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The psychosocial impact of being diagnosed with genital human papillomavirus.

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THE PSYCHOSOCIAL IMPACT OF BEING DIAGNOSED WITH GENITAL HUMAN PAPILLOMAVIRUS

A Dissertation Presented

by

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DEDICATION

I would like to dedicate this dissertation to my grandmother, Rose Edelman, whose generosity, love and support will be with me for the rest of my life.

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ABSTRACT

THE PSYCHOSOCIAL IMPACT OF BEING DIAGNOSED
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The purpose of this study was to obtain information regarding how people are affected by a diagnosis of genital warts/HPV. The psychosocial affects studied included emotional health, social and sexual relationships, feeling's about one's sexuality, safer sex practices and sexual behavior.

147 students (96 females and 51 males) completed the Symptom Check List 90-R (SCL-90-R) and a sexual history and demographic questionnaire. Participants were divided into three groups: students diagnosed with genital warts/HPV (HPV group), students diagnosed with a curable STD (curable group), and students with no diagnosed STD (No STD group). Thirteen students who were diagnosed with genital warts/HPV agreed to be interviewed, and each expressed recurring concerns about fear of transmission, rejection, frustration with the medical establishment and telling future partners.

The qualitative findings from this study found that subjects who were older (more than 20-years-old), had more

than 2 to 4 sexual partners in their lifetimes, had their first sexual intercourse at an early age (13 to 15-years-old) and only practiced safer sex "sometimes" were more likely to have been diagnosed with either genital warts/HPV or a curable STD than the No STD group. Subjects with genital warts/HPV were more likely to change their sexual behavior after a diagnosis by practicing safer sex "consistently". Some subjects reported that they had stopped being sexually active as a result of their diagnosis with genital warts/HPV.

Analysis of variance was used to compare the sample means of the SCL-90-R sub-scales for the three sample groups. The most significant findings were demonstrated when subjects were evaluated by gender. The sub-scales of the curable and genital warts/HPV groups for women were both elevated. This may indicate that "curability" is not a factor affecting the psychological symptomatology of these groups.

Based on these findings, the diagnosis of genital warts/HPV and a curable STD requires certain psychological assistance and patient education. People at high risk (those with multiple partners, early age at first intercourse, a history of STDs and alcohol abuse) need to be informed about genital warts/HPV, its prevalence, its virulent nature, and its medical complications. The psychosocial impact of any STD, curable or incurable, is of great importance in treating the person "systemically" to fully address all aspects of the disease.

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CHAPTER 1

THE PROBLEM

Introduction

Sexually transmitted diseases (STDs) have been present in our society for thousands of years and now include approximately 30 recognized disease syndromes (Berger, 1984). The pathogens responsible for causing these diseases are bacteria (e.g., gonorrhea), viruses (e.g., herpes, genital warts, HIV disease, and hepatitis A & B), protozoa (e.g., trichomonas vaginalis), fungi (e.g., candida albicans), and metazoa (e.g., phthirus pubis and sarcoptes scabiei).

STDs are diseases primarily acquired through sexual contact, involving an exchange of bodily fluids, such as vaginal secretions, semen, or blood or through direct contact with a symptom such as a lesion or a wart and contact with soft tissue (unkeratinized tissue). Some of the diseases categorized as STDs, such as Human Immunodeficiency Virus (HIV) disease, the disease that causes Acquired Immune Deficiency Syndrome (AIDS), and hepatitis, can also be transmitted through intravenous drug use. The term STD was once used to refer to "venereal diseases" (VD), but has since been replaced by "STD" as a reference to the primary method of transmission.

Studies indicate that more than 70% of people who are sexually active by age 19 may have been exposed to an STD, become infected, and transmitted the infection to a partner without ever feeling ill or knowing they have been infected (Goldsmith, 1989). Typically, STDs such as gonorrhea and syphilis are treatable with penicillin and other antibiotics. However, three types of STDs; herpes (caused by Herpes Simplex Virus - HSV), genital warts (caused by Human Papillomavirus - HPV), and HIV disease (caused by the Human Immunodeficiency Virus which results in AIDS) are for the most part incurable and recurring. There are treatments available that can relieve the symptoms caused by these diseases, but the human body is incapable of eliminating the actual pathogens. Another common factor shared by these STDs is that they can be asymptomatic and highly contagious if sexual contact occurs in the absence of protection or if physical contact occurs when the initial site of one person's infection comes into contact with the uninfected soft tissue of another person. (HIV is the exception in this case because the virus needs to gain entry into the person's blood.)

A diagnosis of genital herpes and genital warts/HPV causes strong emotional reactions in individuals and can have a devastating effect on someone's mental health, relationships, work, living situations, and families. For example, marriages have dissolved over the fear of infidelity which could lead to one of the partners contracting a STD;

some people are choosing a life of celibacy rather than risking the anticipated rejection in sharing their diagnosis with a potential partner (Rodway & Wright, 1988). These are serious life choices that have far reaching implications for those diagnosed with STDs, choices which could bring these individuals into therapy. For example, a person could potentially harbor the human papillomavirus (which is the cause of genital warts) and be asymptomatic and then for some unexplained reason develop genital warts. This may have nothing to do with whether or not his or her partner has been faithful. It is important that the mental health practitioner understands both the medical and the emotional ramifications of these STDs.

The purpose of this study is to examine the psychosocial effects of being diagnosed with genital human papillomavirus (HPV). These psychosocial effects include emotional health, social and sexual relationships, feelings about one's sexuality, safer sex practices and sexual behavior. Due to the increased incidence of genital warts/HPV it is important for the medical and mental health practitioners to understand how a diagnosis of this disease will impact on an individual.

Physical Aspects of Genital HPV

Genital warts/HPV (condylomata acuminata) one of the most common STDs in the United States (Becker, Stone, & Alexander, 1987), are caused by the human papillomavirus and usually

occur in the urethra and the genital and rectal areas. Warts may occasionally be found in the mouth, larynx, and conjunctivae (Buck, 1989). Symptoms may appear 6 weeks to 6 months after exposure to HPV (Friedman-Kien, Oi, & Reid, 1988). In most body areas the warts (condylomas) appear singly or in clusters. They are pink/red or brown in color and may be flat or raised resembling tiny cauliflowers. On dry body areas they can be smaller, firm, pink, brown, or yellow to grey in color (Brown, 1989). If the warts are internal (i.e., inside the vagina, rectum or urethra) a person may experience no symptoms, since the warts are painless. To date 60 different types of HPV have been identified and at least 13 infect the genital region and are distinct from those that cause the common skin warts on other body parts (Stone, 1989). Genital warts are usually caused by HPV strains 6, 11, 18, 31, 33, 35, 39, 51, and 56 (Buck, 1989). Types 16, 18, and 31 have been associated with causing subclinical infection and have also been associated with cervical, vulvar, vaginal, and penile neoplasia and cancer (Aral & Holmes, 1991).

Genital warts/HPV are transmitted through anal and vaginal intercourse or oral-genital contact. Genital warts/HPV are very contagious in a partnership when one person is infected. Studies have shown that 60% to 66% of partners of persons with genital warts developed them after an average incubation period of 3 months (Becker & Larsen 1984). Genital

warts/HPV have also been associated with multiple sexual partners, oral contraceptive use and cigarette smoking (Stone, 1989).

