., 2000, p.75). One study conducted with young women confirmed the lack of association between HPV and men. In the study “39% [of the participants] thought that ‘HPV does not affect men’” (Yacobi et al., 1999, p.535).

To summarize, it is important to learn what males know and think about HPV because they are affected by HPV. Therefore, this HPV awareness study will be conducted with college-aged males. In particular, the purpose is to determine what males know about HPV, and then to have them discuss their concerns and attitudes regarding this virus after being informed about the risks of the disease.

CHAPTER 2 LITERATURE REVIEW

Human Papillomavirus (HPV), A Definition

Human papillomavirus, more commonly known by its acronym HPV, is—as its name indicates—a viral disease. HPV is categorized as a sexually transmitted disease because the virus spreads during sexual intercourse, whether it is vaginal, anal, or oral (American College of Obstetricians & Gynecologists, 1999). The virus can be passed from one individual to another through genital skin-to-skin contact, from the mouth, from the rectum and/or in semen (American College of Obstetricians & Gynecologists, 1999). Also, there is a risk that a mother can infect her child with HPV during birth (American College of Obstetricians & Gynecologist, 1999).

Unlike many other sexually transmitted diseases, the use of a latex condom does not prevent the spread of HPV. This is because HPV is a contact STD and can be present on skin surfaces that are not covered by a condom. A British HPV study at the University of Manchester found that despite the fact that approximately three-fourths of the women in the study claimed to use barrier contraception during intercourse, “46% of the women examined were at risk of cervical HPV infection. For half the women, the infection was detected within three months after their first sexual encounter” (Global Campaign for Microbicides, 2002, ¶2). This investigative team concluded, “Perhaps cervical human papillomavirus infection should now be considered an inevitable consequence of sexual activity” (Global Campaign for Microbicides, 2002, ¶3). The researchers for the Centers for Disease Control and Prevention arrived at similar

conclusions: “HPV can be prevented by abstaining from sexual activity or having sex only with an uninfected partner” (Centers for Disease Prevention and Control (CDC), 2001). Both sources also indicated that the risk of acquiring HPV directly increases with the number of sexual partners.

Consequently, certain political figures, in particular Representative Tom Coburn (R-OK), have used HPV in their political platform against the government-funded family planning programs that educate people how to have safer sex rather than fight for abstinence before marriage (Couto & Dailard, 1999). According to one report Coburn said that “the only real protection against [HPV] is a lifestyle of abstinence before marriage and fidelity within marriage” (Couto & Dailard, 1999). Coburn demanded amendments to the Breast and Cervical Treatment Act of 1999 that would “call on the CDC to track HPV cases and educate the public about the disease, as well as call for an HPV-specific warning on condoms” (National Cervical Cancer Coalition, 1999). Critics of Coburn feel that the public should know that condoms do not prevent HPV but worry that the warning may be misinterpreted as meaning that condoms cannot prevent any STDs. (Couto & Dailard, 1999). Public health experts, who are critics of Coburn, also have doubts about people’s willingness to practice abstinence. They felt that,

... abstinence messages play an important role in preventing the transmission of STDs, including HPV, [however] they stress that such messages need to be part of a more comprehensive approach of STD reduction—one that takes into account the reality of people’s lives, including their willingness to refrain from sexual activity (Couto & Dailard, 1999, p. 2).

There are more than 80 HPV strains; however, this number is continually increasing (British National Health Service, Cancer screening programs, n.d.). According to the American College of Obstetricians and Gynecologists (1999), while several types of HPV “tend to infect cells in the genital areas of a man or woman . . .

other types infect other parts of the body” (¶4). Most strains of HPV are asymptomatic and have yet to be connected with physical illness. While this may seem somewhat reassuring, the downside is that people can spread HPV from one partner to the next without even knowing it. Furthermore, HPV affects people differently. Most cases of HPV are transient (American Medical Women’s Association, Inc., (AMWA), 2002) because the immune system can fight off the virus and the infected person is left unharmed. However, people with weakened immune systems or those infected with more virulent strains of HPV may become symptomatic (Couto & Dailard, 1999). The different strains of HPV have been categorized according to risk: more than 99% of cervical cancer cases are linked to “high-risk” strains of HPV, whereas genital warts, *condyloma acuminata*, are associated with other “low-risk” strains (AMWA, 2002).

While HPV cannot be cured, symptoms and resulting medical problems, including warts and cervical cancer, can be treated (American College of Obstetricians & Gynecologists, 1999). Even if warts are removed either with oral/topological treatment or surgery, the HPV may still remain in the system (American College of Obstetricians & Gynecologists, 1999).

Human Papillomavirus, A Rampant STD

Human papillomavirus is one the most common sexually transmitted diseases and affects approximately 24 million people in the United States per year (American College of Obstetricians and Gynecologists, 1999) and even larger numbers of people worldwide. Centers for Disease Control and Prevention researchers estimate that approximately 20 million people in the United States have HPV type16 (an active form of HPV) and 5.5 million more will become infected with this strain every year (CDC, 2001). Furthermore, the numbers of people in the U.S. who have HPV type16 might be larger than noted

because some people do not show any signs of antibodies (CDC, 2001). Moreover, in 1997 the *American Journal of Medicine* stated that “three out of four Americans between the ages of 15 and 49 have been infected with genital HPV at some point in their life” (Couto & Dailard, 1999, p.1).

Women are more likely to have HPV than men and HPV affects a greater percentage of African-Americans than Caucasians (CDC, 2001). The CDC reported that “women of all races had an HPV-16 prevalence of 17.9%, compared to 8% for men” and “African-Americans overall had 19.1% prevalence, compared to 12.5% in whites” (CDC, 2001, ¶15).

Human Papillomavirus and Cancer

High-risk strains of the human papillomavirus are studied continually in order to determine their association with certain types of cancers and other negative ramifications. One of the most widely recognized consequences of high-risk HPV is cervical cancer in women. As stated by the *2001 U.S. Department of Health and Human Services Report*, “The link between human papillomavirus and cervical cancer is well established; HPV is present in almost every single case” (Arnold, 2001, ¶1). According to the British National Health Service, in addition to HPV-16, types 18, 30, and 33 have been linked directly with causing cervical cancer (British National Health Service, n.d.). Annually, 12,900 women are diagnosed with cervical cancer in the United States, of which 4,400 cases will result in death (Mullaney, 2002). Germany and the United Kingdom are two European countries with the largest incidence of cervical cancer—Germany has 7,000 cases and 2,207 deaths annually and the UK has 4,014 cases and 1,300 deaths each year (Women for HPV Testing, 2002). There are reportedly 400,000 cases of cervical cancer worldwide and, while not true in the U.S., it is the most common type of cancer in

women in certain countries (Mullaney, 2002). While cervical cancer can be 100 percent treatable with early detection, delayed discovery is the primary reason for the related deaths (AMWA, 2002). As a result, there are several initiatives dedicated to educating the public about HPV and finding a more effective test to detect the presence of the virus. These include the National HPV and Cervical Cancer Campaign, in association with the American Medical Women's Association, Inc. in the United States and The Women for HPV Testing in Europe.

The media has picked up on this association between HPV and cervical cancer, and on the rare occasion that the human papillomavirus is mentioned in the media, it is typically framed as a female issue (Homer, 2004). While the most substantiated consequence of high-risk HPV is cervical cancer, medical researchers have found a causal link between HPV and cases of anal and penile cancers in men (ASHA, n.d.). Although the relationship between HPV and penile cancer has been the most uncertain, one study found that “the risk of penile cancer among men with a history of genital warts was 5.9 times that of men with no history of such cases” (Maden et al., 1993, ¶17). If a male was exposed to a strain of HPV that causes genital warts it is likely that he was exposed to a cancer-causing strain of HPV. Furthermore, his immune system was weakened by the genital warts, which makes him more susceptible to cancer. Also, “among the men with penile cancer who had tumor tissue available for typing . . . 49% were [HPV] positive” (Maden et al., 1993, ¶18). Unfortunately, because the extent of this relationship between HPV and anal and penile cancers is still relatively unknown, there are no readily available statistics about the cases of anal and penile cancer caused specifically by the virus. In fact, the Centers for Disease Control and Prevention rank the

“assessment of rates and risk factors for HPV incidence, prevalence, and persistence in men” as “high priority” (CDC, 1999, p.3). Beyond cancer, high-risk strains of HPV also may cause male infertility. In one study, researchers found HPV in men’s vas deferens (Rintala et al, 2002). HPV may impinge on sperm cell motility, which may explain why HPV could lead to male infertility (Rintala et al., 2002, p. 1665). Again, because this effect of HPV is still being investigated, there are no clear quantitative measurements of these incidences.

Human Papillomavirus Medical Testing Studies

Medical institutions have been conducting clinical trials for possible alternatives for HPV testing beyond the traditional Pap smear/test. During a Pap test, a brush/swab is used to obtain cells from the cervical canal, and these cells are observed for any irregularity, which could be pre-cancerous or virally induced (American College of Obstetricians & Gynecologists, 1999). However, according to the American Medical Women’s Association, these Pap smears “have a high false negative rate,” and these inaccurate results delay the diagnosis and treatment (AMWA, 2002). What the American Medical Women’s Association proposes is a specific HPV test, in addition to the Pap test that can be done from the initial specimen and would provide more accurate results and reassurance to the patient (AMWA, 2002). A clinical study in Britain is being performed to evaluate the effectiveness of such an HPV test (British National Health Service, n.d.). Also the National Health Service in Britain is conducting the TOMBOA (Trial of Management of Borderline and other Low Grade Abnormal Smears) study, whose purpose is to evaluate not only the most effective physical method for handling a positive HPV result, but also how to address the psychological and emotional side of being HPV positive (British National Health Service, n.d.).

Medical researchers also are working to develop an accurate HPV testing method for men. The CDC has recognized the need for HPV testing in males and in 1999 has called for,

. . . improved sampling and testing methods to detect incident genital HPV infection as a study outcome, including assays sensitive enough to detect HPV infections in men, sensitive and specific methods to detect type-specific (and quantitative) HPV infection, and methods amenable to self-sampling (to allow more frequent and less expensive measurements of outcomes) (CDC, 1999, p.18).

Five years later and there still is no reliable way to test for HPV in men (ASHA, n.d.).

Clinical studies have found that traditional HPV testing methods are unreliable for men, providing both a considerable percentage of false positive and false negative results. For example, in one study researchers found that “some of the patients whose clinical examinations were negative [for HPV] tested positive on cytologic and/or virologic samples” (Aynaud et al., 2003, p. 1101). In other words, tests for HPV in male specimens are inconsistent. It is also nearly impossible to test for HPV in males who do not have “clinical lesions,” which is why “several studies [that] have attempted to demonstrate that even in the absence of clinical lesions the male urethra is a reservoir for HPV” have been unfruitful (Aynaud et al., 2003, p. 1100).

Human Papillomavirus Communication Studies

In addition to the medical studies, academic studies are being performed to determine what young people know about HPV. One study asked college students to evaluate their “self-perceived knowledge of STDs and fears of STDs,” rank the “prevalence” of 11 different STDs and take an “HPV quiz” that tested their knowledge about the specific STD (Weigold et al., 2001). In this study, only approximately 41 percent of the participants volunteered HPV as an STD of which they were aware; however, most of these participants referred to warts, a symptom of low-risk HPV, which

affects both women and men, rather than HPV itself (Weigold et al., 2001). When asked to evaluate the frequency of STDs, the participants underestimated the number of HPV cases (Weigold et al., 2001). Furthermore, investigators found that “self-perceived knowledge about STDs is also unrelated to knowledge of HPV” (Weigold et al., 2001).

Similar results were found in a study with adolescent and adult female participants. Overall the women knew more about other STDs than HPV. In the study “none of the 40 participants mentioned HPV during the recall task”¹ but “6 participants (5 adolescents and 1 adult) mentioned genital warts” and “on the STD recognition task,² 7 participants (4 adolescents and 3 adults) said that they had heard of HPV, and 35 participants (19 adolescents and 16 adults) said that they had heard of genital warts” (Mays et al., 2000, p. 368). Although the participants had greater recall and recognition of the genital warts than HPV, many of the women confused genital warts with herpes and did not know the connection between warts and HPV (Mays et al., 2000). This inability to identify HPV with genital warts or name cancer as another potential outcome of HPV was a common finding in HPV awareness studies (Dell et al., 2000; Mays et al., 2000; Baer et al., 2000).

In a follow-up to the 2001 Weigold et al. study, information was collected from college students through surveys that tested their knowledge about sexually transmitted diseases and HPV (Weigold & Treise, 2002). This follow-up study then went a step further than its predecessor by exposing the participants to one of three different formats of a public service announcement about HPV in order to determine its effects on their attitudes toward the STD (Weigold & Treise, 2002). Results from this second study

¹ Participants were asked to name every STD they could remember during the “recall task.”

² Participants were given the name of the STD and asked if they had heard of it in the “recognition task.”

confirmed findings from the original study that there is low HPV awareness among college students. Researchers also found that even with a heightened awareness about HPV and its prevalence among their age group, the participants neither intended to change their sexual activities nor seek a medical professional for screening purposes (Weigold & Treise, 2002). While few people were concerned about their own health, the majority of students applied the third person effect: they recognized the public's risk for HPV but could not conceive that there was any possibility of them personally being at risk for HPV (Weigold & Treise, 2002).

In a different type of HPV awareness study, investigators first studied their participants' base knowledge of HPV and then asked them questions about two potential HPV vaccines, one that prevented common high- and low-risk strains of HPV and one that prevented just high-risk strains of HPV. As with the other study participants, a majority of the subjects had not heard of HPV (Hoover et al., 2000). In the study, "only 23.3% had previously heard of HPV; 34.5% of women 18 years or older had heard of HPV versus 8.3% of those 17 years and under" (Hoover et al., 2000, p.381). The women who had heard of HPV identified learning about the STD in either school, from the doctor, or from television (Hoover et al., 2000).

In the second part of the study, investigators found that while women viewed HPV vaccines as beneficial, a majority of the participants did not want to participate in the HPV vaccine clinical trials. More than half of the women believed that their participation in the clinical trial would take away from their free time (Hoover et al., 2000). Also, more than half of the women thought that a boyfriend or significant other "would neither

approve nor disapprove” of their participation in the clinical study (Hoover et al., 2000, p. 385).

In addition to determining women’s willingness to participate in the clinical trials, one question from this part of the study related to whether or not women think that men are responsible for HPV prevention. Participants were asked if men should get these vaccines. Overall, women did feel that men need to take some responsibility:

Almost 70% felt that men should receive a vaccine against oncogenic HPV to protect potential sexual partners even though men did not develop cervical cancer. Almost 80% felt that men should receive a vaccine that protected against genital warts and oncogenic HPV (Hoover et al., 2000, pp. 382-383).

In their discussion, investigators wrote (Hoover et al., 2000, p.388):

It may be impossible to eliminate an STD by only vaccinating one gender; vaccination of men against oncogenic HPV may be needed. While 95% of women felt men should be vaccinated against oncogenic HPV to prevent transmission of these viruses to subsequent sexual partners, fewer men may hold this attitude. Almost 100% of women felt that men should receive a vaccine against oncogenic HPV if this vaccine would also protect men against genital warts. Although research on attitudes of men is needed to answer this question, inclusion of protection against warts may make an oncogenic vaccine more acceptable to men, thus increasing its use by both sexes.

Investigators allude to the need for research to be performed with male participants in order to evaluate their opinion of a HPV vaccine and to learn about their concerns regarding HPV. In turn, one major weakness of this study, as with many other HPV awareness studies, is that it only collected information from female participants despite the fact that HPV is a non-gender-specific issue.

One study that addressed the disparity between female and male HPV awareness compared females’ and males’ knowledge of HPV. Results suggested that overall, only a small percentage of females and males, 4.6 percent and two percent, respectively, identified HPV as a “most common STD,” and both males and females rank HPV last of

“STDs they were concerned about” (Baer et al., 2000, p.73). Only 3.8 percent of males and 3.9 percent of females polled were concerned about HPV (Baer et al., 2000, p.73). There were differences between males’ and females’ HPV awareness. While approximately equal percentages of men and women had heard of genital warts, only 4.2 percent of males versus 11.6 percent of females knew that genital warts were caused by HPV (Baer et al., 2000, p.71). Another difference between males and females was that approximately 83 percent of the males versus approximately 46 percent of the females “did not know how HPV was transmitted” (Baer et al., 2000, p.72). To summarize, this study found that males knew less about HPV than females; however, both genders were equally interested in learning more about STDs in general.

Researchers also have discussed the implications of conducting HPV research with only female participants: “. . . to focus exclusively on women sends a clear message to both men and women that prevention of HPV infection is solely a woman’s problem. It also tends to minimize the significance of HPV infection for men” (Baer et al., 2000, p.75). Evidence has been found to support this claim (Yacobi et al., 1999).

To summarize, while studies have been performed to determine what college students know and think about HPV, none of the studies have used only male participants. On the contrary, several studies have been carried out with only female participants. Studies that have been conducted with both female and male participants found that males knew less about HPV than females (Baer et al., 2000). This trend to use only female participants implies that HPV is just a woman’s issue, which is not physiologically true. Past studies have alluded to the need to conduct HPV awareness

research with males. Therefore, this study seeks to answer the following research questions:

- RQ1: What do male college students know about HPV?
- RQ2: After reading facts about HPV, what do male college students discuss as their concerns about HPV?
- RQ3: After reading facts about HPV, what level of importance do college males feel the HPV issue should be given in the future?

CHAPTER 3 METHODS

Qualitative versus Quantitative Research

Qualitative research methods were employed in this study to evaluate what college males knew about HPV versus their general sexual transmitted disease knowledge and college males' attitudes toward HPV. Qualitative methods were more appropriate than what many researchers consider more traditional quantitative measurements because of the exploratory nature of the study's research questions.

In *Qualitative Communication Research Methods*, the authors discuss the difference between qualitative and quantitative research methods (Lindof & Taylor, 2002, p.66):

[Quantitative research methods] tend to follow a linear order of activity in which what precedes all else is choice of theoretical perspective from which testable propositions can be deduced. From the writing of hypotheses to the operationalizing of variables, from the selection of a sample to the conduct of an experiment, the project's linkages are clear every step of the way . . . Importantly, most quantitative projects depend on a high degree of control by the researcher.

While the investigator suspected that most study participants had not heard of HPV before this investigation, based on findings from previous HPV studies, this hypothesis was not the primary focus of the study. Instead the purpose was to identify what males raise as their concerns and general feelings toward HPV after they have been introduced to facts about the STD. As previously discussed, little HPV research has been done exclusively with males, and none of these studies were about males' knowledge levels; therefore, it was imperative to acquire a general notion about males' HPV awareness and

concern. Furthermore, in order to obtain thoughts that accurately and precisely reflect the study sample, the participants had to be given the opportunity to express themselves in their own words versus ranking levels of HPV interest or concern as extreme, moderate, partial, or neutral and then computing the responses into statistical, numeric data. Finally, by design there was not a theory preceding the study, theory was grounded in the research data collected (Lindof & Taylor, 2002, p. 218).

Contrary to quantitative research, the key of qualitative research is to:

. . . plan on making decisions about issues we haven't yet discovered. We usually begin with a sense of purpose and some broad questions. We may also have read the research literature, made some personal contacts, and found a way to enter a social world. Otherwise, we cannot predict—in fact, we usually refrain from even trying to predict—how the study will turn out (Lindof & Taylor, 2002, p.66).

This HPV study began with a sense of purpose: to determine males' HPV awareness and general concerns. The study also incorporated some broad questions: What do male college students know about HPV? What is the relationship between sexual activity and attitudes toward HPV? After reading facts about HPV, what do male college students discuss as their concerns about HPV? After reading facts about HPV, what level of importance do college males' feel that they will give to the HPV issue in the future? After the information was collected from the participants, analytical induction was conducted with the responses; therefore, the outcome of the study was completely dependent on the study participants' views rather than the researcher's expectations—the researcher forwent the majority of control over the study, control that would be vital in quantitative research, and in turn placed the responsibility into the hands of the participants (Lindof & Taylor, 2002, p.66).

Testing the Value of Qualitative Research Findings: Trustworthiness

In this qualitative study, as with most research that is audience-centered, the quality of the data collected is dependent on each participant's ability to be honest not only with the investigator but also with himself and then accurately (and articulately) report these responses using as much detail as possible. The value of a qualitative research study is evaluated through "trustworthiness." Trustworthiness is typically determined by answering four types of questions (Lincoln, 1985, p. 290):

"Truth value": How can one establish confidence in the "truth" of the findings of a particular inquiry for the subjects (respondents) with the context in which the inquiry was carried out?

Applicability: How can one determine the extent to which the findings of a particular inquiry have applicability in other contexts or with other subjects (respondents)?

Consistency: How can one determine whether the findings of an inquiry would be repeated if the inquiry were replicated with the same (or similar) subjects (respondents) in the same (or similar) context?

Neutrality: How can one establish the degree to which the findings of an inquiry are determined by the subjects (respondents) and conditions of the inquiry and not by the biases, motivations, interests, or perspectives of the inquirer?

General Method

Information was collected from participants through focus groups. Focus groups were selected as the method to collect data from the participants for several reasons. First, focus groups provide a forum to collect data from a number of males in a relatively short amount of time. Focus groups are often "used as a self-contained method in studies in which they serve as the principal source of data" (Morgan, 1997, p. 2). In turn, "the goal in self-contained focus groups is to learn about participants' attitudes and opinions on the researcher's topic of interest" (Morgan, 1997, p. 20), which is a major objective

for this study. What is known about males' HPV awareness and concern is limited and focus groups were an ideal way to expand this knowledge base.

During the focus groups participants first were asked questions regarding general sexual health awareness and concerns about sexually transmitted diseases. For example, participants were asked about how they define safe sex, their major concerns when contemplating a sexual relationships, and what they know about and how they categorize the risk associated with STDs. The information gathered from these questions was used to determine whether or not there is any relationship between the participants' general sexual health concerns and STD awareness and their attitudes about HPV. After responding to the preliminary questions, participants were given a few minutes to study an HPV fact sheet (see appendix A). They then were asked questions related to HPV awareness, concern, and future considerations (see appendix B). In general, the second set of open-ended questions was designed to determine what males think about HPV, in particular what facts about the virus are most distressing and whether or not their concerns about HPV are merely about themselves or their potential sexual partners. For example, they were asked if they had ever heard of HPV prior to the focus group, and, if so, where, what facts about HPV were most concerning, what type of consideration they planned on giving HPV in the future, and what kind of responsibility do they think males have to learn about HPV. Before leaving the focus group, participants were asked to fill out an anonymous information sheet about their age, race, sexual orientation, and number of people with whom they have had sex. This information sheet will be used to gain a better idea about the participants' sexual history without invading their privacy by asking them to disclose such information to the group (Morgan, 1997).

The purpose of the HPV Fact Sheet was to make certain that all the participants had been exposed to the same information about the virus. It was expected that most, if not all, of the participants will have no knowledge of HPV, so the fact sheet served as an introduction to HPV. To summarize, the participants had to know something about HPV in order to respond to the second set of open-ended questions; therefore, the fact sheet gave them information to which they could respond.

The HPV Fact Sheet has been adapted from the fact sheet available on American Social Health Association's (ASHA) National HPV & Cervical Cancer Prevention Resource Center's Web site, www.ashastd.org/hpvccrc. The researcher added some statistics about the number of people who contract HPV and the risks associated with HPV to the fact sheet and reworded certain facts for a college-aged audience for the purposes of this study. One reason the researcher chose to get HPV facts from ASHA is because, according to the association's Web site (ASHA, 2001):

The American Social Health Association is recognized by the public, patients, providers, and policy makers for developing and delivering accurate, medically reliable information about STDs. Public and college health clinics across the US order ASHA educational pamphlets and books to give to clients and students. Community-based organizations depend on ASHA, too, to help communicate about risk, transmission, prevention, testing and treatment.

In addition, health initiatives, such as the Kaiser Family Foundation and MTV's Fight for Your Rights: Protect Yourself campaign, have used HPV information provided by ASHA (MTV & Kaiser Family Foundation, n.d.).

Recruitment

Participants were recruited from the University of Florida's College of Journalism and Communications. Students in an introductory advertising course were given three extra credit points for their participation in the study. Participants also were provided a

meal for their participation in the study. Recruits were told only that the study is to learn about males' opinions of a relatively unknown sexually transmitted disease. Participants were not told that the STD is HPV because that information could have skewed results by encouraging participants to take the initiative to learn about HPV prior to their participation in the study or could have discouraged potential participants because they did not feel that they knew enough about the topic to contribute any useful information. Participants will be given the option to remove themselves from the study at any time during the focus group.

Focus groups work best when participants are fairly homogeneous. Often investigators have to segment their participants, divide them according to demographic categories, before conducting a focus group; however, the participants who were eligible for this study were already a fairly homogeneous group, college-aged males and it was not necessary to segment them further.

Five focus groups consisting of approximately eight to 15 participants were used in the study.¹ The investigator decided to conduct five focus groups so that each of the males who were recruited from the introductory advertising course could participate in the study and none of the focus groups would become overpopulated. Five focus groups were also enough to establish themes among the participants' responses to the open-ended questions. Finally, saturation was expected to occur within five focus groups. Saturation occurs when continuing information collection will not result in any more new ideas.

¹The fifth focus group was the smallest with only three participants.

Eight to 15 participants in each focus group was ideal to have a variety of responses to each of the questions and to have an active conversation between the focus group participants. Eight to 15 participants was also small enough that each participant has the opportunity to contribute to the discussion. Focus groups were conducted in Weimer Hall, the primary site for courses in the College of Journalism and Communication. This location was chosen because it is a neutral territory. Also, the course from which participants will be recruited meets in Weimer Hall; therefore each of the participants was familiar with this location.

Moderator

A male graduate student moderator, trained in qualitative methods, was used to conduct the focus groups because the lead investigator is a female and therefore could not be the moderator. Research shows a greater likelihood that a participant will be more at ease and more cooperative with a moderator who is like him or herself (Morgan, 1993); therefore, because the participants in this study were college males, the moderator too had to be a college male. Also this moderator was used because the investigator was already highly involved with the study topic, which could have affected the outcome of the focus groups. For instance, if “the moderator is perceived by the participants to be holding a particular position or stand on the issue, [this may provoke] similar or different views from the focus group” (Krueger, 1993, p. 75).

In order to have a successful and productive focus group, “moderators must know when to probe or follow up on questions, and how to maintain a balance of participation within the focus group by encouraging quieter participants and restraining dominate ones” (Krueger, 1993, p. 74). During a training session, the moderator was instructed on how to listen to the participants’ discussions while taking note of cues that can lead to

appropriate follow-up questions. He was also learned how to encourage equal contribution from all participants.

The moderator took a “funnel” approach to the focus groups; in the funnel approach, “each group begins with a less structured approach that emphasizes free discussion and then moves toward a more structured discussion of specific questions” (Morgan, 1997, p. 41). The moderator was given an open-ended question guide to follow so that there was some consistency among the focus groups; however, the moderator began each discussion with broad questions intended to get the participants thinking and talking rather than directing the specifics of their responses. For instance, the participants were asked what concerns them about HPV versus if they are concerned that there is no cure for HPV. The moderators then followed up with more specific questions based on their initial responses. For instance, during the preliminary STD discussion the moderator said “So really, you guys mentioned warts. You guys have heard of genital warts before and so, what do you guys know about genital warts?” Moderator involvement was minimal, adequate to promote discussion among the focus group participants, but not enough to manipulate participants’ responses. The moderator also was coached on how to respond to participants’ questions regarding HPV or the purpose of this study in a way that satisfied the inquirer but did not influence what the participants said.

A major priority for the moderator when conducting a focus group was to make the participants feel comfortable. One question that a researcher has to address when deciding to collect data by any type of interview is “Who does the respondent think the investigator is?” (McCracken, 1988, pp. 25). According to McCracken (1988),

As sentient social actors, North American respondents use every available cue to categorize the investigator and the project. They judge the institutional affiliation of the investigator, the project description, and even his or her appearance, mode of dress, and patterns of speech (Denzin, 1978b; Strauss and Schatzman, 1955). This semiotic exercise can dramatically influence whether and how the respondent responds to the questions they are asked (Briggs, 1986; Williams, 1964). If the investigator does not carefully control these cues, they will confound the nature of the respondent's participation in the interview and the data he or she provide (Benney and Hughes, 1956; Cannell et al., 1968, 1979; Lerner, 1956; Stebbins, 1972; Strauss and Schatzman, 1955; Vidich, 1955; Vogt, 1956) (pp.25-26).

It was important that the moderator did not pass any judgment on the participants through verbal or physical cues; this was stressed during the moderator training session.

Challenge to the Focus Group

One major challenge to the focus groups was the nature of the research topic.

Sexually transmitted diseases are highly stigmatized, and HPV is no exception.

Therefore, people are generally less comfortable talking about this topic because of how they believe it may influence what others think of them. In turn, because HPV is a sensitive topic, study participants could have been less likely to disclose detailed information about their personal lives, as well as their true opinions of HPV, in an interview or focus group. Studies performed with individuals who test positive for an STD have found that these participants internalize this and perceive it as a character flaw (Nack, 2002). For instance, in one study, a group of women reported believing that they had been "good girls" but had transitioned into "bad girls" because they had HPV, and they wondered what they had done wrong to deserve this punishment (Nack, 2002).

Studies also have shown that an individual may withhold a positive HPV-status from a sexual partner out of fear of rejection (Weigold & Treise, 2003; Taylor et al., 1997; Nack, 2002).

In order to account for this challenge, the open-ended questions were less personal and more about males in general. For instance, the participants were asked, “Do you think if men knew about HPV they would change some of their behaviors” versus being asked, “Do you plan on changing some of your behaviors now that you know about HPV?” The wording of the open-ended questions and follow-up questions was extremely important to making the participants comfortable and collecting accurate responses.

Data Analysis

Code mapping, also known as analytic induction, and comparative analyses was conducted with the information collected from the focus groups (Glaser & Strauss, 1967). Code mapping is a process in which “material [is divided] into analytically distinct segments that can then be examined together when drawing conclusions concerning one or more of the topics and related concepts under investigation.” For example, information collected about what characteristics of HPV are of most concern was grouped as one segment and what types of behavior changes males believe they should make after learning about HPV was placed in another. Then the concerns and behavior changes could be analyzed alone and as they compare with one another. Code mapping allowed the researcher to determine whether any of the groups’ responses to different questions correlated to one another, as well as identify overall themes among responses. Comparative analysis ensured that the findings from the code mapping were consistent.

The focus groups were videotaped and audio-taped so that the investigator could analyze both the verbal and nonverbal information provided from the focus group without being physically present during the focus groups. Each focus group was transcribed (see appendix C). The investigator also analyzed notes taken by the moderator.

All research materials, methods, and means of collecting data were approved by the University of Florida's Institutional Review Board.

CHAPTER 4 RESULTS

Five focus groups were conducted during the month of April. Forty-six of the 50 people who were originally recruited for this study participated in one of the five focus groups. Participants were all heterosexual males between the ages of 19 and 40. According to the post-focus group questionnaires, participants self-reported having between zero and 45 lifetime of sexual partners (see appendix D) and between zero and four sexual partners within the past six months (see appendix D).

Saturation occurred after three focus groups; however, five focus groups were conducted. Conducting five focus groups ensured that every participant originally recruited to the study had an opportunity to participate in one of the focus groups and also ensured that the information collected in the focus groups was indeed repeatable and thereby an accurate representation of these college-aged males. There were numerous similarities among the findings in the five focus groups; however, five major themes were developed from the data. Half of these themes evolved as a result of specific questions that were posed to the participants by the moderator. For instance, in each focus group, the moderator asked participants some version of the question “What concerns do you have about STDs?” and from this question came the theme that incurable STDs, like herpes and AIDS, are of most concern because they are permanent. Males talked at great length about how contracting an incurable STD would affect their lives. This theme will be discussed at greater length later. An example of a theme that developed, but not from a specific line of questioning, is that the participants have two different standards for

sexual behavior depending on the type of relationship, whether it is a one-night stand versus what potentially could become a long-term relationship. The five themes that were identified from the data collected through the focus groups are: (1) one-night vs. long-term sexual relationships, (2) ranking STDs, (3) three out of four is unbelievable (4) why change, and (5) HPV, share and tell.

Theme 1: One-Night vs. Long-Term Sexual Relationships

The first theme identified from the focus groups, one-night vs. long-term sexual relationships, refers to how males categorize their relationships. According to the participants, males have two different standards for women based on whether they view the women as those with whom they will have sex immediately after meeting them (also known as one-night stands) or those women with whom they will pursue a longer relationship. Their categorizations of the females, in turn, determine their level of sexual precaution and protection.

Short-term sexual relationships involve one-time-only sexual intercourse with a person with whom the male is not in a relationship, nor does he expect to have any type of relationship with her following the intercourse. Males have a lower standard for these one-night-stand females and are less concerned about their past sexual indiscretions. For instance, according to one participant:

It depends on what you're looking for. I mean, if you're looking for like a one-night stand, or if you're looking for a long-term relationship, it obviously is different qualities that you're trying to get, or at least me.

A different participant has a similar point of view:

Yeah, you can usually tell like if it's a girl you'd pick up at the bar maybe the first time and take her home, like you gotta be taking her to the den already. I don't think it is really fair for you to do like 'were you a slut' you know, if you take her home because you are not doing anything any better. But if it is some girl you

meet and you really like, and I see the relationship in a totally different dynamic to it.

Short-term relationships often result from an evening of heavy drinking and flirtation in a social environment like a bar or club. In every focus group at least one participant mentioned that being “wasted” or drunk was a contributing factor to his high-risk, sexual behavior. One participant said,

I think it kind of matters where you meet them. Like, if you’re in a bar, and you’re wasted, you might not think as seriously as you would if it was someone you met in class, maybe . . . it does affect your judgment.

The males do not discuss sexual history or whether or not they or the females have a sexually transmitted disease (STD) in these short-term relationships. One participant described why this is impractical, “Let’s say you are at the bar or club or something, you really can’t go up to a girl and initiate conversation, be like ‘Hey, what’s up? Are you clean?’”

While the males are less discriminate about their sexual partners during these short-term encounters, they do recognize that they are at a greater risk for negative repercussions, like STDs, because of these indiscretions. One participant explained,

I mean if I just met the girl, and like, I’m taking her home, it kind of goes through my mind, well how often does she just meet a guy and just take him home. So, I mean, it just depends on what you’re looking for. So if you’re going home and having sex with her, and she’s done that before then there’s a better chance that she has an STD and you just got to, just deal with that if you really want to have sex.

The concern about contracting an STD from a one-night stand often occurs the following day, after sex, gratification, and possible infection. One participant summarized the scenario, “You hook up with her and have sex with her, and then like a couple of days later, you’re like ‘ah man, I hope she was clean’.” In exchange for not discussing sexual history or STD status with these females, males say that they find it more important and

are more likely to use a condom when engaging in this type of sexual relationship, that is, if they think of it.

Participant A: A lot of times though I think if you kind of know the girl you really kind of don't think that they are going to be, you know, having STDs, and if it's a stranger you're hooking up with, somebody that you don't know that well, it might be a little more concern, but you know what I am saying, if you know them fairly well you're not going to take into consideration near as much.

Participant B: Especially if maybe you're drunk, you know, then it usually happens, and you are usually drunk when a one-night stand happens. You are just thinking about something else, and you know, STDs and condoms, you just don't care.

A participant from a different focus group shared a similar view:

Just seems like it [sexual health and STDs] never comes up and like you are right there in the middle of a scene and it's right about to happen, then it comes into your mind. It's like you are so far along you want to be satisfied. I don't know, it's kind of hard to say no. So it's kind of hard to bring up like a condom or I guess you'd go with a condom, if I was in that situation.

Regardless of whether or not they do use a condom, the overall consensus was that safe sex, in particular condoms, were a "necessary evil," something that the males did not want to use, but that was important for their protection from disease and unwanted pregnancy.

Long-term relationships have a completely different dynamic compared to short-term relationships. In general, the male participants' view of a long-term relationship is anything that lasts longer than one night. For instance one participant said, "I've never had a one-night stand. If I've had sex with a girl, it's been like three days." Male participants give their long-term partners more respect and in turn have higher expectations of these girls. In fact, while a male can vacillate between being a long-term and short-term partner, females are either one or the other; therefore, in order to be long-term material, a female must be "clean" and not engage in casual sex. One participant's

view on the importance of knowing how many people a female has slept with prior to their encounter is,

I think it all depends on what kind of relationship you are going to get into. If it is going to be a long one then I usually don't want to get into a long-term relationship with someone who is sleeping around with a bunch of people. But if it is a short-term fun thing then I kind of want to be aware of that kind of thing.

Typically males are not looking for someone to engage in sex with immediately during these long-term relationships. It is actually quite the contrary. Immediately having sex with someone almost guarantees that there will be no long-term relationship. One participant said, "I mean it's a bad way to put it, but I don't want some girl I can pick up and take home for one night, you know, to spend real time with." In a different focus group, participants discussed how they wait to have sex with someone if they want to be in a relationship with them:

Participant A: Generally, when I hook up with a girl I don't start relationships with them. If I start a relationship with them, it's a girl that I have been talking to.

Participant B: The only ones that last.

Participant C: Yeah. Yeah, like if it is a good relationship, then it will actually last more than a couple of days. You generally take it a little slower.

Trust and knowing your partner were identified as key factors for a successful long-term relationship. In turn, males were less concerned about STDs and using a condom during sex with a long-term partner because of this "trust" and familiarity. In fact, when asked what safe sex is, the two most common answers were condoms, usually in reference to a shorter relationship, and knowing your partner. For instance, participants in one focus group said:

A lot of times, though, I think you kind of know the girl, you really kind of don't think that they are going to be, you know, having STDs. And if it's a stranger you're hooking up with, somebody that you don't know that well, it might be a

little more concern, but you know what I am saying, if you know them fairly well you're not going to take that into consideration near as much.

Another participant concurred:

I would be safe like, I think it depends on the relationship, you know. If you've been dating a girl for like a while, then I think safe sex is kind of like you trust each other and nothing sprung up on yourself yet, so, you know.

In a different focus group one participant explained how trust replaces condoms, "I always figure you got to get to know the girl pretty good before. Like, know her past sort of before you start like having sex without a condom." Other participants shared similar views:

Participant A: I always start off wearing a condom for a while. Then it will get annoying, if it ends up lasting more than a month or something. It always comes off after a while.

Participant B: I guess either wear a condom or know or be pretty sure who you are with like doesn't have anything. Be real careful.