It is difficult to study the percentages of transmission however, because a large proportion of infected partners develop subclinical disease (Stone, 1989). Subclinical infections are HPV lesions that appear flat or look like tiny spikes, and may require a vinegar wash or magnification to be detected by a clinician (Rubin, 1991). Complete and accurate detection of subclinical HPV infection requires the use of multiple tests and histologic confirmation which is difficult data to gather. In partner studies it is impossible to tell the duration of the infection or who was infected first.

Clinical evidence has continually supported the theory that even though the condylomas can be removed the virus will diffuse into the tissue and remain in the body (Aral & Holmes, 1991). Whether or not the person can transmit the virus, or develop new condylomas once the condylomas are removed, has not been studied. People who have been exposed to HPV need to have regular medical examinations to screen for precancerous cellular changes that are common with the three different strains of HPV mentioned previously in this paper.

Critical Nature of the Problem

The incidence of STDs has increased in our society for the following reasons: people have multiple partners and

experiment more with their sexuality; people do not take the proper precautions (i.e. safer sex practices) because they are not even aware that they have an STD (due to asymptomatic infection); there is increased use of drugs and alcohol impeding judgment regarding sexual activity; there has been an increase in the use of oral contraceptives by women, with a resulting decrease in the use of methods which prevent STD transmission; and physicians find it difficult to diagnose and manage certain STDs (Rodway & Wright, 1988).

There have been approximately 12 million cases of genital warts/HPV in the United States, with 750,000 new cases per year (Goldsmith, 1989). Aral and Holmes (1991) report that genital herpes and genital warts/HPV were the most rapidly spreading STDs from the mid-1960s until the onset of the HIV epidemic during the late 70s. The extent of the problem is not yet clear. As of January 1993, genital warts/HPV has become a reportable disease to the Center for Disease Control (CDC) based in Atlanta, Georgia. A reportable disease means that by law, when someone is diagnosed with genital warts/HPV, HIV disease, syphilis or gonorrhea, the health care provider must report the diagnosis to the CDC.

According to Becker, Stone and Alexander (1987), before this recent mandatory reporting of HPV to the CDC became effective, the most reliable source for documenting the incidence of genital warts/HPV was the National Disease and Therapeutic Index (NDTI) which was an ongoing survey of

private practitioners' offices in the United States. A 1978 survey of six public STD clinics demonstrated that genital warts/HPV cases outnumbered those for genital HSV (Stone, 1989). In the last few years the NDTI has reported that first visits to private physicians for genital warts/HPV has averaged approximately 250,000 yearly (Stone, 1989).

The NDTI has shown increasing trends for consults with physicians for genital HSV, office visits with physicians for herpes, and first office visits for herpes from 1966 - 1981 (Becker, Stone, & Cates, 1986). Between 1966 and 1984 physician - patient consultations for genital HSV increased from 29,560 to 450,570 visits (Becker, Stone, & Cates, 1986). During that same time period, consultations for genital HPV increased by nearly seven times - from 169,000 to 1,150,000 (Becker, Stone, & Alexander, 1987). For both of these STDs the greatest number of consultations were made by people between the ages of 20 to 29.

For genital warts/HPV, the cases that are documented by the NDTI are typically people coming in with symptoms. These statistics do not include the number of people with asymptomatic infections which researchers speculate is relatively high. Researchers have speculated that 70% of the people with genital warts/HPV have a subclinical infection and are not even aware that they have the virus (Gall, 1991). One can only guess at the "real" prevalence of this disease due to the high incidence of asymptomatic or subclinical infections.

Fackelmann (1991) estimates that 15% of the sexually active population carries the HPV without clinical manifestations of the disease. Unfortunately, there is no standard diagnostic test to identify HPV in the body. However, in a study done at an Atlanta, Georgia Public STD clinic, 10% of 604 women screened for HPV infection had evidence of infection. In a Seattle, Washington Public STD clinic 20% of the women screened had evidence of cervical HPV (Stone, 1989). Even higher figures were reported by Bauer et al. (1991) at the University of California. Women attending the university health services for a routine annual gynecologic examination were tested for HPV by using a polymerase chain reaction (PCR) DNA amplification technology. Of 467 women tested 46% were infected with HPV.

Asymptomatic and subclinical infections create a problem regarding transmission of this virus. In order to transmit HPV there has to be some friction or abrasion to the soft tissues (i.e. male and female genitals, the mouth, the throat and the rectum) of the body which are more susceptible to these infections. Viruses are easily transmitted in moist environments occurring during vaginal, penile, rectal and oral intercourse. People with asymptomatic or subclinical infections will not know or be aware that they have these infections, so necessary precautions to prevent transmission (such as using a latex condom with a spermicide) will not typically be taken, unless the person is using condoms and

spermicide as a birth control measure. It's important to note that even when a person is taking certain precautions, no method is 100% effective in preventing the transmission of STDs. Therefore, there are risks involved even when using prophylactic devices, including: the condom breaking; improper use; or not covering the area that has been previously infected.

According to the studies reported from the NDTI, women outnumber men in office visits for genital warts/HPV (Becker, Stone & Cates, 1986; Johnson, Nahmias, Magder, Lee, Brooks, & Snowden, 1989; Stone, 1989). Dr. Richard Rubin, of the University Health Services in Amherst, Massachusetts, suggests that these sex differences in genital warts/HPV are due to anatomical reasons. He believes that the vagina and cervix which is mostly covered by mucosa or soft tissue are more prone to microscopic trauma; the penis is less susceptible because it is covered by skin.

The NDTI data on genital warts/HPV infections should be interpreted cautiously for the following reasons: recent media attention regarding HIV infections and other STDs may increase the number of people seeing private physicians; a person seeking out medical attention for one of these infections might not be presenting a newly diagnosed case; many people with these infections seek treatment from public health clinics rather than a private physician in order to maintain confidentiality; and many people with subclinical or

asymptomatic infections are likely to remain undiagnosed. However, now that genital warts/HPV is reportable to the CDC, the limitations of the NDTI should be rectified making the documented cases of genital warts/HPV more accurate.

Similarities Between Genital HSV & Genital HPV

Herpes Simplex Virus (HSV) and Human Papillomavirus (HPV) are incurable. With herpes recurrences, the lesions and sores will eventually heal and disappear, but the HSV will remain in the nerve tissue only to recur again, causing painful, contagious lesions in the genital area. In the case of genital warts, the condylomata or warts themselves can be removed, but the virus will remain in the tissue and may cause the warts to reappear.

Genital HSV and HPV have many important factors in common: recurring episodes; disfiguring symptoms; a risk of sexual transmission; a risk of asymptomatic transmission; a risk of subclinical infection; and a social stigma associated with acquisition. In investigating the psychosocial and psychological consequences of genital HSV, Luby and Klinge (1985) found that people diagnosed with genital HSV "move through a sequence of adaptational responses similar to those described for cancer" (p. 494). Vanderplate, in an interview published in The Helper (Summer, 1989), identified these responses as the following stages: denial, resistance, affirmation, and integration. These stages are typical

responses of people diagnosed with certain chronic illnesses such as HIV disease (Kubler-Ross, 1989).

Although every person diagnosed with a chronic illness, or specifically genital HSV and HPV, will deal with his or her disease differently, there are some broad generalizations which people experience that are important to understand. These can include depression, anxiety, guilt, and anger. Because there has been more research done on the psychology of chronic illnesses than on the psychology of HSV and HPV, mental health practitioners treating people diagnosed with these diseases have much to gain therapeutically by reviewing the literature on the treatment of chronic illnesses.

The Importance of Studying the Psychosocial Impact of Genital HPV

While there are similarities in the psychosocial impact of the two diseases, there are some unique differences between genital HSV and HPV. Genital warts/HPV will require more medical visits for treatment of the clinical manifestations of the disease and these treatments can result in some scarring on the genitals. More medical treatments and required medical visits for follow-up exams can cause a person to view him or herself as being "ill". Also the potential risk of genital cancer associated with HPV can create a whole new set of problems for the person diagnosed with this disease. Another important difference between HSV and HPV is that the lesions associated with HPV are painless and often subclinical. As a

result of this phenomena the person could have a difficult time accepting a positive diagnosis of this disease which could potentially prolong adjustment.

CHAPTER 2

REVIEW OF THE LITERATURE

Only three articles could be found in the literature that addressed the psychosocial impact of an HPV diagnosis (Lehr & Lee, 1990; Persson, Gosta Dahlof & Krantz, 1993; and HPV News, 1993). However, this has not been the case for genital HSV; there are numerous studies in this area, which may be examined for relevance to the topic of HPV. For the reasons already stated in the first chapter and the similarities regarding these two STDs, it would appear that the ramifications of being diagnosed with genital HSV can also be applied to genital warts/HPV.

A herpes diagnosis has the following effects on an individual: severe anguish and distress; feelings of guilt and self-blame; anger and hostility; anxiety, frustration, and feelings of helplessness; lowered self esteem; poor psychological adjustment; and depression (Aral, Vanderplate & Magder, 1987). Changes in an individual's sexual attitudes, sexual identity, sexual relationships and sexual behavior have also been reported (VanderPlate & Aral, 1987).

Psychological Distress

Lehr and Lee (1990) report on a case history involving a woman who was in a monogamous marriage for 8 years. Shortly after her marriage she developed vulvar burning and itching.

During her 8 year marriage she consulted 22 physicians and eventually experienced bladder surgery and a partial vulvectomy with no relief from her initial symptoms. As a result she was told that her symptoms were emotionally based. She finally found a physician who diagnosed her correctly with genital HPV. She conveyed to Lehr and Lee that during those 8 years without a definitive diagnosis and attempting to deal with her physical condition she experienced the following: frustration, depression, lack of self-esteem, lack of trust, hopelessness, utter despair and an overwhelming sense of urgency. As a result of her experience with the medical establishment and her misdiagnosis she developed a distrust of members of the medical community.

Persson, Gosta Dahlof and Krantz, (1993) studied symptoms and psychological reactions of 82 female patients diagnosed with genital warts/HPV in a hospital and youth clinic in Sweden. The patients were given a standardized questionnaire before treatment for their genital warts and six months after the treatment had been terminated. The questionnaire consisted of 32 questions concerned with symptoms, knowledge, and experiences of genital warts and their treatment, contraceptive habits and how their positive diagnosis affected their current sexual relationship. Three open-ended questions about feelings and fears of genital warts currently and in the future were also included. The results indicated that patients were worried about the future, especially in regards

to cervical cancer and the lack of a cure for HPV. The researchers also found that the emotional impact of genital warts/HPV is relatively "longstanding and profound". Findings of this study suggest that a diagnosis of genital warts/HPV could be a risk factor for the development of psychosexual disorders.

In 1992, the American Social Health Association (ASHA) conducted a survey of people who subscribe to their newsletter entitled HPV News. There were 454 surveys evaluated containing 80 questions focusing on health care experiences, treatment, and personal impact. Participants reported feelings of anger (78%), depression (76%), isolation (70%), and feelings of shame (66%) and guilt (60%). Men seemed to be less impacted by the HPV diagnosis than women. Specifically, feelings of depression and shame were significantly higher for women than men (HPV News, Summer 1992).

Hillard, Hillard, Kitchell, Birch, Brennan and Grubb, (1989) studied 23 college age women, newly diagnosed with genital HSV. Participants were interviewed at an initial visit and 6 to 9 months later. The purpose of this study was to quantify the psychological reaction to a diagnosis of genital HSV. The participants completed a structured interview and four self-report scales: the Impact of Events Scale (IES), Symptom Check List - 90 (SCL-90), College Event Scale (CES), and a questionnaire used by HELP (a Herpes Resource Center). This research successfully documents a

significant level of acute stress reaction in the population studied. This stress reaction was demonstrated by measures of intrusive thoughts and avoidance behavior on the IES and was generally resolved in 6 - 9 months while the significant levels of psychological distress measured by the SCL-90, continued. Some women continued to exhibit levels of stress reactions at 6 to 9 months, and some exhibited levels of distress usually associated with clinical psychiatric populations.

Drob, Loemer and Lifshutz (1985) investigated the psychological consequences of genital HSV among 18 men and 24 women. Each subject was required to fill out a series of self-report instruments (including a Genital Herpes Questionnaire). In addition, 35 subjects participated in an intensive two-hour psychological interview. Many subjects reported that "herpes had a pervasively negative effect upon their emotional life". Depression was the most common emotional response (83%). Subjects also reported being angry at having contracted herpes, at the medical personnel for their insensitivity, and at the media for equating herpes with leprosy. Other emotions reported were: guilt and shame for getting a "venereal disease"; and anxiety and nervousness as a result of future recurrences, asymptomatic transmission, and the risk of transmission of the HSV to their offspring. Subjects also reported a lowering of self-confidence and reported feeling 'contaminated', 'ugly', 'inferior' and

'damaged' as a result of having herpes. Although this study was useful in examining the psychological consequences of genital HSV, the results should be examined in the context with which the study was done. All the subjects for this study were already seeking counseling and/or psychotherapy because of the problems they were having with genital HSV so that the results should not be generalized. However, this study is consistent with the elevated levels of emotional distress in herpes sufferers reported from other retrospective studies (Luby & Gillespie, 1981; Manne & Sandler, 1984; Silver, Auerbach, & Kaplowski, 1986; Stout & Bloom, 1986; Manne, Sandler & Zautra, 1986; Goldmeier et al., 1986; Hillard, Hillard, Kitchell, Birch, Brennan & Grubb, 1989).

Anger is often experienced by people diagnosed with genital HSV and HPV. It may be directed at the person they think gave them their infection or it may be turned inward because the person feels like he or she was careless and acted irresponsibly. This feeling may become more intense if the patient's initial anger for the person who transmitted the infection to him or her was very deep or it can be the more destructive form of anger and should be vented in an appropriate way (Sacks, 1983). Anger can also be directed at the medical community for failure to find a cure (Swanson & Chenitz, 1989; HPV News, Summer 1992) or the lack of a definitive diagnosis (Lehr & Lee, 1990). This kind of anger

will be more evident when the health care provider makes the mistake of passing moral judgement or of offering inadequate information (Sacks, 1983).