Participant C: Rather than having to wear a condom, just make sure you know who you're with, if you can hold out that long.

Many males felt that trust and knowing a partner were sufficient protection.

However, there were several participants who questioned females' honesty and did not feel that trust was a failsafe form of STD protection. One participant stated, "A lot of girls are like Pandora's boxes; you just don't know what is inside. When you crack the seal, boy!" Furthermore, many males admitted that they had difficulty discussing sexual history with their partners because they felt that the females would mistake the inquiry about past sexual risks and indiscretions as an accusation of having an STD and being promiscuous; meanwhile, other participants admitted that they would show little to no compassion for a female if they found that she had an STD in her past, regardless of

whether or not they were in a long-term relationship. For instance, one participant shared his hypothetical reaction to finding out a girlfriend had an STD:

Honestly, for me, these days you know, if it came back that she had this, or whatever, cut her loose. Tell her to hit the road. That's the thought; but I'm not going to be sitting here playing around now that you know you had this. Now you know, I guess the best thing you can do is find somebody, you know, you are comfortable with and you want to be with, and let them know for their benefit.

To summarize, male participants explained that their concerns when contemplating entering a sexual relationship depend on the type of relationship. In short-term relationships they feel that females are more promiscuous and therefore are more likely to have an STD. In these relationships males make more of an effort to use a condom; however, they are often inebriated during these interactions and only experience real concern about sexual health and protection after intercourse. In long-term relationships, males look for an STD-free, virgin-like female. Usually these males do not immediately have intercourse with these females, but instead take some time to get to know them. Knowing the partner, truth, and honesty often replace more traditional forms of contraception, like condoms, in these relationships; however, many males find that social stigma and possible rejection inhibit open conversations about sexual health and sexual history with their partner.

Theme 2: Ranking STDs

The second theme from these focus groups, ranking STDs, refers specifically to how males categorize the threat of STDs. Each of the focus groups were asked to name as many STDs as they could think of and then asked to rank the STDs according to threat and concern. Herpes was one of the first STDs mentioned in each of the focus groups and was one of the STDs that males were most concerned about. Other STDs mentioned in each of the focus groups were HIV/AIDS, gonorrhea, Chlamydia (in all but one focus

group), genital warts, syphilis (in all but one focus group), and HPV, crabs and “the Clap” were mentioned in three focus groups. While most major STDs were mentioned by the participants, in general, the males did not give any indication that they knew much more about many of the STDs beyond their names and the fact that they did not want to contract them.

When asked to rank the STDs in terms of seriousness, each of the focus groups were in concurrence that the worst STDs were those that would kill you or that were painful, noticeable, and would never go away. Number one and two on the list were HIV/AIDS and herpes, respectively. Males stressed that their fear of these STDs was due to their permanence and life-altering repercussions, that something you do in college could impact your overall quality of life, chance for marriage, and future sexual endeavors. Participants reflected on the difference between STDs that are curable and those that last for a lifetime:

Participant A: If something were to happen that you could take care of, you know, it would be a big inconvenience and a pain in the butt, but . . .

Participant B: Well, future relationships man, you know, you are going to have to explain to your next partner that ‘hey, guess what, I have genital herpes. You know, I have medication to keep them suppressed, but I still have it.’ That’s going to be kind of a hard thing to throw out there to somebody.

Participant C: Actually, when you want to get married, there’s that complication way down the line.

Males ranked pregnancy immediately after these two STDs. While pregnancy is not an STD, they felt that having a child also could affect their quality of life, as well as become a lifelong responsibility (and, as participants in one focus group discussed, a huge financial burden). One participant shared his view: “I’d do AIDS, babies, herpes.

'Cause herpes sucks, but you can get medicine for that. If you get a baby, you're paying at least 5 bills a month for 18 months. No, I'm saying 18 years."

After pregnancy, males ranked the other STDs that people cannot get rid of (other than HIV/AIDS and herpes), such as genital warts. Finally, on the bottom of the list were STDs that are uncomfortable, but that people can get rid of, either by taking pills or by injection. One participant summarized the reasoning behind this point of view: "I am more worried about herpes and AIDS than anything else. Syphilis, gonorrhea, or whatever, you can take a pill and it's gone." Another participant said,

We have people out there that probably take antibiotics and something and, you know, big deal, you know I have Claps or something like that. They are never sure, but there is something out there. I'm sorry. There is stuff out there that you know you can't get rid of.

Despite the ranking, many of the participants indicated they did not think in terms of 'I would rather have this than that' because regardless of the STD, they all are bad and they did not want any of them. For instance one participant said, "You don't want to get any of them so it really doesn't matter what they are called." Another participant had this to say:

Well again, you can know about it, but you know about STDs, too. I think more guys—I think it has more effect on guys, just the fact that they know the concept of STDs. Like, it doesn't matter what STDs, they know how all pretty much all STDs can be transmitted. Most guys, if you ask them, they know some STDs can be transmitted by skin, just skin contact. And some can be transmitted just by oral sex, or whatever. Nothing scares them, like, getting HIV or getting syphilis or getting herpes doesn't scare them. Getting an STD is what scares people. Like, the forbidden—they are trying not to get STDs. Like, it doesn't matter—you can point them all out; but they're not going to change anything because they're already doing what they're going to do to try to prevent from getting STDs. That's why I don't think that picking one out makes any difference.

Many participants admitted that they would be most concerned about an STD after they were infected with it. Males also said that they would most likely consider changing

their sexual behavior after they were infected; however, removing sex completely was not a viable option. One participant explained,

I was just going to say, if you are like a good Samaritan and you know you have herpes, you are probably never going to have sex for the rest of your life. That is a hard thing to live with, too.

Anti-abstinence sentiments developed into a sub-theme that evolved from the STD discussion. Most participants felt that their STD concerns did not justify removing the STD threat. For instance, one participant said, “Somehow the moment that you are going to have sex these things seem to balance out you know, and you have sex anyway.” A participant in another focus group shared a similar opinion,

I mean everybody’s got to get theirs, ya know? And I mean it’s not gonna stop em. So, I mean, if I had something, it would be really hard to just not have sex anymore, ya know? Kind of something huge to give up.

Most of the participants in the focus groups are currently sexually active. There were only a total of four male participants in the five focus groups who never had had intercourse.

To summarize, males were most concerned about STDs that could not be cured and could lead to premature death and/or were extremely uncomfortable, namely HIV/AIDS and herpes. Next, they were concerned about pregnancy, followed by other incurable STDs. Finally, males were least concerned about STDs that could be cured. Males felt that all STDs are unappealing and wanted to avoid them, but not if the cost was indefinite abstinence.

Theme 3: Three out of Four is Unbelievable

The third theme, three out of four is unbelievable, refers to the male participants’ reaction to the fact that “Nearly three out of four Americans between the ages of 15 and 49 have been infected with genital HPV in their lifetimes.” This statement was the ninth

fact out of 19 facts on the HPV fact sheet, and therefore was approximately in the middle of the handout. Yet, despite its placement, this fact was the most discussed among all the focus groups. The general reaction to this fact was disbelief and exasperation. One participant simply stated, “three out of four Americans, that’s obscene.” The first focus group had this to say:

Participant A: I think it sticks out that three out of four Americans between 15 and 49 have it. That is a lot.

Participant B: That is crazy.

Participant C: Should be just conceding that we are going to get it and not worry about it.

Participant D: I would almost question the statistics. I mean 75 percent is a lot.

Participant E: Did they like go to like a warehouse and ask around? Hey, how are you doing?

Participant F: Is that a biased sample?

In the fifth focus group, males thought that the percentage of people who had HPV was higher on the University of Florida campus than in the outside population; however, their estimates were still very low:

Participant A: I’d say it was even higher here. If I had to guess, I would say it is higher here than normal populations, just because college is so promiscuous and people are just out hooking up with . . .

Moderator: So, if you had to put a number on it, what you put?

Participant A: You know the answer? 15 percent maybe.

Participant B: Yeah. I’d guess it was around 10 to 12.

Participant A: What’s the answer?

Moderator: 75 percent.

Participant A: Is it really? 75 percent have it?

Moderator: Yep.

Participant A: Wow! Three out of four people, really? On campus here.

Even after this discussion, the three participants in this focus group still doubted the statistic.

Participant C: I find that hard to believe. Yeah, I'm not going to knock it, I can't argue.

Participant A: I just find it hard to believe that. 'Cause I don't think, I mean yeah, I believe it could be 75 percent of all people who were engaged in . . .

Participant B: Maybe 75 percent of the people who went to get tested, they probably wanted to get tested, so they were . . .

Participant A: I'd say that a lot of people that have it are a lot more promiscuous than; I'd be shocked if 75 percent of the entire campus population. 'Cause I would not consider myself a really promiscuous person, so I just think that guy on TV might . . . I understand, you know, that people that aren't that promiscuous that they get it, too, but that's a pretty large number.

In several focus groups males thought that this three-out-of-four statistic was taken from a biased sample, such as people who were extraordinarily promiscuous or that it may really represent three out of four people who had gone to a clinic to be tested specifically for HPV because they already showed some symptoms of having HPV.

Male participants also used other HPV facts to argue the validity of the three out of four statistic. For instance, males felt that if there was no accurate way to test males¹ for HPV, then the three out of four statistic may not really relate to them. Male participants also discussed the statistic within the context that there are eighty different strains.

Does the three-fourths mean like there are 80 different types of it? It means that there are probably only four of them that are very dangerous; all the rest seem harmless pretty much. That is something that we ought to know.

¹ The fact that males could not be accurately tested for HPV was not included on the fact sheet; however, it was discussed in each focus group after a participant asked specifically about a male testing procedure.

Another participant also thought of the statistic in terms of strains: “I doubt that statistic. I don’t believe 75 percent have it. That probably includes like the smallest of the small strains. The ones that are, like, harmless.”

Another reason males questioned the statistic was because they felt that they would have heard more about HPV in the media and from health professionals if it really was that much of a problem. For instance, one participant felt that he would have heard about research to develop a male HPV screening procedure if HPV was such a large threat:

Yeah, if three out of four people have this, you know, then it’s a problem, you know, why isn’t there at test? I want to know if they are doing research or whatnot, but it should be out in the open you know

Another participant had this to say: “Well, he said that—Florida, they said that three out of four people have it here, too, serious. I’d like to think that they’d let us know.”

Beyond discussing its validity, males saw the three-fourths statistic as a way to justify their increased or decreased concern about HPV. Many males were shocked by this statistic because it meant that, realistically three out of four people in their focus group had had HPV in their lifetime, which included themselves. Alternatively, some participants were less concerned with HPV because they felt that if so many people had the STD and there was no public call for alarm in the media or by their health professionals, then having HPV is more of a natural part of life than a real threat for males. For instance, two participants said:

Participant A: It seems to me like it is just one of those things that you know that the people who kind of know about there’s not really too much to be done about it, besides abstain, so it’s kind of either a fact of life or you know technically you are going to pay the price someday.

Participant B: Yeah. Then maybe that’s why maybe there’s not too much talk about it. Cause I don’t really hear too much about it. I’ve heard of it. But I don’t hear like statistics or you know ways to prevent it either, obviously because there’s not too many.

This statistic coupled with the facts that there is no way to test males for HPV and that condoms do not prevent HPV decreased males' concern and sense of self-efficacy for dealing with HPV even further. For instance one participant said, "It's like I feel I want to be responsible and do what I can to prevent it, but it's like, you know, I just feel like I'm going to get screwed one way or the other." In focus group one, the males discussed this predicament:

Participant A: If these statistics are true, then there is no point in worrying about it because everybody is going to get it at some point. I mean, like, I can't live my life with this sheet and be like, 'Oh my God.'

Participant B: If you don't, there is no way you can test for it.

Participant C: Most of the times you don't even know you have it.

Participant A: I refuse not to kiss a woman because she might have this. For as sexist as it sounds, I don't have a cervix. By all means, I grew up in a house full of women. I am not trying to sound sexist at all, but . . . Just like you said, you could leave your house and get hit by a car. I have to worry about that too. Nah, nah. You have to know about it. It is I definitely good to always know. That is why we are here in college to learn, but to occupy yourself with this, that is three-quarters.

Participant D: Well, if you are a guy and they can't test for it anyway, how are you ever going to know if you have it unless you have . . .

To summarize, participants in all the focus groups were most attentive to the statistic that three out of four Americans between the ages of 15 and 49 have been infected with genital HPV in their lifetimes. Most males questioned the validity of this statistic, thinking that a biased sample was used to make the statistic so high. They also used other facts about HPV to argue against the statistic. Most participants were concerned by the large number; however they felt that, if the statistic is true, HPV infection is inevitable and there is no use in worrying about it.

Theme 4: Why Change

The fourth theme, why change, refers to the participants' overall reaction to the possibility of making changes in their sexual habits or in their lives in general after having this in-depth discussion about HPV. Despite some participants' admission that this focus group increased their awareness of HPV and that they would have a temporary increased concern about contracting the STD (one participant went so far as saying that he would rank HPV as the number one most concerning STD), most participants shared that, in the long run, they would not make any major changes to their lives. For instance, one participant said:

It scares you for a little bit, but then like a month . . . I guarantee now it's really gonna; I mean like it will be scary now, we'll go home and talk about it for a couple of days. I'll tell my roommate about this and then in a month I probably won't even think about it again. You get scared at the time.

Another participant said, "Nothing's changed for me. However, I may wait a few days to get into something I don't want . . . you know, actually try not, you know, actually try to avoid it." Yet another participant felt that the focus group was enough HPV education. "I am not going to go home and do anything, to tell you the truth. It's like I figure I got everything I need to know right here."

A majority of the participants used one or a combination of two reasons why they would not change their behavior. First, they would continue to take the same sexual precautions as they were practicing before the focus group or, second, they referred back to the fact that there is no way to get tested for HPV, nor any way to prevent it beyond abstinence and that was not an option. In either case, males concluded that there is no point in changing their behaviors. Some of the participants in different focus groups who believed that their current protective measures were sufficient explained their opinion:

Participant A: I mean they know about AIDS is out there, this is out there, that is out there. I mean it is not going to change anything. People, you know, especially in college.

Participant B: You basically, like, you are coming in with your own likes and morals, a kind of checklist of what you go through, you know, and that's what you took home with you and you just kind of follow it. You are not going to change your behavior, I mean, unless like you are going to get a really specific, but I think the review is going to do the same thing. You know what I mean.

Participant C: I won't say that anything will change for me. I mean it's all in the back of your head. I mean just because I see the statistics, this sheet's about AIDS, sheets and statistics about everything else, they are all bad so you don't want it.

Participant D: But I mean how are we going to change, if we are already taking care of ourselves?

In one focus group a participant began to share how he plans to continue with the use of his standard form of protection, condoms, at which point another participant reminded him that that they are ineffective for preventing STDs. In turn this reminder led them into the second of the two reasons for not changing their behavior.

Moderator: So now that you guys know a little bit about HPV, do you think that any of your behaviors are gonna change?

Participant A: I'm sticking with a rubber, man. I am not straying from my path.

Participant B: Hey, what are you supposed to do if the rubber doesn't help you? I mean not have sex?

Participant C: Yeah, what happens when you blast the rubber?

Participant B: It says it doesn't even help. So you either not have sex, or have sex. You have two decisions.

Participant C: To bang or not to bang, that IS the question.

Other participants straightforwardly admitted that if abstinence was the only way to prevent HPV, they would take the risk:

If this said a way to prevent HPV besides just not having sex at all, then I might be interested in knowing. You know, if it's worth it to try to protect myself against it. But, this is just saying you can't have sex or you're probably going to get it. So what are you gonna do?

In a different focus group a participant had a similar reaction:

I don't want one [STD] just as bad as I did before. I don't want one you know. Especially this one [HPV]. There is not a whole lot you can do about it. If you get it, you can't find out if you got it or not. In five years you do, and five years you don't. There's no way this type of STD, like the danger of STDs, is going to be reinforced as much as our satisfaction for sex is by looking at girls at a bar or whatever, you know. I mean there almost has to be that many times you have to see it [warnings about HPV] just as much as you are tempted.

Another participant equated HPV with a conspiracy against sexual activity. He said,:

It is like ghosts flying around you. It is going to appear every once in a while. It is just what like you are saying is . . . this is like a conspiracy. There is nothing we can do, unless we are going to become celibate. We have two options and none of us are going to become celibate.

In addition to using the fact that there was no accurate way to test males for HPV as an excuse for them not to change their own behaviors, a few participants used this fact, as well as their insatiable sex drive, as a reason why HPV is more of a female's responsibility. These participants felt that females can be tested for HPV and will be tested if they want birth control pills, and therefore they know whether or not they are infected with HPV. In turn, if a female finds out that she is infected, she has the responsibility to abstain from sexual intercourse. For instance, one focus group had the following to say:

Participant A: Girls are like, I mean as far like, ah, them knowing about it and not really telling somebody. You know what I mean. Do you think a girl is going to come out and say, 'Oh yeah, by the way I have HPV?' I mean they are worse than a guy.

Participant B: Yeah, they are also very cautious about themselves. They have the power. They make everything happen. We get close to them to see what happens and then . . . You know what I am saying?

Participant C: The decision is over there . . . They decide everything. The ball is in their court.

Participant D: Yeah, because they care a little bit more about this than, you know, because they have more information because they are the ones getting the best care

or yearly exams and the doctors tell them, you know, that you are clear of those things now.

Similar to the discussion about general STD concerns, a few participants felt that they would be more worried about HPV and more inclined to change their sexual behavior after learning that they or a sexual partner had HPV. For instance one participant simply stated, “If I knew I had it, then it would be different.” Another focus group participant had a similar point of view:

I don't think that honestly that being informed would mean a thing until you have it. You know if warts show up one day and I got cancer because of that, yeah, then you are in trouble there. I mean if you are going to protect yourself against it, then know the numbers, and be more knowledgeable about HPV. Maybe if you were more knowledgeable about what you can do to prevent it. I mean I really don't care about the statistics honestly. I just care if I have it or not or that my partner or not because these statistics don't do anything, again, until you have it.

Finally, some participants said that if they heard something about HPV in the media they may be more inclined to pay attention to the information, but that they would not actively look for more information about HPV. One participant said, “I probably won't look anything up or anything. But, if I hear it like on TV or something, I will pay attention to it.”

In summary, males did not intend to change their behavior after gaining a greater awareness about HPV. Many males felt that they were already taking measures to protect themselves from STDs and that learning about HPV did not make them any more concerned about the risks associated with sex. Males also felt that there was no reason to change their behavior, as males cannot be tested for HPV, and therefore may never know whether or not they have the STD. Also they did not intend to change their sexual habits because there is no way to prevent HPV, other than abstinence, which was unrealistic. In turn, some participants shared the view that females are more responsible for knowing

whether or not they have HPV, being honest about their HPV status, and abstaining from sex if infected. Finally, a few participants said that the only way that they may consider changing their behavior is if they learned that they had come in contact with HPV or if they learned that they had HPV. Other participants said that they would pay attention to information if they heard something about HPV in the media.

Theme 5: HPV, Share and Tell

The final theme from the focus groups, HPV, share and tell, refers to participants' views regarding both interpersonal communication and mass communication about HPV. In regard to interpersonal communication, many of the participants either doubted or were unsure if they would discuss HPV with someone after the focus group. For instance, one participant said, "It is so arbitrary that like talking about this is like a waste of time." Participants shared that males generally do not sit around and have serious discussions about STDs; therefore, their male friends probably would not care about HPV. Other participants joked about discussing HPV with their friends. For example, in one focus group participants shared their plans:

Participant A: I'm going to scare my brothers.

Participant B: How did that little thing go? I'll be like, scary as hell. Be at the bar playing pool tonight. Hey man, guess what happened. 1, 2, 3, 4 . . . Ya'll been screwed.

In another focus group, a participant had a similar reaction to the idea of discussing HPV with someone:

Some of us might talk about it. Just bring it up, like if you're having a conversation with friends anyway about STDs or something like that, you know, just joking around or something.

Participants also had doubts about discussing HPV with their girlfriends. They did not feel that there was an appropriate time for such a discussion or thought that this HPV conversation would not be well-received.

Despite some participants' skepticism about discussing HPV with someone, there were other participants who intended to have this type of HPV conversation in the future. The most common response from these participants was that they intended to have a serious conversation about HPV with their girlfriends, especially when they first contemplate having sex. Still other participants said that they might discuss HPV with their friends within the context of 'I participated in a focus group today about HPV.' One participant said that his friends in the medical field would be interested in learning about what they talked about in the focus group, and another participant said that he might approach the topic like, "I was here today and I learned about HPV, and what do you know."

While the male participants were split about whether or not they would have some type of interpersonal communication about HPV, all males were interested in more mass communication about the topic. Overall, participants felt that there was not enough information about HPV in the media to evoke concern for the STD. One participant said:

You can't take something too seriously that you don't hear of too often or know that much about. If you try to convince other people that it is serious, that they should learn more about it, and they don't know the facts or they haven't heard much about it, they're going to brush it off.

Participants in all of the focus groups felt that the one way to communicate HPV as an important issue and increase the public's perceived personal risk was to hear more about it on television. For instance participants in one focus group shared:

Participant A: I just want to know what I am up against. You know what I mean. Like I know a condom can break, I know there is a 0.01 percent chance that you

can contract AIDS through a condom. I just want to know. You know I'd like to know my risks [for HPV] instead of just being in the dark. I haven't even seen anything on MTV.

Group: Yeah.

Participant B: They don't even have an HPV forum or anything like that, you know. It's not out there. It seems like it is swept under the rug.

Only one focus group had participants who remembered hearing sufficient information about HPV in the mass media.

The final theme also refers to interpersonal and mass communication issues discussed in the focus groups. Participants questioned the likelihood that they would discuss HPV with anyone following the focus group. The most common person that participants said they would talk with about HPV was their girlfriend. Other participants said that they would talk to their friends about it, but many of these participants were clearly joking. While participants were skeptical about interpersonal communication, most of the participants thought that there was insufficient mass communication about HPV and that there should be more media coverage on the topic. Participants felt that more mass media coverage would help the public understand the gravity of the HPV issue.

CHAPTER 5 DISCUSSION AND CONCLUSION

Focus groups were used to collect information from college-aged males in order to determine the answers to the following research questions:

- RQ1: What do male college students know about HPV?
- RQ2: After reading facts about HPV, what do male college students discuss as their concerns about HPV?
- RQ3: After reading facts about HPV, what level of importance do college males feel the HPV issue should be given in the future?

The answers to these questions provide insight into how males' view the HPV issue, as well as reinforce findings from previous HPV awareness studies.

Research Question 1: What Do College Students Know about HPV?

What do college students know about HPV? Not too much. Before being given the HPV fact sheet, participants were asked to discuss what they think are the risks associated with having sex. They were also asked about which STDs have they heard. During this preliminary STD concern discussion, at least one person in each focus group listed genital warts as an STD, and in three out of the five focus groups at least one participant mentioned HPV; however, participants in the focus groups did not discuss genital warts and HPV at length. During this early discussion, members of the focus groups spent more time talking about herpes, pregnancy, and AIDS than any of the other STDs. A few participants shared their personal experiences with STDs; however, none discussed having genital warts or HPV.

In focus group one, all that was said about HPV prior to the fact sheet was that,

. . . It doesn't even do anything in guys, but for the rest of your life, whoever you have unprotected sex with, they contract it just as well as you. It is girls that it messes up. So you know what I mean.

No one identified the relationship between genital warts and HPV in this focus group.

Participants in focus group two admitted that they never had heard of HPV, but knew that genital warts are incurable, can be passed by skin-to-skin contact, and that females can be carriers and contagious, but not show any symptoms. There was no discussion of genital warts or any mention of HPV in the third focus group prior to the HPV fact sheet.

Participants in focus group four and five were more knowledgeable about genital warts and its carrier STD, HPV. During their pre-fact sheet STD discussion, one participant in focus group four shared what he knew about genital warts. He said:

I guess genital warts, you can't really get rid of either. I think it's a virus. And that's the one that supposedly so big. HPV. Is that what it's called? They say like, you know, 70 something percent of all college students carry it. I mean something like that. It's outrageous.

In the fifth focus group one participant shared his concern for HPV during the pre-fact sheet discussion. He said:

I would say ones that you can't get rid of and then HPV, then as being number one and two would be mine among the scariest. Cause A, it's not going away, and B, you know you don't want to be some AIDS patient, you know, stuck up in bed somewhere, you know, dying and being 110 pounds. Then genital warts, you don't want that either, so, those don't go away either, so, I don't think your partner would like that too much. Wouldn't be too attractive.

The participants' superficial knowledge about HPV and genital warts and lack of concern about them are not anomalies. Investigators of previous studies on HPV knowledge and awareness produced similar findings. In a 2000 study conducted with first year college students, researchers found that:

When asked whether they had heard of genital warts, HPV infection of the cervix or the penis, and cervical or penile dysplasia, the vast majority of male and female

respondents, 96.2% and 95.4% respectively, indicated that they had heard of genital warts. On the other hand, a smaller proportion of students had heard of HPV infection of the cervix (29.1% of men and 35.3% of women) or the penis (23.3% of men and 22% of women) (Baer et al., 2000, p.70).

In another study, conducted with university students, participants self reported having the lowest perceived knowledge, education, and worry about HPV, less than HIV, Chlamydia, gonorrhea, herpes, hepatitis B, and syphilis (Yacobi et al, 1999). In a 2001 study at the University of Florida, participants were asked to list every STD of which they had heard and the STD's prevalence, as well as answer questions about their HPV beliefs. Investigators found that 40.9 percent of the participants mentioned genital warts and/or HPV, the prevalence of HPV was undervalued, and most participants admitted to having low HPV knowledge levels (Weigold et al., 2001).

Two possible reasons why most of the participants had a low introductory knowledge of and concern for HPV and genital warts are because they never had a comprehensive HPV education, and they do not hear about HPV from the media. In each focus group, only one or two participants volunteered that they had learned about HPV in the past. The most common place that participants said that they had learned about HPV was from middle and high school (the second most common response was from females); however, many of the students recalled that this education was superficial. For instance, one participant said:

I heard like in health class and stuff, I want to say it might have been in middle school, I have seen this before, it's because you go over everything. Like you get one page for this, one page for that, one page for that, nothing in depth . . . But AIDS and pregnancy, and all, they go real in depth with. I mean, I've heard of it, but nothing intensive of it.

Being bombarded with several facts about many different STDs in a short period of time and then moving on to another topic is not conducive for long-term retention.

Participants were not proud of their lack of HPV knowledge. In fact, participants suggested that a sexual health, STD education program at the college-level could be one way to increase this age group's awareness of HPV. This educational program could be offered as a half credit requirement, recreational course, or part of freshman orientation. Also, rather than having an oral presentation, participants suggested that sexual health information could be part of a regular column in the college newspaper.

In addition to their lack of an HPV education, participants discussed that another reason why they were not knowledgeable or concerned about HPV was because they had not heard about HPV from the mass media. In focus group two, participants brainstormed about what vehicles could be used, that currently are not being used, in order to increase HPV awareness. One popular response was television. For instance, one participant said,

Probably any type of communication just, you know, trying to use it as frequently as possible. And make sure lots of people hear about it. And the more people that hear it, the more it'll pop in their heads, maybe . . . obviously, TV.

Only two participants, who were both in the last focus group, said that they had been exposed to a plethora of information about HPV in the media.

Previous research supports the participants' claim that the media lack stories about HPV. For example, one study found that over the past five years, there have only been 19 articles in the *New York Times*, a well-respected and widely read newspaper, that mention HPV, and these articles generally did not focus on the risks and consequence of HPV (Homer, 2004). According to another study,

Educational messages may be delivered via a number of mechanisms (schools, doctors, health workers, etc.) but mass media are often a cost effective way of reaching large numbers of people. Yet to date, there has been little in the way of broad communication efforts to inform people about HPV (Weigold et al., 2003, ¶5).

Although still low, the focus groups' HPV and genital wart awareness was somewhat greater than the investigator expected and more than has been found in previous HPV awareness studies. One possible explanation is that sexual health awareness campaigns, such as MTV and Kaiser Family Foundation's Fight for Your Rights: Protect Yourself campaign and those from the college student health centers, have increased HPV awareness among college populations. Another possible explanation is that rather than being all participants in the focus groups as a whole having a greater HPV awareness than expected, it appeared to be just a few of the focus group participants. While members of each focus group mentioned genital warts, and members of three out of five of the focus groups mentioned HPV when asked to discuss the STDs that they have heard of, only a few participants in each of the focus groups, if any, did more than name the STD. In reality, only five or six males out of 46 participants described attributes of HPV and/or genital warts, which is less extraordinary.

In summary, participants did not have an in-depth knowledge of HPV or genital warts prior to receiving the HPV fact sheet. Participants discussed other STDs, such as herpes, at greater length than HPV and genital warts. This low knowledge of HPV among participants is consistent with findings from previous studies on young adults' awareness and knowledge of HPV. Two possible explanations for why participants do not have sufficient knowledge about HPV are that they have not had a proper, formal HPV education and/or they have not heard about HPV from the mass media. While participants' knowledge levels were low, they were still greater than the investigator had expected. This phenomenon might be due to STD awareness campaigns.

Research Question 2: After Reading Facts about HPV, What Do Male College Students Discuss as their Concerns about HPV?

After reading the fact sheet about HPV, participants' greatest concern was that "Nearly three out of four Americans between the ages of 15 and 49 have been infected with genital HPV in their lifetimes." Participants vigorously questioned the validity of the statistic. They particularly thought that the sample was biased somehow. Some participants felt that the statistic was formulated using people who were especially promiscuous or who already were suspicious that they had HPV before being tested specifically for the STD. Other participants doubted that the statistic was applicable to males because there was no way for males to be tested for HPV. Not only did participants not believe this statistic, they could not be convinced that the statistic was legitimate and applicable to the University of Florida campus.

One possible reason for this denial is that by accepting HPV's prevalence, participants also may be accepting personal susceptibility to the disease. In the focus groups, participants would physically count out "one, two, three, four . . ." and realized that only one of those four people most likely would not come in contact with HPV. Three out of four was an easy to understand, tangible statistic used to reveal the participants' vulnerability for contracting HPV--the statistic made it difficult for participants to deny their own risk.

Underestimating the prevalence of and susceptibility to HPV has been a common finding in HPV studies. In a previous university study, participants were asked to rate their susceptibility to HPV. Researchers found that, "only 21% of respondents believed that they were at risk for HPV infection" (Yacobi et al., 1999, p.538), even though, in fact, "HPV is the most common STD among students seen at university health centers"

(Yacobi et al., 1999, p.539). In another study, young men and women were asked to list what they felt were the three most common STDs from a list of eight different STDs (Baer et al., 2000). Most respondents listed herpes, HIV/AIDS, and hepatitis B (in that order) (Baer et al., 2000). These same participants then were asked to evaluate their risk for contracting an STD and overall concern about STDs (Baer et al., 2000). Researchers found that, “Although 80% of respondents considered themselves to be at low-risk for contracting an STD, nearly three quarters of males (75; 73.5%) and females (154; 70.6%) surveyed indicated that were somewhat or very concerned about STDs” (Baer et al., 2000, p.72); however, only 3 males (3.8%) and 6 females (3.9%) were most concerned about HPV (Baer et al., 2000, p.73).

Another reason why the participants may not trust the statistic is because they have not heard about HPV in the media or from their health professionals, and they feel that if HPV was such a significant problem they would have heard more about it from one of these two avenues. One participant confirmed this explanation:

You can't take something too seriously that you don't hear of too often or know that much about. If you try to convince other people that it is serious, that they should learn more about it, and they don't know the facts or they haven't heard much about it, they're going to brush it off.

In a previous HPV study, researchers found that participants overestimated the prevalence of STDs that they heard a lot about and underestimated the prevalence of STDs that were less known. In particular, “The best known STDs, HIV/AIDS, syphilis, and gonorrhea, are each believed to have greater prevalence than current STD data suggest is warranted. Conversely, less well-known diseases, such as HPV, trichomoniasis, and chlamydia, tend to be dramatically underestimated” (Weigold et al., 2001, p.26).

In the future, health communicators may want to consider using the three out of four statistic in HPV awareness messages because of its potential to generate a significant impact. For instance, this fact can be used to convey the risk of contracting HPV to teenagers. There is a risk that this statistic may create emotional fear among message recipients and, in turn, lead the people to rebuff the statistic and ultimately reject the HPV message (Maibach & Parrott, 1995). Health communicators must remember that many people, especially young adults, do not want to believe that they are at risk for disease and that their indiscretions have consequence; therefore, this audience may experience cognitive dissonance to any messages that reveal this risk. However, an effective message might be,

Nearly three out of four Americans between the ages of 15 and 49 have been infected with genital HPV in their lifetimes. Count it out—one, two, three . . . four—Do you want to be just another number? Protect yourself from becoming one of the millions of people who have HPV

This message would be accompanied by a brief explanation of the disease along with specific suggestions for how people can reduce their risk for getting HPV. This type of message could help audiences realize that they are susceptible to contract HPV, which, in turn, could make them pay attention to the suggestions for how to prevent HPV.

Regardless of whether or not they decide to use the statistic, health communicators must actively promote HPV awareness through the media so that people will not be so shocked to learn that it affects such a large portion of the population.

Another concern males had about HPV was that there is no way to test for HPV in males or any way to prevent contracting the STD other than through abstinence. For instance one participant said, “It kind of burns me that you’re in here saying, I can’t go

out and I want to get tested, you know. I guess I'll just wait." Two other participants discussed their lack of options when dealing with HPV:

Participant A: Yeah, it's like what would you change? Does anybody have an inkling of what you could change, like I think you're already trying to be safe from STDs. Like, you can't get tested for it. There's nothing you can really do about it if you got it.

Participant B: Condoms can't completely prevent for it.

Participant A: And I don't think anybody's going to be celibate from now on, you know. Until they get married—there's not a whole lot you can do, really, not as I see it.

Perhaps participants were concerned, frustrated, and angered by the facts that males cannot be accurately tested for HPV and cannot prevent HPV, unless they are abstinent, because these facts meant that the participants have no self-efficacy for dealing with the HPV issue. Self-efficacy is the feeling that one is able to follow a prescribed action in order to evade or at least deal with a threat (Maibach & Parrott, 1995). Building self-efficacy is central to an effective health message (Maibach & Parrott, 1995). Typically, people evaluate their self-efficacy for dealing with a health issue by first identifying their personal risk for the threat and then determining if a change in behavior in order to reduce the risk is attainable and does not have a large personal cost (Maibach & Parrott, 1995).

Participants were told that risks of HPV may include genital warts, cancer, or even sterility. Participants identified additional risks of HPV as negative stigma and possible rejection. After identifying the risks of HPV, the problem was that there is no prescribed action for dealing with HPV, except monogamy with a non-infected partner or abstinence. Participants determined that the cost of not having sex, or being faithful to

one person before marriage had too high a cost and was unrealistic; therefore, they did not have any self-efficacy for dealing with HPV.

Finally, the third and most basic concern participants had about HPV was contracting the STD, more specifically having one of HPV's tangible symptoms, cancer or genital warts. Researchers in another HPV study found that people can be concerned about getting an STD without feeling particularly susceptible to the disease (Baer et al., 2000). While participants had not really heard too much about HPV prior to the focus group and felt that there was not much that they could do to prevent getting HPV, they had heard of cancer and warts and did not want either. Participants were especially concerned about cancer. For instance, one participant said:

The cancer thing is kind of scary; but I mean, you're not going to have genital warts and then get cancer without knowing you're getting cancer—you know. If you got cancer, you got cancer. Obviously, if you got genital warts, you might possibly get checked out for cancer or something like that. But genital warts isn't going to kill you; but you know if you get cancer from it, I think you can catch that fast enough. You know, if you have genital warts, you should know. This can give you cancer. You better keep an eye on that.

One possible reason for why the cancer element of HPV was a concern is that cancer is a major concern in the United States. Furthermore, people may associate cancer with death from what they hear about the disease in the media or what they have personally witnessed. Participants may have been concerned about the genital warts symptom because they are a visible sign of HPV. Many cases of HPV are without symptoms and therefore are possible to ignore; however, the warts are an indication of infection, and, as one participant said, "Then genital warts, you don't want that either, so those don't go away either, so I don't think your partner would like that too much. Wouldn't be too attractive."

In summary, participants were most concerned about the fact that nearly three out of four Americans between the ages of 15 and 49 have been infected with genital HPV in their lifetimes. This statistic not only indicates HPV's prevalence, but also the participants' possible susceptibility to the STD. Participants also were concerned about the fact that there is no way for males to be tested for HPV accurately and there is no way to prevent contracting HPV completely, other than abstinence (or mutual monogamy with an uninfected partner). These facts decreased the males' self-efficacy for dealing with the HPV issue and left many of the participants frustrated. Finally, participants were concerned about contracting HPV and getting cancer or genital warts. In particular, participants may have been concerned about HPV's symptoms, cancer and genital warts, because they are tangible ramifications of the relatively unknown virus. Also, it is possible that the participants knew people who had cancer or genital warts and therefore they could somewhat relate to the consequences of HPV.

Research Question 3: After Reading Facts about HPV, What Level of Importance Do College Males Feel the HPV Issue Should Be Given in the Future?

In general, participants did not intend to give much personal importance to the HPV issue in the future. Participants shared that they may be more concerned about HPV immediately following the focus group, but they expected that this concern would only be temporary. For instance, one participant said:

I think it is a concern but when you are like given the facts right in front of you there is more of a concern, because I have heard about this before, but you don't really realize all this stuff until it is right in front of you. Even when you are presented with it, you know, I am sure that after a couple of weeks go by I am going to forget most of this and just not worry about it.

Furthermore, participants did not intend to change any of their behaviors after learning about HPV, except for maybe discussing what they learned about HPV with a

girlfriend. Other participants were uncertain whether or not they would discuss HPV with anyone, including a girlfriend, because they felt that it was unnatural or could be misinterpreted as being an accusation of having the disease. These insecurities are not uncommon. For instance, one researcher who interviewed women who were diagnosed with an STD found that these women felt that an intimate relationship may be jeopardized or at least a romantic mood destroyed by discussing sexual history/behavior or if one partner is panicked about HPV (Nack, 2000).