Currently, certain information about genital HPV is unknown. It is not clear if and when the gential warts will recur in someone undergoing treatment; if and when the virus is transmittable after removal of the warts; and the risks of developing genital cancers associated with HPV. This lack of definitive information will only enhance a person's anxiety level and anger when attempting to deal with his or her medical condition (HPV News, Winter 1991). In a survey conducted by ASHA (HPV News, Summer 1993), the greatest level of dissatisfaction reported by participants was regarding the failure of providers to give advice on emotional issues and sexual practices.

The social stigma of genital HSV portrayed by the media has contributed to the emotional distress of people inflicted with this disease (Marks & Patrick, 1983; Drob, Loemer, & Lifshutz, 1985; Inhorn, 1986). The articles in the popular press during the early 80's were sensationalistic and focused on pain, physical disfigurement, damage to newborn babies, and the apparent helplessness of the medical community (Langston, 1983). The media focused on the "incurable", "recurrent" nature of herpes which culminated in an article appearing in Time magazine in June of 1980 entitled "Herpes: The New Sexual Leprosy - "Viruses of Love" Infect Millions with Disease and

Despair". Throughout this entire article were personal accounts of horror stories that were extreme examples of people's misfortunes with this disease. Time then had a follow-up article in August of 1982 entitled "Herpes the New Scarlet Letter" which highlighted how herpes, an incurable virus, was going to undo the sexual revolution. Even though both of these articles contained factual information about the disease, they also perpetuated many of the myths regarding herpes.

A study was reported in The Helper (September, 1982) by Bryson and Larson describing their effort to culture the HSV outside the body off of a speculum, gauze square, gloves and a toilet seat. It did not document any evidence of transmission through these means. In fact they stated in their research that transmission was "unlikely". The local press, such as "The Washington Post" on May 13, 1982, took this research and printed articles entitled "Herpes Found to Survive a Long Time Outside the Body" (The Helper, 1982). As a result of this article a fear of contracting herpes from toilet seats, swimming pools and other inanimate objects was created. This is a good example of irresponsible journalism which helped create a "leper effect" for people suffering with HSV (Inhorn, 1986).

Genital warts/HPV has not been given the same amount of attention in the popular press because of all the attention focused on the AIDS epidemic. Thus, the general population is

not aware of the high incidence of this particular STD, nor are they aware of the fact that it is incurable, highly contagious and highly correlated with cervical and penile cancer.

In the August, 1993 issue of Glamour, a popular magazine read primarily by women between the ages of twenty and thirty, a short article was featured entitled "Women and STDs: Are Federal funds being misdirected?". In this article, genital warts/HPV was never mentioned. The article referred to Herpes, Chlamydia, Gonorrhea, Syphilis, and other STDs. This type of reporting in the popular press maintains a certain amount of ignorance pertaining to this disease among the general public.

The Impact of Genital HPV & HSV on Sexuality and Relationships

Some chronic illnesses, such as genital HSV and HPV, visibly affect the physical features that define one's sexuality and, as a result, the person's body image and self concept. Skin problems can affect an individual's feeling about him or herself, and may be linked with feelings of shame, stigma, inferiority and sexual unattractiveness (Buckwalter, 1982). Genital skin changes, even though they are not publicly visible, can have a negative effect on one's sexuality (Buckwalter, 1982 & Lubkin, 1986). Buckwalter wrote that people unconsciously associate skin diseases with "uncleanliness". For example, people with psoriasis (a non-

contagious skin condition) "are often shunned as carriers of STDs by people who cannot distinguish between these disorders".

In studying women who have experienced problems with sex, Anderson and Jochimsen (1985) reported that 90% of these patients had a disease at a sexual body site. These same investigators found that 82% of a sample of women who had experienced gynecologic cancer reported poorer body image evaluations, in contrast to 31% of women who had experienced breast cancer and 38% of the women in the non-cancerous sample. These results have clear implications for women diagnosed with genital warts/HPV because of the high correlation between genital HPV and cervical cancer.

In a study on the effects of genital warts/HPV reported on earlier in this paper, the areas of one's life most affected by an HPV diagnosis were sexual feelings and behavior (HPV News, Summer 1993). Approaching a new partner was reported as being the most negatively affected (86%), followed by being spontaneous (73%), feeling desirable (72%), frequency of sexual contact (72%) and enjoyment of sexual contact (68%). Of the 454 people surveyed, 49% of the women reported a negative impact on their sex drive as compared to 35% of the men. More women than men were negatively affected by sexual contact.

On a more positive note, the ASHA survey reported that the impact of HPV on one's sexuality seemed to diminish over

time. Therefore one can assume that the impact of HPV on one's sexuality and sex related problems is most severe at the time of diagnosis (HPV News, Summer 1993).

Luby and Klinge (1985) also found that the strongest emotional effect of genital HSV was felt in the area of sexual relations. Seventy-four adults (26 males and 48 females) with genital herpes filled out a 183-item questionnairre developed by the Herpes Resource Center. Participants in their study indicated that genital HSV had restricted sexual freedom, frequency, and spontaneity. Luby and Klinge (1985) stated that the major stress regarding sexuality was related to overall tension in the sex life specifically associated with the frequency of impotence or other physical difficulty and a marked reduction in the frequency, pleasure, spontaneity, and intimacy of sexual contact.

Campion et al. (1988) conducted a study of women with an abnormal cervical smear who were referred to a colposcopy clinic. The women in this study were divided into four groups. In the first group there were 30 women with abnormal cervical smears. The second group consisted of 50 women who were regular partners of men with penile HPV; this group was further divided into 26 women with confirmed cervical HPV and 24 women with no evidence of HPV. The last group was composed of 25 women with regular male partners who had been diagnosed with non-specific urethritis (a curable STD). A detailed medical, obstetric, gynecological, social and sexual history

was obtained from each woman as well as a complete pelvic examination. The aspects of sexuality that were investigated included the following: frequency of spontaneous sexual interest, frequency of intercourse, frequency of adequate vaginal lubrication and sexual arousal, frequency of orgasm with intercourse, frequency of dyspareunia and frequency of negative feelings towards intercourse. Seven weeks after the study began the women with clinical HPV were treated with laser therapy. Each women was given an appointment six months after treatment. At this appointment, they were requested to complete the same questionnaire they had filled out during their initial appointment. The results of the Campion et al. (1988) study demonstrated significant adverse changes in the women diagnosed with pre-invasive cervical epithelial disease regarding their attitude towards sex and towards their sexual partners, as well as in their sexual behavior and response. The decreased interest in sexual intercourse could be attributed to the anxiety about potential harmful effects of sexual intercourse after treatment. A decreased interest in sex, however, suggests a possible effect of their medical condition on their self concepts and body images. Campion et al. (1988) found a significant increase in negative feelings towards sexual intercourse or towards a regular sexual partner amongst women treated for cervical pre-malignancy.