Future HPV messages not only should promote interpersonal communication about HPV but also should take into consideration people's insecurities about discussing sexual health with their partners. Participants in the focus groups revealed that they were wary of discussing HPV with their partners because of the possible negative consequences of this conversation. Therefore, in order for HPV messages to be effective, they must specifically address their target audiences' insecurities. In particular, the messages need to provide specific suggestions for ways to talk to a sexual partner that reduces risk of rejection. The messages should also stress the positive outcomes of talking to a partner. For instance, a message targeted to males could suggest that talking to a sexual partner about HPV or encouraging a female to get tested demonstrates that they care about the female's well-being and not that they are accusing her of sexual indiscretions.

As previously mentioned, participants did not intend to change their sexual behaviors after the focus group. One reason for this rigidity was because participants thought that they had known the risks associated with having sex before the focus group and are comfortable with the measures that they already take to reduce these risks. Other sexual health studies have documented this attitude among their participants (Weigold et

al., 2002). The most common methods of protection cited in the focus groups were to know your partner and trust your partner in long-term relationships and use condoms in short-term or one-night relationships. Neither of these measures can protect people from contracting HPV. While condoms can effectively prevent many other STDs and pregnancy, knowing sex partners only gives people a false sense of security and does not protect them from any risk. Unfortunately, this ineffective response is common.

Researchers who conducted a different HPV study discussed this phenomenon among their participants:

It is also at least somewhat disheartening to see that respondents place faith in strategies such as “choosing partners wisely” as a way of avoiding STDs. This strategy has emerged regularly in studies on sexual health protection that we have conducted over the years, and it is not just an anomaly present in this unique sample. Respondents appear to place great faith in the notion that a person’s style of dress, look, economic class, etc., are useful guides to that person’s sexual health. Apparently to our respondents, people with sexually transmitted diseases “look” a certain way that sends clear signals that the person is to be avoided (Weigold et al., 2001, p. 29).

Similar to findings of the other researchers, participants in this study shared that they had some type of intuition that would let them know if a girl was short-term material (a sexual indiscretion) or if they were long-term material (trustworthy and virtuous).

However, males are incorrect to assume that they are taking the appropriate precautions for dealing with HPV, or any other STDs, if they choose the “know your partner” method.

Future HPV messages need to address that fact that intuition does not prevent HPV and that HPV does not discriminate based on the type of sexual relationship, whether it be a one-night-stand or long-term. Health communicators may want to develop messages that identify people’s specific risk for HPV according to the type of relationship. For instance, an HPV message targeted at people who have several one-night-stands might

include the fact that risk for contracting HPV increases with every sexual partner and that condoms cannot prevent HPV. These messages can be displayed in proximity to an area where people are looking for short-term relationships, like the bathrooms of bars or clubs. Messages targeted to people in a long-term relationship might say that while you should trust a long-term partner, she or he could have contracted HPV from a previous relationship, be a carrier of HPV, and not even know it. These messages could also stress that people can be monogamous and conservative and still have HPV.

Another reason why participants did not intend to change any of their behaviors in the future was because they did not feel that they were offered a realistic and practicable method to deal with HPV, and they felt that getting HPV was out of their control. As was previously discussed, males' sense of self-efficacy for dealing with HPV was depleted because there was no way for them to be tested for HPV, they were not willing to practice abstinence, and could not guarantee that they would be monogamous until marriage. For instance, one participant said:

If this said a way to prevent from HPV besides just not having sex at all, then I might be interested in knowing. You know, if it's worth it to try to protect myself against it. But, this is just saying you can't have sex or you're probably going to get it. So what are you going to do?

Self efficacy was also jeopardized because of the number of people who contract HPV. Participants said that they felt if three out of four Americans will have HPV in their lifetime, then getting the STD is somewhat inevitable; therefore, there was no point in trying to change their behavior even if they were given an option.

Health communicators must create HPV messages that increase males' sense of self-efficacy in order to combat the "why change?" attitude. The messages should provide suggestions for things that they can do to reduce their risk for HPV rather than

what they cannot do. For instance, a message might advise males to avoid sexual indiscretions because condoms do not prevent HPV and the risk for HPV increases with each new sexual partner. They also might advise males to encourage their long-term, female sexual partner to be tested for HPV. Having a female partner tested for HPV benefits both her and her sexual partner. A female needs to know if she contracted HPV in order to reduce her risk for getting cervical cancer in the future. Also, the result of a female partner's HPV test informs the male about whether or not he is exposed to the STD. Finally, health communicators can increase males' self-efficacy for dealing with HPV by keeping them constantly informed about HPV research and the availability of new HPV testing procedures and/or vaccines.

While participants did not intend to give HPV much consideration in the future, they did feel that HPV should be a higher priority for the media and medical researchers. Participants suggested that the media can show that they are giving HPV a priority by discussing HPV more frequently on television. Many participants felt that HPV was "being swept under the rug," and participants equated it with "ghosts flying around you," "a 1.6 billion dollar ghost," and a "conspiracy." A major reason why the participants said that they doubted that HPV was a serious problem was because they had not heard about it from health professionals or from the media. Consequently, they said that HPV should receive more media attention if health professionals and communicators want the public to know about HPV and want them to see it as a serious issue. For instance, participants in focus group four said:

Participant A: I think people in the medical field and, you know, that area should inform people. 'Cause I guess you know as we've seen [in this focus group], I mean we've heard of it but if you wanted us to tell you about it we couldn't do it.

Participant B: Exactly.

Participant A: You know. Just like we don't really know. We just kind of know what's out there.

Participant B: Yeah. You just got to ingest it like a lot of STDs that people talk, there's a lot of hearsay that goes along with it. You know what I mean? I mean talking about, you know, just things that people will hear and take it as fact when it's not actual fact. You know what I mean. If somebody, like an example, you hear someone saying a condom protects all STDs. I mean that's kind of leading, well wear a condom and there's nothing to worry about. You know, when that's not necessarily true. Obviously by this [HPV fact] sheet.

Ultimately, participants felt that the public needed to be educated about HPV and they need to know the facts about HPV before they can consider it a real threat.

These participants are not alone in the desire for more mass communication about HPV. While they did not necessarily specify the medium for this type of health education, several researchers have concluded their research reports with similar requests. For example, investigators in one study wrote, "Implementing HPV educational programs and measuring their effectiveness should be a priority" (Yacobi et al., 1999, p.535).

Researchers in another study shared a similar desire,

We conclude that health education should be reconceptualized to incorporate a better understanding of STD, including HPV infection, by engaging adolescents and young adults in exploring the biological and social context of STDs, their public health importance, strategies for prevention, and the uncertainty of our scientific knowledge (Baer et al., 2000, p.67).

In addition to wanting the media to pay closer attention to HPV, participants said that medical researchers should prioritize HPV research. In particular, participants felt that medical researchers need to develop an HPV testing procedure for males.

Participants were distraught and angered that there is no accurate male test for HPV. One participant said:

It's just kind of like, I mean it's almost incredible, in fact, what they can do, like with technology, but I think there is going to be even a lot more discoveries. I mean even here, the amount of research and stuff that comes out of here, it just

seems like why can't Florida be the one that comes up with that test? Well, there's no reason it couldn't be.

One possible reason why participants want medical researchers to prioritize HPV is that these health professionals can increase the participants' self efficacy by developing a male HPV test or a vaccine. Essentially, these types of medical breakthroughs will provide males with options for dealing with HPV.

Just as health communicators who conducted research on HPV awareness and attitudes have called for more health communication about HPV, medical researchers who have performed studies on HPV, feel as the participants do—that there is a need for more medical research on HPV. Researchers have called for studies to learn more about HPV's effects on men. For instance, one research group concluded that “. . . more research, especially prospective cohort studies of HPV in men, is needed” (Baldwin et al., 2003, p.1069). In a different study, which investigated the relationship between circumcision, medical conditions, sexual activity and risk of penile cancer, researchers suggested that, “. . . medical conditions of the penis, sexual activity, infection with HPV, and smoking may increase the risk for penile cancer” and that “a larger study would allow examination of interrelationships of circumcision, infection with HPV, and smoking as risk factors” (Maden, 1993, ¶1).

In summary, participants did not intend to give HPV much significance in the future. They may be more concerned about HPV immediately following the focus group but did not expect for this increased apprehension to be permanent. Participants might discuss HPV with a girlfriend but did not intend to make any major behavior changes after learning about HPV. Overall, they were comfortable with the precautions they were already taking in order to reduce their risk for STDs. Unfortunately, some of these

methods are questionable. Despite not giving HPV much individual attention in the future, participants felt that media need to give HPV greater priority and communicate more about the STD. They also feel that medical professionals should conduct more research about HPV and develop an accurate HPV testing method for males.

HPV as a Responsibility

The primary reason for this study was to recognize that HPV is not just a woman's responsibility, but that males are responsible for HPV, too. Overall, the participants' responses in the focus groups indicated that they did not feel much accountability for HPV instead they thought that women should know whether or not they have the STD and the media should take responsibility for informing the public about the HPV issue.

Regardless of the participants' views, males do have a role in the HPV issue and, in turn, must accept some responsibility. While there is no way to test males for HPV, they can reduce their risk for contracting and spreading HPV by not participating in short-term, one-night-stand relationships. Males who frequently participate in this type of behavior are far more likely to contract HPV than males who only have long-term, monogamous relationships. Several of the male participants who talked about their sexual indiscretions also admitted that they had concerns about how these behaviors could have permanent consequences, such as an incurable STD. Therefore, HPV messages need to communicate the permanence of HPV. For instance an HPV message might have a photograph of a scale that is labeled "satisfaction." On one side there could be a depiction of the satisfaction a male can get from having sex with a stranger in a short-term relationship and on the other side of the scale there can be a depiction of the future satisfaction a male can get from having a child or getting married. The headline can be "Which weighs more on the satisfaction scale?" and the copy can be, "What you

do today can affect your tomorrow. People who have one-night-stands are at high-risk for contracting HPV. HPV is an incurable and extremely contagious STD that may lead to male infertility.”

Another way that males can accept some responsibility for HPV is to learn about the STD and share this knowledge with the people they care about, like their families, girlfriends, or wives. Unfortunately, one problem with this responsibility is that males cannot follow this prescribed behavior if they do not know that HPV exists. A reoccurring theme throughout this study was the call for more mass communication about HPV. While participants discussed this need as a way to shift responsibility away from themselves and onto the mass media, their appeals were not completely unfounded. Males cannot know that they need to be aware of and learn about HPV if they never have heard of the STD. Educational programs are one way they initially may learn about HPV; however the success of a health message, such as how to prevent HPV, depends on how often it is repeated (Maibach & Parrott, 1995). The mass media cannot be held responsible for the HPV epidemic or people’s refusal to change their behavior or remain informed about the STD after they originally learn about HPV. However, the mass media does have the responsibility to make the public aware of the existence of the HPV issue and to provide them with resources that they can use to learn more about HPV in the future. Mass media also have the responsibility to inform the public about new ways to deal with HPV, such as with the HPV vaccine or a male HPV test. Public relations representatives who work for organizations that conduct HPV research must constantly make information about HPV available to the public by developing press releases for the news media as well as posting the information on the Internet. Also, another way to get

more general information about HPV in the media is to develop an official HPV awareness week. During the week, newspapers and broadcast news stations should have stories about HPV's prevalence and risks, how it can be prevented, and where people can look for more information about HPV. This mass media coverage would help males fulfill their responsibility to be knowledgeable about HPV by teaching them about HPV's existence.

Another possible responsibility for males is for them to remain abstinent until an HPV vaccine is marketed. The reason they should wait to have sex until they have the vaccine is because the vaccine will only help individuals who have not already contracted HPV. Most of the male participants in this study were sexually active and did not recognize abstinence as a reasonable way to prevent HPV. However, abstinence may be a viable option for other males in the general population. In fact, there were approximately four male participants in this study who were still virgins and may be willing to continue to practice abstinence. Future health messages that encourage males to practice abstinence are important. This type of message should directly identify the risks associated with HPV. For example the copy should include: HPV causes cancer, genital warts, and infertility, it is incurable; it is extremely contagious, often asymptomatic, and can be passed to a child during birth; condoms cannot prevent HPV; an HPV vaccine will be available soon. The message then should conclude with a statement like, "Currently, abstinence is the only proven way to prevent HPV. Protect yourself (or You can do it). Wait for the HPV vaccine."

Finally, males have the responsibility to be tested for HPV when an accurate male HPV test becomes available. In the meantime, males have the responsibility to support

their female partners and encourage them to get tested. Males should reassure these females that they will not discontinue their relationships if they learn that their partners have HPV. As previously discussed, HPV messages must provide specific scripts for how males can talk to their partners about HPV that reduce the risk for negative repercussions.

To summarize, there are several ways males should demonstrate their responsibility for HPV prevention. Males should reduce the number of people they have sex with. Ideally, males should remain abstinent until there is an HPV vaccine; however if they are unwilling to practice abstinence, they should at least practice long-term monogamy—they should not participate in one-night-stands. Males also should remain informed about HPV and be aware of new methods to prevent HPV or be tested for the disease. Mass media can help males with this responsibility. Finally, males should support their loved ones with information about HPV and encourage the females in their lives to be tested for HPV.

Strengths, Weaknesses, and a Call for Future Research

The greatest strength of this research study was that it is one of the first qualitative studies focused specifically on exploring what college males know about HPV and what their attitudes and concerns are about HPV after learning about the STD. Researchers of a previous study conducted in 2000 at Brown University identified that their study was “unique in its exploration of the knowledge about HPV among young adult male” (Baer et al., 2000, p.75); however, the study surveyed both males and females with questionnaires and used the data to create a gender comparison. In this investigation, the researcher focused specifically on males. The qualitative nature of this study allowed for the male participants to articulate their HPV awareness and concerns in

their own words; therefore, data collected from this study provides new insight into how males truly view the HPV issue without any restrictions on their language or responses. Consequently, this information about males' concerns about HPV is valuable because it can be used to develop HPV awareness campaigns that target male audiences.

Human papillomavirus is a sexually transmitted disease, which means that it is contracted and transmitted by both females and males. Therefore, it is important that both genders know about the disease. Previous research primarily has focused on females' role in HPV because investigators have used only female participants. While these studies have resulted in important information that could be used to develop resources increasing female's awareness of HPV, they also have propagated the idea that HPV is only a women's issue. This research study, which used male participants, is a reminder that males are responsible for knowing about HPV, too.

A potential weakness of the study was that data were collected through focus groups. While focus groups are an ideal method for an exploratory study, there is always a possibility that one or two participants may dominate a group or contribute information that may not reflect the entire group. For instance, two of the participants in the final focus group had an unusually high level of knowledge about HPV, and they dominated the focus group. Just because these males knew about HPV did not necessarily mean that the other participant, who was more reserved, had as much background about the STD. Another weakness was that all the participants were recruited from the same introductory course, and the five focus groups were conducted on different days. Therefore, it is possible that participants in later focus groups may have been "tipped off" about the purpose of the focus group, which could have skewed the overall results of the study.

Participants were specifically asked not to discuss the focus group with their classmates in order to minimize this possible weakness.

In the future, more research should be conducted with college males about their awareness of and attitudes towards HPV. One question that needs to be answered by future research is, “If there was a way to accurately diagnose HPV in men, would males take the test?” Also, several participants said that they may change their behavior if they contracted HPV, which leads to another research question, “If they were diagnosed with HPV, what type of actions would they take?” Future research also should be conducted in order to test the message strategies outlined in this study. For instance, do males think that they would pay close attention to a message with a headline that referred to the three-out-of-four statistic or would they have cognitive dissonance?

A logical follow-up study to this research would be to carry out in-depth interviews with males about HPV. The data collected from these interviews would be accurate representations of the individual interviewees, rather than of a collective, and could provide more thorough insight into what the males think about HPV. This research will be especially important following the development of an accurate HPV screening procedure for males.

APPENDIX A
HUMAN PAPILLOMAVIRUS FACT SHEET

HPV is an extremely common and contagious sexually transmitted disease (STD).

Approximately 5.5 million new HPV infections occur yearly in the United States—this represents approximately 1/3 of all new STD infections.

HPV can infect anyone who has ever had a sexual encounter: man, woman, heterosexual, homosexual.

HPV can be spread during vaginal, oral and/or anal sex.

Genital HPV is spread through skin-to-skin contact, not through an exchange of bodily fluid.

Genital HPV cannot be entirely prevented by condom use; however condoms do protect against other STDs, like HIV/AIDS.

Sexual promiscuity increases your risk for HPV; the more sexual partners you have, the more likely you will get HPV.

About 20 million people -- men and women -- are thought to have an active HPV infection at any given time.

Nearly three out of four Americans between the ages of 15 and 49 have been infected with genital HPV in their lifetimes.

Each year, approximately \$1.6 *billion* is spent to medically treat symptoms caused by HPV in the United States, alone.

There are over 80 types of HPV and are categorized according to risk.

Over 99 percent of cervical cancer cases have been caused by high-risk types of HPV.

High-risk types of HPV can cause anal and penile cancers.

Complications, like cancer, caused by high-risk HPV may cause male and female infertility.

Low-risk types of HPV cause genital warts.

Often people do not know that they have HPV—the only way to detect high-risk types of HPV is through medical tests.

You can get HPV from one sexual partner but not show any visible symptoms and then infect another sexual partner.

Women can be screened for HPV and cervical cancer is by a Pap smear or an HPV test.

The American College of Obstetricians and Gynecologists recommends that sexually active women age 18 and older should have an annual Pap test and pelvic examination

APPENDIX B
OPEN-ENDED QUESTION GUIDE

1. What are some concerns men have when they are contemplating having sex or are in a sexual relationship?
2. Give me your thoughts on safe sex, safe sex methods.
3. What concerns do men have about STDs, if any? BY DISCUSSING STDS THIS DOES NOT MEAN THAT YOU HAVE HAD THEM.
4. What STDs have you heard of?
 - a. Okay, these are the STDs that you mentioned: can you tell me what you know about them (how common, curable, preventable, testable?)
 - b. You mentioned these STDs, what makes you most concerned about these STDs?

Give participants HPV fact sheet

5. Of all the guys you know, how many of them do you think have HPV?
6. Have you ever heard of HPV, prior to this study?
 - a. Where?
7. What are your concerns about HPV?
8. What are your feelings about HPV knowing there is no reliable method to test males for HPV?
9. If men knew about HPV, do you think that they would change any of their behaviors?
 - a. Do you think that they should discuss HPV with their sexual partners?
10. Now that you know about HPV will you be making any changes?
 - a. What changes in behavior, if any, do you intend on making?
11. Do you think that men should be responsible for learning (more) about HPV?
 - a. Do you intend on learning more about HPV in the future?
12. Do you think that you will talk about HPV with anyone?

APPENDIX C
SAMPLE TRANSCRIPT

CD – Focus Group

Moderator: I am Steve Marshall. I am a doctoral student here in the Department of Advertising and I teach international, multi-cultural advertising right now, and I am going to teach the class you guys are in right now maybe in the Fall. So, unfortunately I won't be teaching the multi-cultural class, but I do enjoy teaching it. It is kind of my research area. So really there are some things that I want to talk about. We are in here to discuss sexually transmitted diseases. I want everybody to feel comfortable so there are no wrong or right answers and everybody needs to respect what other people in here say. I know that is not going to be a problem but I want to make sure that that is known. This is a focus group. Has anyone in here ever done a focus group before? (Yes and No answers in background). So you guys kind of know the dynamic, those of you that have done it. Really this more so of you guys talking than me talking and so what I would like to do is just throw out some issues, throw out some topics, and then have you guys talk as much as you can. I would rather not talk because you guys probably don't want to hear what I have to say anyway. So that's the main idea here, is just to get you guys' ideas, to get you guys talking, and like I said just be open, everything is confidential so nothing is going to come back to haunt you or anything like that. So really I want to kind of open it up (everybody signed?) and if you have any questions or anything during this just let me know. But I would like to kind of open things up with some of the concerns that some of you guys have when you guys are contemplating maybe a new relationship with somebody and all of a sudden sex is now a part of that or when you are just beginning to get into a sexual relationship with somebody what kind of things, what kind of concerns do you guys have?