A similar study was completed by Palmer et al. (1993). This study was entitled "Understanding Women's Responses to

Treatment for Cervical Intra-Epithelial Neoplasia (CIN)". This study compared two groups of subjects, those who had received a negative pap smear test result and those who were diagnosed as having CIN. A total of 40 subjects were studied and there were 20 subjects in each group. Both groups were studied using standardized, self-report measurement scales and structured interviewing. The interview data suggested that body image and sexual relationships suffered following a positive diagnosis of CIN because of the docuemented causal relationship between CIN and HPV. Therefore, after a diagnosis of CIN, a woman had to cope with the knowledge that this may have been caused by a STD (Palmer et al., 1993).

It can be especially difficult for the person who contracted genital HSV (or genital warts/HPV) following a first sexual experience or for the person who had anxiety about sexual intimacy prior to his or her illness. These people will typically abstain from sexual activity in the future (Drob, 1986).

Shaw and Rosenfeld (1987) conducted a study on the "Psychological and Sexual Aspects of Genital Herpes in Women". In this study psychological testing was conducted on four gynecologic patient groups: 20 patients with recurrent genital herpes, 16 patients with primary genital herpes, 18 patients with curable STDs, and 20 patients who served as normal controls with no history of STDs. All patients completed a demographic questionnaire, a brief sexual history

questionnaire, and the Minnesota Multiphasic Personality Inventory (MMPI). The authors found that individuals with recurrent genital herpes experienced less sexual satisfaction than other groups in the study. This study confirmed the results of the study by Luby and Klinge (1985) which found that herpes had not interfered with work or social performance, but had significantly impaired sexual enjoyment and satisfaction. Hillard et al. (1989) also found adverse effects of genital herpes on sexuality, self-image and sexual relationships.

A study was completed by the Help Organization (a resource center for people with genital herpes) in October, 1979 to provide a measure of understanding about how herpes affects the lives of people with the disease. The Helper Newsletter stated that over 53% of the participants said that they have "consciously avoided potentially intimate situations, even during periods of latency" (The Helper, 1981, p.4). Of this 53%, 1% stated that they have limited their sexual involvements only to others who also have genital herpes and 10% stated that they have become celibate due to herpes (The Helper, 1981). The study also found that 35% of respondents experienced impotence or diminished sexual drive and as a result sexual relations were affected significantly.

Negative feelings about one's sexuality, self-esteem and a loss of control over sexual functions create stress for the chronically ill person's closest relationships. According to

Anderson and Wolf (1986) the loss of social contact and social isolation are commonly recognized consequences of chronic disease. Because people with genital HSV believe that their illness will in some way prevent them from pursuing a significant sexual relationship, they feel a terrible sense of loss. These fears or beliefs are based on preconceived myths regarding the virus. As a result, a significant number of people with genital HSV are so fearful of rejection or of transmitting the virus to a sexual partner that they abstain from any sexual activity (Drob, 1986). They are anxious about meeting potential sexual partners because they consider themselves less desirable sexually or "damaged" in some way (Greenwood, 1984).

There is an ethical dilemma that the person with genital HSV or HPV faces over disclosure to a current or potential partner. The disclosure may assist in building trust and strengthen the relationship or it may put a strain on the relationship because the uninfected partner might fear the risk of transmission (HPV News, Summer 1992). It can also create the sense of being trapped in a current relationship with little or no hope of seeking or finding another that might be more rewarding (Lehr & Lee, 1990).

People who have been in monogamous relationships for a number of years and contract genital HSV or HPV from their current partners become suspicious and develop a lack of trust in the relationship. It is, of course, possible that the

partner who transmitted the virus has been unfaithful, but it is also possible that the partner who transmitted the virus had an asymptomatic infection that he or she was not aware of before the transmission. The frustrating reality is that there are no clear cut answers for either HSV or HPV when this situation presents itself. The resulting strain on the relationship as a result of this situation can be enormous. In a study completed by The Helper (1981) 18% of the participants believed that herpes was a contributing factor in the dissolution of their marriage or long-standing nonmarital relationship.

Unfortunately, people with genital HSV and genital warts/HPV can experience a lack of support and alienation from friends who, through ignorance, will make jokes or derogatory statements about the disease (Drob, 1986 & HPV NEWS, Summer 1993). This will further alienate the person with genital HSV or genital warts/HPV because they don't feel like they can trust their "secret" with anyone and, as a result, will hold their anxiety and anger inside, exacerbating the situation. For this reason support groups for people with genital HSV and HPV have been very successful across the country.

According to Drob and Bernard (1986) participants in their time-limited herpes group experienced relief from isolation, the exchange of information, a challenge to

defensive denial, exposure to new ideas and behaviors, an opportunity to explore the developmental issues that typically emerge, and other ethical issues that arise.

Control and Predictability

> "Two important organizers in one's life are control and predictability. When such factors are disrupted, the structure, order, and flow of one's life are disrupted. The very nature of herpes, with its random recurrences, creates a realistic sense of lack of control and predictability" (Perlow & Perlow, 1983).

Manne and Sandler (1984) defined the phrase "disease management strategies" as techniques employed by people coping with chronic illness to control a disease. They investigated how this control can take the form of stress reduction techniques, dietary changes and any kind of self treatment measure that the person chooses to employ. Efforts to control a disease may affect the person's adjustment to the disease in two ways. It may reduce feelings of depression or hopelessness because the person feels that he or she is taking some kind of action to deal with the problem. This is especially the case with a disease which has no cure. It can also enhance feelings of depression or hopelessness when the person is attempting to control an uncontrollable disease. The attempts to gain control of an uncontrollable disease, such as genital herpes and genital warts/HPV, and the repeated failures to do so may lead to increased feelings of stress, helplessness, and depression, creating a "learned helplessness" situation (Seligman, 1975).

In their work on learned helplessness, Abramson, Seligman, & Teasdale (1978) believe that a depressed affect is a consequence of learning that outcomes are uncontrollable. The person with genital HSV experiences helplessness, attributes the situation to external and unstable factors, and expects failure in specific pertinent situations (i.e. sexual relationships) but not necessarily in others (Silver, et al., 1986). People diagnosed with genital HSV and HPV are faced with the fact that there is no cure and recurrence rates cannot be predicted. Suzanne M. Miller's research on controllability and predictability states that:

> "an individual who lacks some form of behavioral control is in an objectively more dangerous situation than is a subject with control. This may, in turn, activate a chain of disturbing cognitions which subjectively magnifies the anticipated event and so contributes to maintaining elevated levels of anxiety and arousal" (cited by Garver, 1980, p. 83).

Manne and Sandler (1984) investigated ways people cope with genital HSV and tried to correlate the coping mechanisms used with measures of adjustment. An assessment battery composed of cognitive and problem-focused coping, attribution, and social support was administered to 152 people with genital HSV recruited from self-help groups and from the community. The results of this study support the hypothesis that higher levels of psychological symptomatolgy (i.e. depression) are correlated with the following: coping strategies of characterological self-blame (attributing causality to uncontrollable nonmodifiable traits of one's character),

wishful thinking (an attempt to think positively), use of disease management strategies, stressful thoughts about negative aspects of having genital HSV, and the perception that family, friends, and significant others have a negative attitude towards the person.