Participant 3: How many people they have slept with? I'd like the answer to that (inaudible).

Participant 4: I don't think it all necessarily the numbers but just like how they do it, like are they safe and all, even if it is a huge number, if they are safe. I would say it was a better chance of having some thing if they have a huge number, but if they are conscious about being safe I think that is a bigger deal than sleeping with a lot of different people; I think it is more if they are conscious about being safe about it.

Moderator: Okay.

Participant 5: Are they on birth control?

Participant 6: And, do they have an STD (laughter).

Group: Yeah.

Moderator: Okay.

Participant 5: I think it all depends on what kind of relationship that you are about to get into. If it is going to be a long one then I usually don't want to get into a long-term relationship with someone who is sleeping around with a bunch of people. But if it is a short-term fun thing then I kind of want to be aware of that kind of thing, just in case. My main concern is actually talking about it with them. Actually, you know, if you are going to get into a long-term relationship with somebody, bringing it up even. I mean, how do you bring something like that up with them without pissing everybody off or doing something like that.

Participant 10: I really care about AIDS.

Moderator: You say you really care about AIDS?

Participant 10: Yeah, I don't know why but it's like something that I really need to know. I mean like after awhile in a relationship I usually like to know. I'd (go to) like to check with something.

Moderator: So, are you satisfied with just somebody's telling you or do you want to . . .

Participant 10: No, of course not, I will have safe sex to a point until when I don't want to buy condoms or something like that; I will ask the other partner to go with me to do that test.

Moderator: Right. Can I get my pen, where is my pen, thanks. Okay, so really, like you kind guys kind of said, that you might bring it up but it might be an edgy topic. Exactly when would you initiate that kind of a conversation?

Participant 2: Back to the days of when I have actually had that kind of conversation, it has been after I have slept with them. (laughter).

Participant 1: That's when you I felt comfortable enough with her to have that conversation and it is usually them asking me.

Participant 6: The thing that happens more often than not, after you have already slept them once or twice or something, then it really kicks into your mind or whatever and becomes this huge issue, you know what I mean. It was kind of a hindsight that that girl may have had (inaudible) or whatever.

Participant 10: But usually you know that after you look at the girl or the woman, according to her appearance, like it's safe or not safe. You can see that.

Participant 4: Yeah, you can usually tell like if it's a girl you'd pick up at the bar maybe the first time and take her home, like you gotta be taking her to the den already. I don't think it is really fair for you to do like 'were you a slut' you know, if you take her home because you are not doing anything any better. But if it is some girl you meet and you really like, and I see the relationship in a totally different dynamic to it.

Participant 11: Yeah, you definitely gotta be suspicious if you met somebody that night and you have never seen them before and you take them home, you make it clear (inaudible) or the month before but if it is somebody you know or have gone out with a few times and then you decide to do stuff then you know in your mind whether to suspect something or not and hopefully you ask before hand but lots of times it doesn't happen that way.

Participant 7: I think a lot of time that it doesn't happen that way is because most the time it is such an edgy topic so we get ourselves liquored up (inaudible/cough), and then (laughter). I think that the main reason that it usually ends up happening and then by that point it is something that has to be talked about because it has happened once

Moderator: So really the consensus in here seems like it a subject that is brought up after the fact.

Group: Yeah (by several)..

Participant 6: Or at least not directly before.

Group: Right.

Participant 4: I think you have an idea before, but to seriously sit down and talk about it, it is usually always after.

Participant 8: I think it is like you are saying that if you get into a really serious relationship and it is soft of like a certain type of girl, like whatever, like most times if you are going to get into a real serious relationship we choose really the girl who probably wouldn't do that, like really early in the relationship anyways. So she will probably want to talk about it before hand anyways. It is usually like that before time.

Participant 10: I bring it before actually.

Moderator: You bring it up before?

Participant 10: Yeah, No, I say you can bring it before. You might just get in the bar; you bring her home, and decide that you want to talk to her about it. (Laughter).

Participant 11: I think there is an unspoken understanding that she has something that she had better, 'out of respect', to say something. (Much laughter). You can think that way. If you get something after that, and then get back to her, she's done.

Participant 7: Or you hope she knows that she has something.

Participant 4: That's another bad thing, like you use to talk about it, that nobody always knows, like even if she is like "well no, not last time I checked". Like, you know, can you go with that?

Participant 9: You don't have an STD test like they have a pregnancy test, like a home kit maybe. (Laughter).

Participant 4: If she says she is allergic to penicillin, you might be in trouble. (Laughter).

Moderator: What do you guys think about safe sex? What as far, as you know, would you consider safe sex? What kind of methods, what kind of precautions do you take to feel like you are having safe sex?

(Several responses)

Participant 5: Wear condoms, use your fingers. (Much laughter).

Participant 6: I think the biggest is obviously birth control and condoms.

Group/Participant 4: Yeah, that's obvious.

Participant 5: That's standard.

Participant 7: What else can you (interrupted)?

Participant 2: I really don't feel like if she is on birth control that is having safe sex.

Participant 12: Yeah, that's what I say I don't think birth control is safe sex.

Participant 2: Condom is safe sex, but birth control is just 'you can't get pregnant'.

Moderator: Anything else coming to mind?

Participant 9: There is not really that much you can do.

Participant 3: Besides not do it, I guess, or use condoms, abstinence.

Moderator: Has anybody ever hooked up with somebody on a first night, like out at a club or out at a party or whatever.

Participant 3: When you say hook up do you mean like have sex?

Moderator: Yeah, have sex, right.

Participant 9: This is America. (Laughter).

Moderator: So the conversation that, you know, we were just talking about, that would not be initiated right then, huh?

Group: No.

Participant 4: You usually get at least to the waist (not audible, coughing).

Moderator: So, but in that situation, safe sex would be 'make sure that you have condom'.

Many replies from the group:

Participant 10: Yeah, pretty much, right. And, that's pretty stupid but yeah.

Participant 4: Yeah, that's as safe as it can be, I guess in terms. Really, truly safe sex I think has a lot to do with knowing the person and that type of stuff, but if it's a one night stand, then yes, about as safe as you can be is condoms but I don't know if that is really safe sex in it's biggest term.

Moderator: Would there be a situation where you would actually talk about it with somebody before you.

Participant 2: I've never had a one-night and not just been absolutely wasted and the thought never came to my mind to have that conversation at that time.

Group: Yeah.

Participant 2: The next morning, I would look over and say __, maybe.

Participant 8: I think a lot of times you probably couldn't even trust them anyways. You probably don't even know them, so they got nothing to lose.

Group: Yeah.

Participant 4: That definitely, like, I mean I very seriously doubt very many times the guy runs over to see the girl from the night before and wants to be in any kind of relationship because we don't want a girl like that. I mean it's a bad way to put it but I don't want some girl I can pick up and take home for one night, you know, to spend real time with.

Moderator: You know, what concerns do you guys have as far as STDs. We kind of talked about it a little bit, and I am making sure that you guys understand that just because you start talking about STDs, it doesn't mean that you have one or something. I want to make sure that people are labeling people in here that seem to know about

something, you know, 'cause I mean I've had friends that have gotten it and I know about them or whatever. What are the main concerns that you guys have or do you think that men in general have regarding STDs.

Participant 13: Getting made fun of by your friends. (Much laughter).

Participant 6: Just being labeled, if you have one, or you ever had one, even if it is something you can get rid of, just being labeled as you've had one before or whatever. It is something you can't shake. It is like being accused of rape or something, even if you have never did it. It is just something you can never shaker. You'll always be known as that guy

Participant 7: That's not a serious trait?

Participant 8: Yeah but, the labeling thing follows you around. If someone finds out, then . . . (interrupted)

Participant 3: No girls want to get Pizza with you.

Participant 8: Right, especially girls.

Participant 4: I expect it is like you get something like you can't rid of, like, I mean you guys feeling guilty. Like the person who ends up marrying long-term or whatever, you've got to have some guilt there because she hasn't done anything. That is something that she has to put into the mix now. It's like, he's a great guy, but he's got this, you know, that type of thing.

Moderator: Some of you other guys?

Participant 14: She needs to get a blood test. That's the best way I think. Because you already know you are going ___ to sleep with her, so you might as well tell her to take it over there, and if she says no then, just move on to the next girl.

Moderator: You mean, at what point do you decide that you are going to initiate the conversation to get over for the blood test.

Participant 14: You just slip it in, you know, from time to time, you know.

Participant 13: That's the problem (laughter) you have no place to go, why don't we have a blood test (laughter, inaudible).

Participant 2: Go together, yeah, it definitely works better if you go together. It means a little less attacking.

Participant 5: But I don't see that situation arising. I guess if it does come to a serious relationship, you know.

Group: Yeah.

Participant 5: At that point, you've already, like I said, you'd know somebody, I would think, I would know, that you are going to start a relationship with. I guess you trust them enough, there has been enough, I guess, comfort between the two to discuss what you have done, what you may have, you know.

Group: Right.

Participant 5: At that point, well you know, at the bar, you can't say hey, comeback and by the way do you want to stop by the blood mobile. (Much laughter), and, I will get back with you in a month or something like that. (Laughter).

Moderator: Have anyone ever know of friends that have actually accompanied somebody to do something like that. Gone together and maybe have gotten tested together.

Participant 8: Not for the purpose of, I guess, sex, but a lot of times I think the blood mobile that we have on campus, go there and say I'm going to donate blood and not because they want to donate blood, but a lot of people go to just get checked. (Laughter) Factious . . . right.

Moderator: What are they getting checked for when they go?

Participant 8: Whatever they'll check for, I guess. You know, I guess it's just HIV and Hepatitis C. I don't really know how in depth they can get with herpes and all that stuff. Just the comfort of not actually getting an STD check; just getting some kind of screening.

Moderator: You were saying that you know of some friends that . . . (interrupted) . . .

Participant 5: Yeah, a girl friend of mind, not girlfriend, she was with, like slept around a little bit, and so she went, but the guy she was with, had too, so she went to just go have them check out, but she is real mature and handles that situation very well and she initiated it. It wasn't the guy who initiated who did it.

Moderator: And so, they both got checked?

Participant 5: Yeah. Okay. And, they were pretty clean.

Moderator: Does anyone have anything else?

Participant 2: A lot of the girls, some of the girls I've dated, they get yearly checkups and they, you know, I've asked them and they said 'every year I check' for stuff when I'm there, and they said I'm clean, and so, I find out she has been checked in the last six or seven months.

Participant 11: Yeah, I know a girl; her gynecologist does it every year, just like standard.

Participant 1: Yeah.

Moderator: So, what STDs are you guys familiar with, which ones come to mind? Which ones worry you the most?

Participant 3: Probably herpes.

Group: Yeah, herpes.

Participant 6: Because those are like noticeable. The ones that won't go away.

Participant 3&4: Yeah, right.

Participant 7: The one that will kill you, you know. AIDS is pretty bad. The ones you can't rid of, AIDS, things like that.

Group: Yeah.

Moderator: Any other ones, thoughts?

Participant 6: Syphilis, that one is pretty nasty.

Participant 5: I don't think it really even matters . . . all of them basically.

Group: Yeah.

Participant 5: You don't want to get any of them so it really doesn't matter what they are called.

Participant 4: I mean, on a personal level, once you get one, obviously it depends on which one you got, how much it sucks, but, if you get one, you got one. I think that is where the labeling really comes from. It doesn't matter. Nobody says 'well, he's got this'. It's like well he's got an STD, he's dirty.

Participant 5:---(Inaudible) The curable ones are a little more obviously.

Moderator: So, this is a totally hypothetically question, okay, but you know, it seems like that is an issue with being labeled, or you know, with being concerned with perhaps somebody finding something out. And so, would there be, hypothetically, if you could exchange an STD with the fact of not having anybody know that you have it, as opposed to catching an STD that people know you have or had, whatever, what would be the exchange there? Meaning, would you take an STD (interrupted),

Participant 13: That nobody found out?

Moderator: . . . that nobody found out that may be more severe over the fact; and really what I am trying to get at, is just how important the labeling thing is?

Participant 4: Yeah, if you could choose, you definitely choose for not anyone to know it. Like, obviously, nobody wants one, but yeah, if I get one and nobody knows or I get one and everybody knows, yeah, that's pretty easy. I think the labeling is a big part of it. I think that is what people are always talking about is going on after something like that happens. Well, that's big problem is that everybody knows about it.

Moderator: Would anybody in here, what do you guys feel like, if you guys caught herpes, but nobody ever knew about it, as opposed to catching chlamydia.

Participant 11: Oh, are you saying like a curable one?

Moderator: Like that plus everybody knows that you got chlamydia.

Participant 11: I'd take chlamydia.

Participant 5: You'd take the curable one, but still like what he was saying is the fact that people know is the big factor in, I am assuming, most people who have gotten one that was curable, would take some time off from their sexual activity, to make sure that it was taken care of. It is still a known fact, that if you got chlamydia or something, it would still be labeled STD. Nobody looks at it that way, like 'that one was curable' so he's good to go.

Participant 1: I'll get out of here though, and I won't see these people again. My friends would hopefully let it go and go on.

Participant 5: Yeah, I would definitely choose one curable over incurable.

Participant 9: I think that at our age right now like ___ (rotation?) is a big thing, but you've got to also think long run and this is like you were saying, right now you are not with these people but in the future is totally different and you will probably end up marrying somebody totally different and having your friends and stuff. So, that's more important to make sure that you have a curable one, if you can choose.

Group: Yeah, if you can choose (laughter).

Moderator: I was trying to see how you guys weight the reputation. So the top of the line ones that we have talked about so far are really AIDS and herpes. Any other ones? I think I heard syphilis.

Participant 2: Warts.

Moderator: Okay. Any other ones you guys concerned with.

Participant 3: I don't really know that much about them, but the ones you get just with skin contact. There are some out there. That's kind of freaky because a condom can't really do anything. I mean if you are wearing you a condom you can still get them.

Participant 8: That's kind of freaky. That's my biggest concern. STDs and so on that you can get without exchanging fluids.

Group: Yeah.

Moderator: Like what other ones are you (interrupted).

Participant 3: Like I say, I don't know the names, I just know that like you can get herpes, like I think from just contact right.

Moderator: I am not saying yes or no.

Participant 3: I really don't know much about them but I mean that would freak me out just because I mean you can still wear a condom and then you can still get something just from skin to skin contact. That's kind of, I don't know, that freaks me out.

Participant 11: Gonorrhea and chlamydia, those can be passed, like from girls just from contact, like if they were wet and they touch you, or touch themselves and then touch you with their bacteria, and it is easily spread from girls to guys.

Participant: 1 Gotcha.

Participant 11: More easily spread from girls to guys. That's what I understand.

Moderator: Yeah. I mean I am not all knowing in (inaudible). I mean I know kind of where we are going with this research but I am not all knowing about STDs and stuff and that's why I am not playing you guys. If you guys tell me something, you may just be telling me something I don't know either. So ah . . .

Participant 7: Where are they going with this research?

Participant 3: Yeah, that's a good question.

Moderator: Yeah, we'll find out here in a second. (Laughter). So really maybe if I can get you guys to a consensus hierarchy as far as the ones we've mentioned, where would you guys put the worse?

Group: AIDS, AIDS number one, herpes number two.

Participant 13: I think a lot of them go into the same category but I think herpes, a lot of people say that, because that's the one we are most familiar with.

Participant 3: Yeah. Visible.

Participant 13: That's the one that everybody knows is incurable. Everybody has heard of herpes. A lot of people only hear of gonorrhea and chlamydia here and there. I mean, even though at our age, we should be knowledgeable about this kind of stuff.

Participant 14: But, having Hepatitis sounds pretty nasty too.

Group: Yeah.

Participant 14: That's killed people too, I think.

Participant 2: So anything that will kill or anything that won't go away.

Participant 14: Anything then anything that's curable

Group: Exactly. (Laughter).

Participant 14: It's a pain in the butt, also. No pun intended.

Moderator: So really, you mentioned warts. You guys have heard of genital warts before and so, what do you guys know about genital warts?

Participant 6: I don't want them. (Laughter and agreeable comments). Incurable.

Participant 8: You can pass those skin to skin too, can't you?

Participant 1: Yeah.

Participant 2: That's a scary one because the girls can be carriers of that one but not show it. They don't know they have it and they can pass it on.

Participant 5: Plus, like they can have it on the inside too. I don't carry around a flashlight or anything. (More laughter). (Inaudible comment.)

Moderator: Name some things you other guys know about. Genital warts. No? HPV. Never heard of it?

Participant 6: I know that it's different than herpes. I know that there is a difference between the two. I would think that the symptoms and the actual outbreaks look similar but I am no pro.

Moderator: So, you guys asked where the direction of this thing was. And, that's really the direction that we are going. I've got a sheet and I'm going to pass out and really what I would like for you guys to do is read it over. I am going to give you like five minutes. Please don't discuss it with your neighbor or whatever. Just kind of check it out, internalize it and then I want to get your input about what you guys think about it.

(Pause as he leaves the room for a small amount of time)

Moderator: It looks like everybody has read as much as they are going to. So, just kind of, straight up, what do you all think about what you just read?

Participant 3: Three out of four things really scare three out of four Americans between the ages of 15 and 49 if they were infected with it.

Moderator: And that's the research here on campus as well. If you go over to the clinic, that's what, three out of four UF students have it.

Participant 3: That's really scary.

Participant 2: I am going to give this to my brother. (Inaudible).

Participant 10: Does the 3 out of four 4 mean like there are 80 different types of it. It means that there are probably only like 4 of them that are very dangerous; all the rest seem harmless pretty much. That is something that ___ ought to know.

Participant 8: The 99% thing, like I didn't think of warts as killing people, but obviously, it is causing a lot of cancer. I didn't realize that. Like this melena (sounds like melena, may be melanoma) that everybody thinks you can die from.

Participant 9: Obviously, cancer is the scariest part about it all but also, if they don't have a kid and stuff, it can cause infertility. That's kind of scary.

Moderator: You other guys, any other comments or anything?

Participant 11: It just seems to be getting much bigger and bigger. It is approximately one-third of all new STD infections. This is one you don't even hear about.

Moderator: So, now you guys kind of know what HPV is. You know it is genital warts; HPV is the acronym for human papillomavirus; I can't say words that are longer than my name and my name is pretty short. But anyway, so what other facts on here kind of jumped out at you?

Participant 1: Condom can't entirely prevent the skin-to-skin contact (low, inaudible, sounds like preventable), like HPV. That's really scary.

Participant 4: It doesn't really say anyway for like, for obviously, if you have them physically, but for a guy to get tested. Like if he doesn't know he has it by looking at it, how is he going to know if he has it? Like he said, the Pap smear is set for girls, but nothing for guys.

Moderator: Yeah, and I also know from doing research on this too, a lot of the times you may have it and not show for years. And then all of a sudden, five years down the road or something, you have a breakout or something, how many peoples, what are your paths like at that point you know. Where does it go and you can't figure it out; it may not necessarily all that important at that point to figure it out to know where it came from.