Summary

Genital HSV and HPV are chronic illnesses. The diagnosis of these diseases requires life changes and certain emotional adjustments. Sexually transmitted diseases are prevalent in our society but these particular STDs (HSV and HPV) cause strong emotional reactions that can have a devastating effect on an individual mostly because these viruses are incurable, recurring and acquired through sexual activity.

It is clear that there is not enough research on the psychosocial effects of genital warts/HPV. However, borrowing from the literature on genital HSV, we find that the fear of transmission to potential partners; the lack of clear, definitive information about recurrences, treatment and transmission; and subclinical and asymptomatic infections, increases anxiety, depression, hopelessness, and anger. Also, someone diagnosed with genital HSV or HPV can exhibit a decrease in self-esteem, sexual intimacy, and sexual satisfaction. Finally, we also find some interesting things about control and predictability. Because genital HSV and HPV can be recurring, the person with these diseases may attempt

to control or predict his or her symptoms. As discussed earlier, the inability to control recurrences may affect the person's adjustment to the disease.

The psychosocial aspects of any STD are of great importance in treating the person "systemically" to fully deal with all aspects of the disease, including its impact on his or her life. However, because an STD is potentially carcinogenic, the diagnosis requires attention from the entire medical and mental health communities. Often what is discussed with the patient, once they are diagnosed with genital HSV or HPV, is not heard or is forgotten because the person becomes so preoccupied with the fact of the diagnosis (Lucas, 1988). It is critical to schedule a follow-up appointment for this person to discuss education about the disease and the need for counseling. Because of the high incidence of subclinical infections from genital warts/HPV it becomes difficult for the person to believe that he or she has this infection and that it is severe (Lucas, 1988). The general nature of HPV and the course of treatments that must be followed makes abstinence or compliance with safer sex practices, treatment regimes and follow-up examinations critical.

The added complication of the high correlation of cervical, vulvar, vaginal, and penile dysplasia and cancer in people diagnosed with HPV makes it imperative that we understand the impact that this disease can have on the

individual (Stone, 1989; Persson et al., 1993; Palmer et al., 1993). Also the incidence and prevalence of this disease has risen dramatically to epidemic proportions within the last two decades (Lucas, 1988; Vail-Smith & White, 1992). All of these factors make public education, identification of high risk groups, prevention and counseling mandatory if the spread of this disease is to be contained.

CHAPTER 3

PROCEDURES AND METHODS

Introduction

The purpose of this study was to obtain information on how people are affected by a diagnosis of genital warts/HPV. The working hypothesis for this study is that individuals diagnosed with genital warts/HPV will experience more psychosocial effects when compared with individuals diagnosed with a curable STD. The psychosocial effects specifically addressed will include a variety of psychological constructs as measured by the Symptom Check List 90-R and satisfaction with relationships and sexuality, parental relationships, religious beliefs and changes in sexual behaviors as measured by the Sexual History and Demographic Questionnaire.

Included in the variables measured by the Sexual History and Demographic Questionnaire was grade point average (GPA), sexual abuse history, and rape. The reason that the researcher had included GPA as a variable was to evaluate whether students with better grades were more likely to practice safer sex. A history of sexual abuse, rape, and therapy were included as variables so that psychological symptomatology, as measured by the SCL-90-R, could be

attributed to a diagnosis of a curable STD or genital warts/HPV and not other important factors which might effect a person's mental health.

Hypothesis 1

There will be correlational differences in people diagnosed with genital warts/HPV when compared with people with a curable STD or no diagnosed STD, in the following variables: age, sex, relationship status, additional STD diagnosis, onset of sexual activity, sexual abuse history, current sexual satisfaction, and grade point average.

Hypothesis 2

There will be a statistically significant difference in psychological symptoms as measured by the SCL-90-R between a person diagnosed with genital warts/HPV and those diagnosed with a curable STD (i.e. chlamydia).

Subjects

There were 147 students (96 females and 51 males) from the University of Massachusetts, Amherst campus who participated in this research study which took place from September, 1992 through May of 1993. Of the 147 students, the majority (79.6%) were between the ages of 19 to 24 years old and 90.5% were Caucasian. Table 3.1 (page 35) will present a brief profile of the subjects who participated in this study.

Table 3.1

Characteristics of Subjects
(N=147)

Variable	N	Percent
Gender		
Male	51	34.7%
Female	96	65.3%
Age		
17-18	18	12.2%
19-20	59	40.1%
21-24	58	39.5%
25-30	12	8.2%
Race		
Caucasian	133	90.5%
Afro-American	6	4.1%
Hispanic	2	1.4%
Asian	3	2.0%
American Indian	2	1.4%
Other	1	.7%

The study consisted of three groups: Group 1 were students diagnosed with genital warts/HPV, consisting of 18 males and 40 females. Group 2 were students diagnosed with a curable STD such as chlamydia consisting of 13 males and 18 females. Group 3 were students with no diagnosed STD, consisting of 20 males and 38 females.

A strong attempt was made to include a significant number of male subjects in this study in all three groups by extending the date for data collection and targeting the advertising of the study to male students. However, male subjects for this study were more difficult to recruit than female subjects perhaps due to the fact that diagnosis of genital warts/HPV in men is more difficult; 60% of male

patients have subclinical infections (Bergman, 1991). Women on the other hand, who have no clinical symptoms are often diagnosed during their routine yearly pap smear examinations.

Instruments

Symptom Check List-90-R (SCL-90-R)

The Symptom Check List-90-R is a 90-item self-report instrument developed to measure symptoms commonly associated with psychiatric and medical patients. The SCL-90-R has nine subscales for symptoms associated with specific psychiatric syndromes: somatization, obsessive-compulsive behavior, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. It also has composite scores: a global severity index (GSI) which reflects overall severity of symptoms, a positive symptom total (PST), and a positive symptom distress level (PSDL) which reflects severity of symptoms present. These three global indices provide a single score which can measure the level or depth of the individual's psychopathology (Derogatis, 1983). (For a summary of the nine symptom dimensions and three global scores of the SCL-90-R please refer to Appendix C on page 133.)

Reliability data for the SCL-90-R has been collected through internal consistency coefficients and test-retest. For the nine subscales the internal consistency reliability

coefficients range from .77 to .90. The mean coefficient is .84. The test-retest coefficients range from .78 to .90. The mean is.84. These data were collected using 219 symptomatic volunteers on the internal consistency measures. The test-retest reliability was computed using 94 heterogeneous psychiatric outpatients with one week time period between tests.

There are few validity studies of the SCL-90-R. The few studies that have been done demonstrate levels of concurrent, convergent, discriminant, and construct validity which are at a level comparable to other self-report inventories (Paukner, 1985).

Sexual History and Demographic Questionnaire

This questionnaire developed specifically for this study, provided information on the following: age, sex, residential location, current living situation, some family history, religious beliefs, grade point average, sexual orientation, onset of sexual activity, current sexual relationship and level of satisfaction, past sexual history, STD diagnosis, measures of contraception used, and safer sex practices.

This questionnaire was pre-tested on various students for clarity and comprehension of questions. Adjustments in the design of the questionnaire were made based on their feedback.

Procedures

All physicians and nurse practitioners in the University Health Center attended an in-service presentation in which the researcher explained the study and answered all questions about it. The researcher met with all health care providers individually as well, to explain the study and notices were placed in the health services weekly bulletin to maximize referrals to the study.

Students were informed about the study by the following outreach efforts: health care providers notified potential participants, flyers were placed in all the clinic areas of the University Health Center advertising the study, advertisements were placed in the classified section of the campus newspaper, and announcements were made by the researcher in various academic classes.

Sixty five (44.2%) students participated in this study because they either saw a notice posted in the University Health Center located on campus or their health care provider notified them of the study during a medical visit. Seventy five students (51%) volunteered to participate in the study while attending a class where an announcement was made by the researcher. Seven students (4.8%) responded to the advertisement in the local college newspaper.

All interested students were given a packet of information through either their health care provider or the Office of Health Education located in the University Health

Center (see appendices A-E). This packet included the following: a letter explaining the study, an informed consent form, the SCL-90-R, and a sexual and demographic history questionnaire. To maximize the return of completed packets to the Office of Health Education participants were promised $5.

Included in the packet was an invitation to participate in a 15 minute informal interview. During this interview three main questions were addressed: How has this diagnosis affected your life on a daily basis?, How has this diagnosis affected you sexually?, and How has this diagnosis affected your sexual relationship(s)?. Permission to tape the interview was obtained from all participants which freed the researcher from taking notes and to engage the participants. By interweaving quantitative measures with interview transcripts, the researcher was able to evaluate more comprehensively the impact of being diagnosed with genital warts/HPV and its affect on the participants.

Participants were informed that they could call the researcher at the end of the semester if they were interested in learning the results of the study. Pertinent resources on genital warts/HPV were also provided to the subjects.

Analysis of Data

The data for this study were analyzed by comparing results on the SCL-90-R with various aspects of each subject's sexual history and demography using the SPSS statistical

package for the analysis. An analysis of variance and correlational analyses were used to measure significant differences of all continuous data. The .05 level of confidence was used to determine significance. Information collected on the SCL-90-R and the sexual and demographic history questionnaires was analyzed using descriptive tables, correlational analysis, and percentages. This information will also be useful in determining the antecedents and concomitant behaviors associated with genital warts/HPV diagnosis. Only group analysis of the data was completed to protect individual identities.

CHAPTER 4

FINDINGS AND RESULTS

The results of this study are divided into four sections. First, the descriptive and demographic characteristics of the participating subjects are presented. Second, correlational data evaluating significant variables on the sexual history questionnaire and the SCL-90-R are presented. Third, analyses of variance evaluating differences between male and female scores on the SCL-90-R are presented. Fourth, interview information from a sample of subjects is described.

To simplify the summary of the results of this study, the three groups of students that have been identified and studied will be referred to as the following: (1) The "curable" group are students diagnosed with a curable STD. (2) The HPV group are students diagnosed with genital warts/HPV. (3) The third group (the control group) will be referred to as the "No STD" group because they had not been diagnosed with a STD.

In review, the purpose of this study was to examine the psychosocial effects of being diagnosed with genital warts/HPV. These psychosocial effects included emotional health, social relationships, feelings about one's sexuality and sexual behavior.

The first section of this chapter will include the descriptive and demographic characteristics of the entire

sample (N=147) studied. Please refer to Appendix E (page 105) for a breakdown of the descriptive and demographic characteristics by the three identified groups.

Research Sample Characteristics

Table 4.1 describes demographic characteristics of subjects participating in this study.

Table 4.1
Demographic Characteristics of Subjects
(N=147)

Variable	N	Percent
Year in School		
First year	21	14.3%
Sophmore	24	16.3%
Junior	47	32.2%
Senior	43	29.3%
Graduate Student	5	3.4%
Not Applicable	7	4.8%
Living Situation		
Residential housing	79	53.7%
Family housing	7	4.8%
Off-campus/friends	51	34.7%
Other	10	6.8%
Religious Training		
Protestant	29	19.7%
Catholic	65	44.2%
Jewish	14	9.5%
Other	14	9.5%
None	25	17.0%
Religious Faith		
Very strong	7	4.8%
Strong	21	14.3%
Moderate	50	34.0%
Weak	26	17.7%
Very weak	14	9.5%
Nonexistent	28	19.0%

Lifestyle Characteristics

The majority of respondents (65.3%) were not living with someone that he or she was sexually involved with and 25.2% were living alone. Only thirteen (8.8%) participants reported living with a sexual partner. A large majority of participants (72.8%) reported that their current living situation was either good or very good. Only 6.8% reported their living situation as being either unsatisfactory or very unsatisfactory.

Parental Relationships

Regarding participants' current relationship with their parent(s) or guardian(s), 79.6% indicated that the relationship was either "very good" or "good" while 13.6% responded that it was "moderate". A "bad" or "very bad" relationship was reported by 6.1% and .7% reported a "nonexistent" relationship.

A question was asked to assess how open or comfortable parents or guardians were with participants about sexual information before puberty. The responses indicated that 21.1% had been "very open", 25.9% had been "somewhat open", 32.7% had been "neither uptight nor open", 5.4% had been "somewhat uptight" and 14.3% had been "very uptight". When a similar question was asked to assess how open parents or guardians were currently regarding sexual information, 40.1%

responded "very open", 23.8% said "somewhat open", 19.7% said"neither uptight nor open", 8.2% said "somewhat uptight" and 6.8% said "very uptight".

Sexual Lifestyle

The majority of the participants in this study identified themselves as heterosexual (83.7%) while 5.4% identified themselves as homosexual and 4.1% as bisexual. A small percentage (6.8%) did not identify themselves in the above categories and instead identified themselves as "not being in a sexual relationship". When asked about the comfort level of their sexual orientation, 82.3% were "very comfortable" and 14.3% were "comfortable". Only 2.7% indicated being "moderately comfortable" and .7% were "uncomfortable".

A large percentage of subjects (53.7%) identified themselves as being in a monogamous relationship with someone of the opposite sex, while 35.4% identified themselves as being single. The remaining subjects identified themselves as being either in a nonmonogamous relationship with someone of the opposite sex (6.8%), nonmonogamous relationship with someone of the same sex (.7%), married (.7%), divorced (.7%) or separated (1.4%).

More than half of the 147 participants were in sexually satisfying relationships. When asked about their current sexual relationship(s) and how satisfying they were, 32% responded that they were "very happy" and 25.9% indicated

that they were "happy". A smaller percentage 6.1% indicated that their relationship(s) were "satisfactory" and 3.4% found them "unsatisfactory". Only 1.4% indicated that they were "very unhappy" in their relationship(s). Of the total sample, 26.5% of participants were not in a sexual relationship.

When a more specific question was asked regarding their comfort level around being sexually active, of the 147 participants 48.3% responded that they were "very comfortable", 27.2% said that they were "comfortable", 16.3% said "moderately comfortable", 5.4% indicated being uncomfortable, and 2% were "very uncomfortable".