Participant 13: Do know if medical insurances covers something like this?

Moderator: I have no idea. I honestly don't. You mean cover like to get treatment? Well, I am not sure what kind of treatment you get. You know. I mean it's a virus so it's with you forever. You can have them, I think, removed and stuff, but you still have the . . . you are removing what's there, but you are still a carrier of the virus. So there's not much that people can really do as far as treatment. I know that females can go, and if they are showing, wherever they can get stuff what is it? Frozen or how ever, like Laser or whatever, but still it is the same point, you still have the virus, so you could have another break out in six months or something and do it all over again. At the same time, some people have had breakouts and it goes away and then they will have a break out again, and so, at the same time, they are still a carrier of the virus. There are things that you can treat, the physical, you know, the cosmetic part of it, you know, but it is still there. Anything else?

Participant 14: Yeah, can you spread it orally? It says there that virus and STD can spread ____, that's kind of serious.

Moderator: Is that less of a concern if you get physical with somebody, that you know (inaudible/too many talking)?

Participant 5: It is more of a concern for me, only because it's easier to protect against sexually transmitted diseases, but once you get into it, oral sex is sex, but a lot more people are inclined to do that with people even if they don't know them that well or kind of talked about it.

Participant 4: Yeah, when you ask people how many people they have been with they don't go through all the people who they have had oral sex with.

Moderator: Sure.

Participant 8: There is a lot of money being spent for this.

Moderator: Yeah, yep. And actually when we get done here I'd encourage people to type in a Google search and just kind of see what is out there as far as just information in

addition to this just because there is just not much communicated about it. And so, have you guys ever known anybody that has had this before that has talked to you about it, any friends or acquaintances? People of a friend of a friend or something like that?

Participant 6: I was once told of a girl I knew who had it. Nobody I was with at the time, you know. After that it kind of changed your ____.

Participant 3: People aren't really going to talk about if they have it.

Participant 10: It doesn't make sense though. If you have, like, 3 out 4 people have it, so, how can we not hear about it? You should know somebody, at least one that has it. To me it seems like it's a little bit exaggerated here. And, I don't see 1.6 billion dollars being spent on a budget of probably like trillions, seems like a very small amount.

Moderator: Do you think a billion is a small amount?

Participant 10: Yeah.

Moderator: Based on it now.

Participant 10: If I am thinking about the medical budget in a year that the government has, I don't think it is a lot of money. What is the United States budget like? 200 trillion dollars, that's ridiculous, 1.6 billion is not enough. Relative to the budget I am saying.

Moderator: Yeah, yeah, I understand, I understand.

Participant 6: This 3 out of 4 is that people that know they have it or just 3 out of 4 is like the estimate?

Moderator: I don't know.

Participant 6: Actually, 1.6 billion is a lot for one sexually ___(inaudible, transmitted disease).

Participant 7: Yeah, yeah, that's what it says, 1.6 billion just to treat the symptoms of people who know. Yeah.

Participant 4: Yeah, but I think he kind of right because I bet some of that is ___(huge) because like, if they are treating a girl for cancer, because HPV caused it ___(inaudible, too many talking). But it is a lot of money.

Participant 2: Three out of four can't be everybody that knows they have ___(too many talking, inaudible). I know one of my friends would have said something to me or something. (Laughter).

Participant 6: Yeah, I know, they might not know, that's the thing exactly.

Participant 2: Yes, it's got to be an estimate.

Participant 5: The thing is with a lot of STDs is that you kind of want to know how long it has been dormant before, if you were to see something. Because a lot of guys say oh well, I don't see anything on me so I must be safe, or something. How long after a partner do you wait before you go get tested that, I guess, for HPV or any other STDs that we discussed, will show up in tests? Because I am sure if you've slept with somebody and the next day you went and got tested, it's not going to show up and you think you are safe, and a month later you are spreading it around or whatever the time period is.

Moderator: Well you can't really get tested for HPV.

Participant 5: Well, yeah, okay. Through medical detects, like the only way to detect high-risk type of HPV is through medical tests.

Moderator: Yeah, really. See HPV really, if you were to give a blood test to somebody right now, if you've had like a planters wart anyway on your hand, your foot, you had HPV. You just don't have this kind of HPV. Do you follow me? So, . . .

Participant 6: Does it have to do with region, or where it's at?

Moderator: No. I mean it is just a virus in your blood. So, what I am saying if they give you blood test they can say yeah you were positive for HPV but, you know like, maybe when I was six years old I had a planters wart on the bottom of my foot that I cut out with a pocket knife. So, they would say, yeah, you are positive because (interrupted).

Participant 10: That's not cool.

Moderator: So really, for guys there is not really a way, unless there is a visible, you have a visible, you know, showing of it, there's not really a way to test for it. Whereas with girls, you know, they can go get a Pap smear, you know, like you were talking about, once a year most girls do to keep getting birth control or whatever and then the Pap smear will come out irregular or whatever and they can say, okay, there's something going on here. And then they can say, yes, you've got HPV, this genital wart type.

Participant 4: See, knowing that, these stats make a lot more sense now. Like knowing that you've just got like planters warts or something like, it's still the same virus, and yeah, these stats (interrupted)

Participant 11: Yeah, but it says 3 – 4 with genital warts.

Moderator: Yeah, yeah, yeah, it's a different strain. So, it's a different type of strain of it.

Participant 10: So, if you cannot check it, how do they know this is true 3 out of 4. (If they cannot know)

Moderator: I'd have to ask the physical researchers. I don't know how they built their sample.

Participant 10: Some of the stats just don't make sense.

Moderator: That's why I am here talking to you guys to see what you guys think about this stuff and you know, those kind of comments are valuable to us.

Participant 10: (Not understandable) once. Three, four, twenty, forty. Like 79 of them is not four of them _____ (not understandable). (Light snicker) No seriously, you have a lot of virus in your body that are pretty healthy looking but they are still there, you know.

Moderator: Sure.

Participant 12: I think they clearly need to have more education for people in college on the sexually transmitted diseases and things like that than any other diversity or requirement you have take in your life data. If you have to take two biological, whatever, sciences but there is no sexual education class requirement. Seems a little hard to believe considering how much it affects students and they are soon beginning to explore their sexuality.

Participant 3: I agree with him. I haven't learned anything.

Participant 13: How much is on the rise?

Group: Yeah.

Participant 3: Except something like that since like middle school. I am not familiar with a lot of it. So this kind of freaked me for a minute.

Moderator: Just to take a step back, I mean, what about, you guys, not necessarily you guys in particular, but did you know that people that were sexually active in high school.

Group: Yeah.

Participant 9: Not as many though. Even though they said they were to other people, I knew that they weren't.

Moderator: But everybody here pretty much knew people, themselves or whatever, were sexually active in high school . . . Okay. And, did you guy ever hear about this when you were in high school or, what was your knowledge level of STDs when you were in high school?

(Many speaking at once).

Participant 3: Pregnancy was basically the only one in high school.

Participant 12: And, AIDS too.

Participant 2: Then, in high school, I thought everybody was new enough to it, most of the girls had only been with a couple guys maximum. But here in college,(much laughter). She's a veteran.

Participant 4: I heard like in health class and stuff, I want to say it might have been in middle school, I have seen this before it's because you go over everything. Like you get one page for this, one page for that, one page for that, nothing in depth.. But AIDS and pregnancy and all they go real in depth with. I mean I've heard of it but nothing intensive of it.

Moderator: So, we kind of talked about it, but what are your main concerns about HPV now. Now that you've got exposed to this information, I mean, has your outlook changed?

Participant 4: Pretty much not getting the genital strains of it (laughter). Just about everybody has got it anyways, you know. If you think about it, seriously, like I have had warts when I was kid too, so, I mean, I didn't call it HPV, didn't even realize it was the virus. I knew it was a virus but I didn't realize it (interrupted).

Moderator: Yeah, it's not the same virus but it's . . .

Participant 4: Along the same line . . .

Moderator: The same family, I guess you could say. Like I said, I'm not a doctor or I don't study this stuff so I am not Mr. Knowledge here.

Participant 4: Pretty much hope you don't get the genital strain, I guess.

Moderator: Any other guys? Is it going to change the outlook, being exposed to this information?

Participant 3: It scares you for a little bit, but then like a month, I guarantee now it's really gonna (laughter). I mean like it will be scary now, we'll go home and talk about it for like a couple of days. I'll tell my roommate about this and then in a month I probably won't even think about it again. You get scared at the time.

(Inaudible, laughter).

Participant 4: I think that's the biggest thing, like (interrupted)

Participant 3: Alcohol

Participant 4: Not even necessarily that but whole mentality that everyone in college that that's what you are here for, not really that, but to experiment, that's what you don't see. Nobody wants to be 40 and hanging out in bars, taking chicks home. I mean, I guess, some people do. (laughter). For the most part I guess we are here and we are trying to find out what things we like and what we don't like, so they are like, well, I hope I don't get HPV on the way; that type of thing, sure.

Moderator: What are your feelings about HPV knowing now that you know there is not really a reliable way to test for it for guys?

Participant 2: Five years from now they will pop up and

Participant 12: Just hope you don't ever get it

Participant 13: And, be here to know this, that you have no idea where you got it from, when, you don't know who you've been with since then.

Participant 10: It's like cancer, you don't know when it's going to come.

Group: Yeah. (Inaudible).

Participant 10: So, there's really, I mean

Participant 14: There's nothing really we can do (many talking) We just pray (many talking)

Participant 5: I mean you can like have it right now and not know it that's the scary part about it.

Group: Right.

Participant 4: Honestly ____ (not audible) is not going to make me work any harder at trying to not get a STD before I was before I ever came here. I mean, cause . . .

Participant 6: Obviously you don't want an STD

Participant 4: Yeah. I don't want one just as bad as I did before I don't want one, you know. Especially this one. There is not a whole lot you can do about it. If you get it, you can't find out if you got it or not. In five years you do, and five years you don't.

Participant 9: There's no way this type STDs, like the danger of STDs is going to be reinforced as much as our satisfaction for sex is by looking at girls at a bar or whatever, you know. I mean there almost has to be that many you have to see it just as much as you're tempted to have sex with any girl you see. You have to be able to be reminded of the danger and preventive measures to prevent something like this.

Participant 2: You have to be sober and care about it at the time.

Participant 9: But even if you were, even if I was drunk and in a bar, and I walked in a bar and I just met this girl, I mean it might be something to trigger that thought process but if I saw a sign in the bathroom make sure you whatever

Participant 4: (much laughter, many inaudible words) but it might work.

Participant 11: If don't know that much about it, I don't expect that many girls know much about it, so we can't a difference, it doesn't look they do either so they can tell.

Participant 4: I mean, it is bad now because there is a lot of mentality, especially in college, like, you know, 10' tall bullet proof.

Moderator: So, now you guys know about this; we kind of touched in this area. But, do you see any behaviors changing?

Participant 3: Like I said, we'll probably wait 24 hours, and then –

(Inaudible)

Participant 4: It's not like he's going to be that where he can't be tested, so –

Moderator: Does this change where the hierarchy, where this was in the hierarchy of stuff that you guys can catch, when we were talking about that before? Listen I got more surprises for you. That pizza kind of thing, that's STD negative, so –

Participant 2: But you can't test for it.

Moderator: No, we got a reliable source on that, Papa John takes care of that.

Participant 4: The cancer thing is kind of scary; but I mean, you're not going to have genital warts and then get cancer without knowing your getting cancer – you know, if you got cancer, you got cancer. Obviously, if you got genital warts, you might – possible get checked out for cancer or something like that. But genital warts isn't going to kill you; but you know, if you cancer from it, I think you can catch that fast enough. You know, if you have genital warts, you should know, this can give you cancer. You better keep an eye on that.

Moderator: So, do you, kind of along that, if you saw signs of something was irregular, would you initially discover, get it checked out immediately, or what would you do?

Participant 3: Get checked out regular.

Participant 7: You probably ask someone first. Like, if you're a friend or a parent – well, not probably your parents for this, but somebody.

Participant 5: See if you can find a picture on the Internet. WebMD . . .

Group: Yeah, yeah.

Participant 4: I wouldn't go to a friend first.

Participant 8: Yeah, I definitely go to a friend.

Moderator: Normally you wouldn't go to a friend for this?

Participant 4: Not my friends.

Participant 6: (Inaudible) -- a sheet of facts of any STDs or, you know, anything of that sort, we'd obviously see facts that would scare us. But being more like this, I know -- familiar with people, like you said, we know herpes because it's discussed more than AIDS is discussed, you know. Anything that would make us more knowledgeable, but I don't anything would really -- like you said, it's all over.

Participant 10: I know this might sound stupid, but because we are talking more about AIDS and (Inaudible) is more important than that, because --

Moderator: Which is more important?

Participant 10: The AIDS and --

Moderator: Herpes still more important than --

Participant 10: Yes, more dangerous probably than that, because you see it as a fact, (Inaudible) and not because other people told them, because exercising and (Inaudible). This stuff always not so important. Because if it was not, it was probably like the school was probably going to give us, like glasses, and programs about stuff like that.

Participant 1: Yeah. -- school teaching.

Moderator: So you guys think there's not as much of a -- not as much of a concern for your guys, just because it's not as predominately --

Participant 3: Well, he said that -- Florida, they said three out of four people have it here, too, serious. I'd like to think that they'd let us know. We should all be getting penis warts, or something, you know.

Participant 6: By being the ages that we are, I think, a class of that nature would actually be one that people actually went to and listened to, you know, even if they act like they don't want to be the hard ass and not act like their paying attention to that, I think.

Participant 2: Do you want to know?

Participant 6: Not be scared, but you want to know what the risk is, how common it is, all that good stuff.

Moderator: Let me ask you a (Inaudible) question here: If you were trying to communicate on a college campus, what would be the best way to do that? Communicate information on HPV, you guys, you're college students, you guys being the target audience.

Participant 5: I can tell you one thing, at UCF I transferred from their, and they have what's called reach peer education, and they have students, not like faculty or administrators, teaching about sexual education. They do through residents, like to give pizza and stuff like that. They also do it through preview, and – not preview, but like orientation –

Participant 3: Orientation would be good. Because everyone has to go to that.

Participant 4: Yeah. It's kind of weird to go with your parents to orientation –

Participant 3: Yeah, that makes sense.

Participant 5: No, they usually like break the students from their parents. Have the parents go to like parental involvement.

Participant 4: I took a class here. It was actually, you would call it, Sexuality in Culture. It was an anthropology class, but they went real in depth on STDs, which I had no idea. That's where I remember this from now. I thought about it, but I had no idea I had anything like that. But I think if there was a class that actually said, you know, pretty much, (Inaudible) on STDs, I think you'd get a lot of people taking that.

Participant 6: Especially if you get credit for it and can learn something without, you know, looking like a fool. Come learn about STDs and eat pizza, I think you'd get a big turnout.

Participant 11: There was an article, the alligator or something, I wonder if you would read it, or mention some of the key facts, three out of four, and how much money, and one-third of the new STDs – get people to read it. Maybe talk to your friends.

Participant 6: A lot of people want information that applied directly to the community and the society which we're involved in. Like he said, that three out of four is that here on this campus, or is that –

Moderator: No, that's according to the campus too.

Participant 3: That's not cool.

Participant 6: That's what I said . . . You know, a lot of people when they hear statistics about AIDS, that take in the fact the majority of that is in Africa. You know, a lot of that is segregated across the US and different cities, you know, sometimes we don't think that statistic is actually accurate. But, you know, if you said, here on the university campus, three out of four people, you know, it kind of hits home a little harder.

Participant 2: I don't think I have the same statistic you have. You can attest for it at all. Is that three out of four that they have seen? Like three out of four patients that come in here.

Moderator: (inaudible) You know, I can't tell you.

Participant 5: You're saying they can't treat the virus but they can treat the symptoms. And the symptoms indicate that they have the virus, right?

Moderator: Right. I'm not a doctor or anything, but maybe if a female gets something, gets the symptom taken care of, maybe that's a precancerous resolve. I'm speculating right now, so don't take that as, you know like I said, I'm all knowledgeable here either, so – but that may be a reason why (inaudible). Umm, So, what kind of what I heard was curriculum, alligator, press, preview –

Participant 3: Orientation would be good.

Moderator: Orientation.

Participant 8: I'm not sure people listen no matter what you do though.

Participant 10: No, make an awareness week of some type.

Participant 8: You probably, you know, obviously any type of advertising or any type of thing you do would, obviously, you know, get through to some people. But I don't think it would get through the mask.

Participant 9: I think (inaudible) reinforcements to keep – and not any one of those things is going to do it. It's just hearing, picking up a little bit here and there, here and there, as being reminded of it.

Participant 4: I guess as far as hanging out in the bars and stuff; do stuff like that. Hand out HPV fliers, but I mean, that's a type of stuff, that's how to reach people.

Moderator: So, what if you guys weren't on campus, what have you guys were in charge of targeting people that are your age, just in general?

Participant 1: Communicate with people our age?

Moderator: Your age, just you know – what would you guys do?

Participant 7: It's hard. It's hard to get a lot of people together without an incentive, you know.

Moderator: Yeah. I'm just – it's a speculative question, you know. I know it's hard (inaudible) I know it's hard.

Participant 7: You could do the same thing that troop campaign does with smoking on TV. That can be just as detrimental as smoking a cigarette, but more people probably suffer from some type of STD (inaudible) or even underage pregnancy, and all that.

Participant 9: Probably any type of communication just, you know, trying to use it as frequently as possible. And make sure lots of people hear about it. And the more people that hear it, the more it'll pop in their heads, maybe.

Moderator: Do you think of any vehicle that would be good to –

Participant 9: Obviously, TV . . . like commercials.

Moderator: MTV? TV like NBC. TV like popular shows, ESPN, or –

Participant 8: ESPN would probably be a good one. (inaudible) And friends for the girls on NBC.

Participant 4: I think if you, as far as (inaudible) but if you like send a flier out in like cell phone bills, you're going to reach tons of people.

Participant 5: That's a good idea.

Participant 4: I don't personally have one, but everybody I know does. If you send something out like telephone bills, or stuff – like whatever young people are into – like cell phones, that's what comes to mind. Stuff like that, you're going to get tons of people. I mean, they may not read it; but you can't do nothing about that.

Participant 7: You probably also use sporting events. On campus here, like, that's what our school revolves around.

Participant 4: Sure.

Moderator: So now this information gets out. What do you think you'll discuss HPV with your partner, if you're involved right now, or how this has changed communicating with someone you hook up or whatever.

Participant 2: I want to tell her that I could have it and don't know. Won't know (inaudible).

Participant 4: When they say they, like, for most girls they're in the same boat. If they're not showing, they don't know either.

Participant 7: I think (inaudible) in a serious relationship, but I mean –

Participant 4: The girl friend I have now, she's just as intelligent as I am. She's taking a medical terminology class, so I actually saw pictures of this, like, two days ago. Like, she's aware of it. I mean, she might not know all this stuff, but (inaudible). If you're that close with somebody, I mean, you don't hide anything from them. You know, they're one day, like, wait a minute, what's that, you know. You can't really hide it.

Moderator: So, the consensus is really is that nothing really will change?

Group: Right.

Moderator: Okay.

Participant 2: Danger zone.

Participant 4: Yeah, it's like – what would you change? Does anybody have any inkling of what you could change, like (inaudible) safe from STDs. Like, you can't get tested for it. There's nothing you can really do about it if you got it.

Participant 10: Condoms can't completely prevent for it.

Participant 4: And, I don't think anybody's going to be celibate from now on, you know. Until they get married – there's not really a whole lot you can do, really, not as I see it.

Moderator: So, we kind of talked about – a word about changing your own personal behavior now that you know about it.

Participant 10: I don't think that my sexual behavior is going to change after one session. Right now, I may be concerned but in a few days, it isn't going to matter.

Moderator: I understand.

Participant 10: I need to see it, I need to – as you say, I understand it's a real risk, but in an hour and a half conversation.

Moderator: So, exactly how would you know, what would make it a risk for you?

Participant 10: As I said, I need to know more about AIDS or something much smaller, and see it on all the time on television.

Participant 3: Something like CNN, tomorrow or something?

Participant 4: Like the if someone you dates or if a girl you've slept with has it. That's when it hits home.

Participant 7: Outbreak of it. All your neighbors have it. Stay inside, stay indoors. Don't go to the opposite sex.

Group: Yeah. (laugh)

Moderator: So, really, if there was more media attention, more top of mind attention, you guys, would pay more attention to it.

Participant 3: It's like everything, you know.

Participant 9: In personal reliability, too, to make sure that it affects you.

Participant 11: Small ways, you can't take something too seriously that you don't hear of too often or know that much about. If you try to convince other people that are serious, they should learn more about, and they don't know the facts, they haven't heard much about it, they're going to brush it off.

(inaudible)

Participant 2: These things are looked upon so badly that you won't hear of them because people are scared of me, and people know that they have them.

Participant 6: Why don't they run infomercials about, you know, HPV alone – I think it's got to be something that discusses all STDs and sexuality among human beings, not – you can't just say, hey you people, watch out for HPV, because I don't think that would work, you know, just focusing on just one. There's a lot of questions when talking about HPV.

Moderator: This is why you question it?

Participant 6: Yeah.

Moderator: What was your question about it?

Participant 6: My questions is why HPV? Why is this a discussion about that virus?

Moderator: Well, we can get to that afterwards.

(inaudible)

Participant 4: Just like, the more and more awareness of it, like when we all go out, there's someone, how much trouble can we get into, you know, especially when alcohol's

involved, from DUIs to, you know, wrecking and killing yourself or killing somebody. And, you know, (inaudible) but no one thinks, I'm going to get genital warts tonight.

Participant 7: Nobody says, watch out for HPV.

Participant 9: I've got to dial in HPV tonight, you know.

Participant 6: You know you can't really -- (inaudible) it kind of burns me that he's in here saying, I can't (inaudible) get tested, you know. I guess I'll just wait, so I'll wait -- (inaudible) last night.

Participant 10: The cancer, for example, yeah, like these commercials sometimes that says you need to go and put sunscreen every time that you go to the beach or the pool, right? So then again, every time that you go out of your office, don't put it. It's not saying it's cancer and it's more dangerous. You know that it's dangerous, and you know that for a fact that you can get it. They don't care any more because they're curious (inaudible) on the genitals (inaudible).

Moderator: So, you guys don't feel like you'll change your behavior? Do you think, you guys, knowing this, do you think you will be more responsible about knowing about this, in general, I mean?

Participant 4: Well, again you can know about it, but, you know about STDs too. I think more guys – I think it has more effect on guys, just the fact that they know the concept of STDs. Like, it doesn't matter what STDs, they know how all pretty much all STDs can be transmitted. Most guys, if you ask them, they know some STDs can be transmitted by skin, just skin contact. And some can be transmitted just by oral sex, or whatever. Nothing scares them, like, getting STD or getting syphilis, or getting herpes doesn't scare them. Getting an STD is what scares people. Like, the forbidden – they're trying not to get STDs. Like, it doesn't matter – you can point them all out; but they're not going to change anything, because they're already doing what they're going to do to try to prevent from getting STDs. That's why I don't think that picking one out makes any difference.

Moderator: So, we are back to the label –

Participant 4: Not only that, but it's a health concern, too. I mean, no one's going to help me, no matter kind of STDs I get, you know. I mean, yeah, you get one that you can cure; but all the ones you can cure get in the way of all the ones you can't cure. Like you can't pick and choose which one you get; you just try not to get one. And you pretty much get them (inaudible) .

Moderator: Right. Take a time out so I can change the tape. I'm triple-fisted here. I'm Mr. Paranoid, so you see me looking at the data or something, I'm just making sure they're in poor condition. Because I have to remember a lot of things you guys were saying for me about catching it. (inaudible) Having too much fun – We're not too far from being done here.

Moderator: All right. You guys – now you guys know something about HPV. Do you guys think you'll continue to build your knowledge about it? What's going to happen when you guys leave this room?

Participant 6 :(inaudible) We'll talk about it on the way home.

Group: Yeah.

Participant 7: We get three points for this?

Moderator: I don't know what you all are getting for this.

(inaudible)

Moderator: Anybody in here going to take incentive to try to find out more for personal knowledge, or –

Participant 2: Personally, I mean for me, I am going to do what I always do, try to use a condom, and if I found out I had something, then I would do a lot more research on it. But until I get something, I'm not – I'm doing all I can to prevent it anyway.

Moderator: You guys – nobody's going to consider abstinence as a –

Participant 3: Not for something like this. Maybe if there was, like, an AIDS outbreak here. A lot of guys keep it in their pants right now. Especially – this is almost like it does nothing, because you can't test it, can't see it, you get it, you get it, that's plain and simple.

Participant 9: Is there a sexual threat index like they have a terrorist threat index, and in the red; it's time to go. Like abstinence, then everywhere has like a different sexual transmitted disease, and what you can do about it to prevent STDs.

Moderator: Have them put it up on the bell tower –

(inaudible)

Participant 9: Show it at the movie theater before all the movies.

(inaudible)

Participant 5: It'll provoke discussion, Oh, god. (inaudible)

Moderator: Drop the level because every two out of four – are yellow now. I mean, do you guys think you'll talk to anybody about it now that you know a little more about it, friends, significant other –

Participant 6: I think, for the most part, (inaudible) have HPV, would have general words. When you get to this point, what they're doing to prevent STDs anyway. I mean, if they don't care at all, or they care a lot, that's what they're doing, that's their behavior. This isn't going to change any of it.

Participant 12: Some of might talk about it, just bring it up, like if you're having a conversation with friends, anyway about STDs or something like that, you know, just joking around or something. (inaudible) Oh, yeah, you know, and you can sound cool by bringing HPV up.

(inaudible)

Participant 12: Yeah, yeah, like three out of four, that means you probably have it buddy. But, you know, might talk about this just do that. (inaudible) I was here today and I heard about HPV, and what do you know.

Participant 4: Nobody's going to go home and put in on the dry-erase board or anything.

Participant 12: That's right.

Moderator: It's not necessarily somebody you are going to talk to, somebody you're dating about right now.

Participant 4: Right. I would maybe just discuss it, but not as in, maybe we should go checked out.

Participant 1: Not as a serious concern.

(inaudible)

Participant 13: I don't see a point in discussing it early in the –Maybe five years down the road.

(inaudible)

Participant 4: That's what I'm like, you know, so what, nothing you can do about it –

Moderator: Just make you guys think about maybe – since they can test females, they can do a Pap Smear, and (inaudible) irregular. Is this knowledge change trying to talk somebody that you're dating into going and getting tested for it?

Participant 2: I don't think it would matter now. I mean, if she had it, wouldn't it be too late?

Participant 7: Maybe in the future. If you can, by chance, avoid catching it. Maybe in the future.

(inaudible)

Participant 8: That's kind of a scary thought, but you know, maybe the person you're marrying could have it, and you're stuck with that for the rest of your life.

Participant 4: I agree. I think, like, especially that it's known to be a real big cause of cancer; like, if our government had something weird, you know, even – even if I do have it or I don't have it, how the hell am I supposed to know. If she does, I do; but I would tell her and discuss, you know, the (inaudible) Like you said, she gets checked out every year anyway. But still, like if she's like, well, there's something different. And I'm like, well you need to go find out if it is or not. I'd probably do that. But even on the same token, what the hell are we going to do about it. You know. You might want to discuss does she have it, and maybe you don't, but you still don't know. There's nothing you can do about it, so.

Moderator: So, you guys wouldn't necessarily try to talk her into do it for your own knowledge?

Participant 6: Honestly, (inaudible) for me these days you know, it came back that she had this, or whatever, cut her loose. Tell her hit the road. That's the thought; but I'm not going to be sitting here playing around now that you know you had this. Now you know, so I guess the best thing you can do is find somebody, you know, you're comfortable with and you want to be with, and let them know for their benefit.

Participant 7: The best thing (inaudible) I think the best thing about all this now is, like, if I mean this probably would never happen, but like, you know, you're a girl or whatever, and she's like yeah, you know, I got HPV or whatever. You know, before like this I probably wouldn't have thought anything of it; but now it's, like all this shit. I think all guys know that it can't be tested, it's just, I guess, make us more aware of what the dangers would be if we come in contact with it. You know, knowing about an actual outbreak, I guess. Until then, it's a waiting game.

Participant 4: Still, like I said before, most guys – more girls know about genital warts and STDs. The only way you know if she has it is if she has genital warts. And I'm not like, now I know about HPV, let me stay away from girls with genital warts. I'm like, I stay away from girls with genital warts anyway. This doesn't really change my view of anything. Like, you know, I'm just as scared of it as I was before.

Moderator: And you really would not (inaudible) try to talk to them about getting tested for it, or anything?

Participant 4: Well, it's like the girl I'm kind of dating, like, I know she – I can't tell if she has genital warts, you know, I can't see it. And if girls when they are getting their physicals, can they find it, is there a test, or?

Moderator: Yeah, I don't know.

Participant 11: Even if she were to go tomorrow and get tested, and it comes back positive, I mean, that's it. Maybe she didn't notice it. Maybe she just had a wart when she was six. Now, it's –

Moderator: If she got tested through a Pap smear and it came back positive, then it would definitely –

Participant 11: Right, right. ‘

Participant 6: Then again, you, even if you had had unprotected sex with her, may not have caught it, you know. So then (inaudible)

Participant 4: Honestly, the guy, if the girl has it, and he's slept with her, but there's a chance you didn't get it, and there's no way to know if you got it, you're going to go on like you don't have it, you know; who's not? You're not going to sit there and worry the next time, I can't do this or I'll have HPV, you know. Well, I don't have it, you know. I don't have warts yet.

Participant 8: You still continue to sleep with that girl?

Participant 4: Probably not.

Participant 7: I hope you didn't get it, and like I said, wish her the best.

(inaudible)

Participant 4: As the guy, I probably give it to her.

Participant 12: Yeah. Then you could have been the one to give it to her.

Participant 4: Yeah.

Participant 12: But we don't know. So, I guess we're in the best situation. It's never our fault these days, I'm –

Participant 9: I guess it all comes back here (inaudible). Who wants to tell their partner they have an STD if they know that they're going to be dropped?

Participant 4: In a close relationship, I think one person has enough respect to tell –

Participant 9: Right, right.

Participant 4: When you are in that close relationship, you probably (inaudible).

Participant 9: That's the one in ten.

Moderator: So, let me ask you guys another question, hypothetically, since we got this three out of four number. This is a behavior thing and a lot of behavior (inaudible) hypothetical questions aren't worth squat; but you know, if you guys – if you did find out you had it, okay, would that change how you would date, how you would approach, you know, your life, I mean, what do you guys think?

Participant 4: Yes.

Participant 5: I'd probably feel guilty.

Participant 11: Well, yeah, I mean, (inaudible) tomorrow because I'm going to die, or?

Moderator: Whatever, I mean, I could be a case if you think –

Participant 11: (inaudible)

Moderator: I mean, somebody might, you know, it's suggested in (inaudible) what?

Participant 11: I don't know. For guy's, if I noticed any symptoms I'd just maybe think I had a wart. And, you know, I haven't shown symptoms now, haven't shown any for the past five years. When I had a wart was when I was in middle school, so (inaudible) I think I ought to let people know, and tell them about it; but I don't know, it's hard to believe when you don't have any proof.

Participant 2: I tried a girl that was so far out of my league, but had a bad reputation because it got out that she does have it (laugh) and I'd marry her.

Participant 3: That's an icebreaker right there.

Participant 4: That's a pick up, want a beer, do you have some HPV? (inaudible)

Moderator: What about any of you other guys?

Participant 8: I think it probably deterred me from, I guess, dating people actually, just knowing the idea of it, you know. Probably just, you know, dating on a whim, like something (inaudible) in this age, just because I'm thinking another way. You probably, you know, be pulled back and reserved from people. And I guess if it did come down to that serious relationship, of course, you'd have to tell them. I mean, but, and then if you decide still to be the whore that you are, you'd probably be more careful, I think, you

know, without a condom would be out of the picture, unless you're completely retarded. Or didn't care at all.

Participant 4: That's what makes it so bad about (inaudible) among college kids, because even though they have it, you know, you should still think about it. Well, I got it now, to hell with it, you know.

Participant 6: I will know this girl tomorrow, so.

Participant 4: Yeah, really, I'm not talking to her anyway. That's what sucks about it. And I don't – I mean, I treat girls the same way.

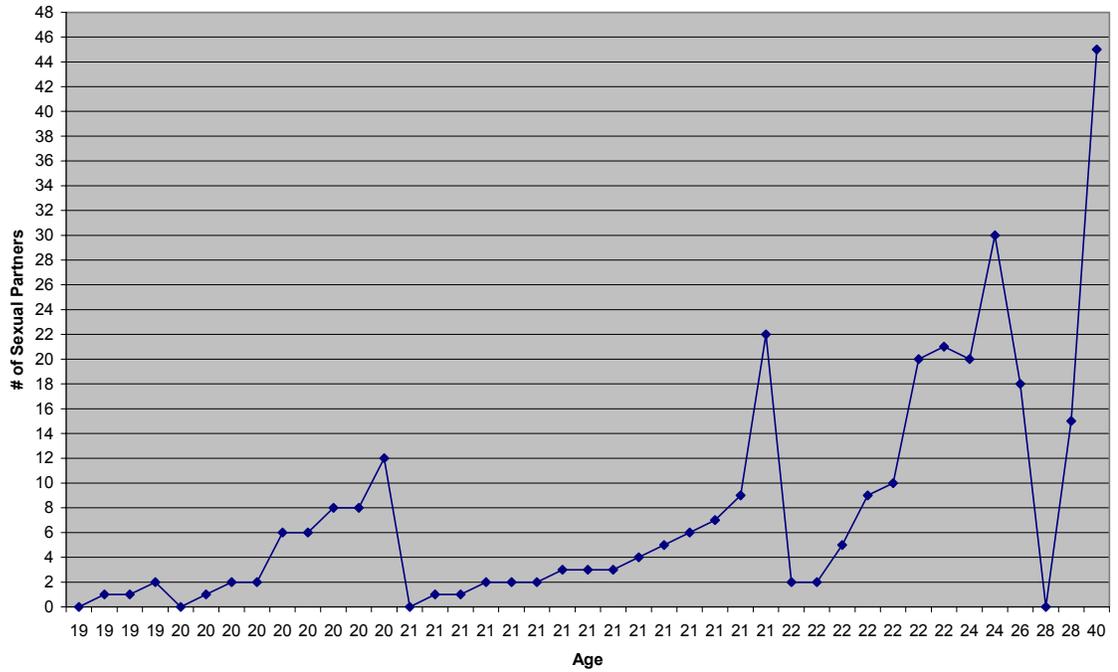
Moderator: You guys have any final comments about what we talked about today?

Participant 6: I hope I don't get it. Or have it.

Well, let's serve the pizza up. It's sitting outside the door.

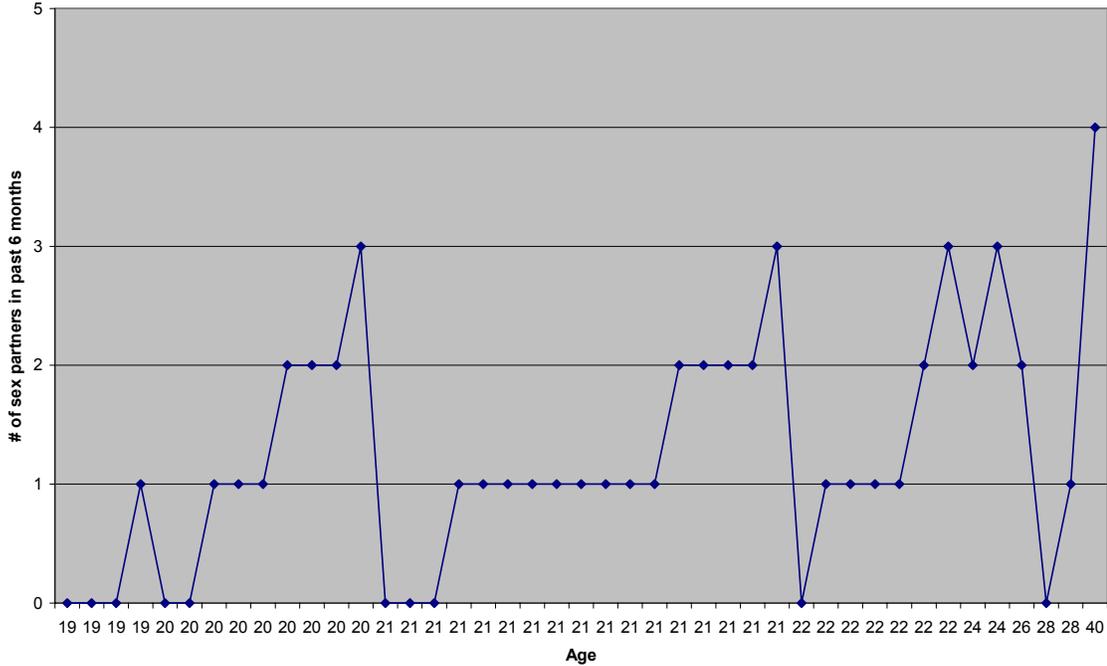
APPENDIX D
PARTICIPANTS' SEXUAL ACTIVITY

Age versus Number of Sexual Partners



Above is the total number of females with whom each participant has had sex. Participants are categorized according to age.

Age versus Number of Sexual Parnters in the Past Six Months



Above is the number of females with whom each male has had sex over the past six months. The participants are categorized according to age.

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BIOGRAPHICAL SKETCH

Megan J. Homer graduated cum laude from Brandeis University with a BA in biology and a minor in film studies. She will graduate summa cum laude from University of Florida with a master's degree in mass communication and a specialization in science and health communication.

Megan was a graduate research assistant for Dr. Debbie Treise, Professor and Associate Dean of Graduate Studies and Research. She worked as a clinical research assistant on the Diabetes Prevention Trial under the supervision of Dr. Desmond Schatz. Megan also interned in the Department of Public Relations and Marketing at Shands Teaching Hospital.

Megan has presented papers at two conferences. She presented her paper, *Awaiting an Auteur: Alfred Hitchcock, the British Years*, at the 2002 Midwest Popular Culture Conference in Milwaukee, Wisconsin. Recently, Megan presented *The Silent Virus: A Framing Analysis of the Human Papillomavirus* at the 2004 Annual Meeting of Advances in Health Care Research in Breckenridge, Colorado. Furthermore, this paper was published in the conference proceedings.

In July 2004, Megan will move to Rockville, Maryland, where she will work with the National Cancer Institute's Office of Education and Special Initiatives.