A question was asked to assess how pleasurable their sexual encounters were. To this question 36.1% indicated "very pleasurable", 38.1% responded "pleasurable", 15% indicated "satisfactory", 6.1% responded "unsatisfactory", and 2% responded "very unsatisfactory".

Sexual Activity

For this predominately college age population, the onset of sexual intercourse at 13 years and younger was reported by 6.1% respondents and 19% reported being 14 to 15 years old. Sixty-two students in this study (42.2%) indicated that their first experience engaging in sexual intercourse was when they were 16 or 17 years old, while 28.6% reported being 18 years and older. No sexual intercourse was reported by 4.1%.

During the year that the study occurred (September, 1992 through May, 1993) 10.2% of the respondents reported having no sexual partners, 45.6% reported having one partner, 35.4% reported having 2 to 4 partners, 8.2% reported having 5 to 10 partners, and .7% reported having more than 10 partners. When asked a similar question regarding the number of partners these students have had in their lifetimes, 2.7% responded zero, 14.3% responded 1, 29.9% responded 2 to 4, 36.7% responded 5 to 10, and 15.6% responded greater than 10 partners. One can assume from the responses to these two questions that students in this study are engaging in sex with multiple partners.

Sexually Transmitted Disease History

Of the 147 students in this study, 58 (40 women and 18 men) participants have been diagnosed with genital warts/HPV. The range of time regarding when the diagnosis was made went from one month to 12 years. Table 4.2 (page 47) describes the three groups.

Table 4.2
Subjects Separated by Their STD Status
and by Number and Gender

STD Status	Females	Males	Totals
No diagnosed STD	n=38 25.9%	n=20 13.6%	n=58 39.5%
Genital warts/ HPV	n=40 27.2%	n=18 12.2%	n=58 39.5%
Curable STD	n=18 12.2%	n=13 8.8%	n=31 21.1%
Totals	n=96 65.3%	n=51 34.7%	N=147 100%

The women diagnosed with genital warts/HPV were asked additional questions in the sexual history questionnaire about their sexual health. Twenty seven women indicated that they had an abnormal pap exam and thirty one also had a colposcopy. Twenty months was the average amount of time elapsed since this study took place and when they were diagnosed with an abnormal pap exam. Sixteen months was the average time elapsed since they had a colposcopy. As a result of the colposcopy, 21 women were diagnosed with HPV on their cervix.

Safer Sex Practices

Safer sex in this study is defined as the use of latex condoms and spermicide. When students were questioned about their safer sex practices in the last year, the majority of participants (57.8%) responded that they only practiced safer sex "sometimes". The remaining 22.4% responsed "always" to

this question and 11.6% responded that they "never" practiced safer sex. The ramifications of students not practicing safer sex "always" will be discussed later in this paper. Of the students diagnosed with an STD, only 47.6% changed their behavior since learning about their diagnosis.

Abuse History

Of the 147 participants in this study, 20 students (16 women 4 men), indicated that they had been sexually abused as children. In response to a question about a history of rape, 27 students (18.4%), 24 women and 3 men, indicated that they had been raped.

Psychological Well-being

The psychological well-being of participants for this study was assessed by a self-report scale entitled the Symptom Checklist 90-R (SCL 90-R) which was discussed earlier in this paper. To score the results of this test the manual recommends the use of a formula to identify a "case". The formula states that if a person has a GSI score greater than or equal to a T-score of 63 (as identified in the SCL 90-R manual) or any of the two sub-scales are greater than or equal to a T-score of 63 (as identified in the SCL 90-R manual), then that person should be considered a "positive diagnosis or a case" (Derogatis, 1983). Of the 147 students participating in this study 72 (48 women and 24 men) were identified as

being a case by the SCL-90-R. As it can be seen in Table 4.3 72 students were exhibiting some level of psychological symptoms at the time that the SCL-90-R was filled out.

Table 4.3
Students Exhibiting Psychological Symptoms
as Identified by the SCL-90-R

SCL-90-R	Females	Males	Totals %
No Identified Case	n=48 32.7%	n=27 18.4%	n=75 51%
Identified Case	n=48 32.7%	n=24 16.3%	n=72 49%
Totals %	n=96 65.3%	n=51 34.7%	N=147 100%

A question on the sexual history questionnaire asked participants how their emotions have changed since being diagnosed with genital warts/HPV? The responses indicated that 14.3% had no identified change, 7.5% felt more guilty when being sexual, 9.5% felt more depressed, and 10.2% felt more anxious.

Therapeutic History

Participants (N=147) were asked if they were currently in therapy with a mental health practitioner, 10.2% responded "yes" to this question. When asked if they had ever been in

therapy, 42.9% responded that they had been in therapy at somepoint in their lifetimes. The range of when the therapy had taken place went from "currently" to 4.5 years ago.

Hypothesis 1

The first hypothesis in this study stated that there would be significant differences in people diagnosed with genital warts/HPV when compared with people diagnosed with a curable STD or no diagnosed STD with regard to specific variables. The variables evaluated included gender, age, grade point average, relationship status, sexual activity, sexual satisfaction, parental relationships, living situation, religious training and beliefs, therapeutic history, sexual abuse history, safer sex practices, and scoring on the SCL-90-R. The Pearson correlation coefficient with significance level of .05 was used to test the level of confidence of the first hypothesis. The specific variables that were significant for both males and females were age, the number of sexual partners they have had in the past year and in their lifetimes, the age at which their first sexual intercourse occurred, whether or not they always practice safer sex and sexual behavior change since being diagnosed with genital warts/HPV.

When the sample was evaluated by gender, rape experience and SCL-90-R, results were significant for women. Following is a description of the significant correlations.

Age

The age of subjects for this study ranged from 17 years old to 30 years old. The research indicated that subjects more than 20 years old were more likely to have genital warts/HPV or a curable STD than no STD ($p = .00$).

Number of Sexual Partners

The greater the number of sexual partners reported by participants in the past year the more likely they were to have genital warts/HPV or have had a curable STD. Their risk of contracting a curable STD or genital warts/HPV was even higher if they have had 2-4 partners in the past year. This was significant at the .001 level.

As would be expected, the more sexual partners that someone has had in their lifetime, the more likely they were to be in the genital warts/HPV group or the curable group ($p = .00$)

Onset of Sexual Intercourse

Subjects who reported having their first sexual intercourse at an early age (13-15 years old) were significantly more likely to have been diagnosed with a curable STD ($p = .05$). There was no significant relationship between age of first sexual experience and diagnosis of genital warts/HPV.

Safer Sex Practices

Subjects who reported that they are practicing safer sex "sometimes" are significantly more likely to have genital warts/HPV ($p = .01$).

A one sample chi square was used to evaluate differences within the HPV group in regards to a sexual behavior change since their diagnosis. Of the 58 subjects diagnosed with genital warts/HPV, 40% indicated that since they were diagnosed with genital warts/HPV they have been practicing safer sex "consistently" while being sexual with their partner(s). Sixteen respondents (28%) reported that they were practicing safer sex "sometimes", 3% reported that they were not practicing safer sex and 17% reported that they have stopped being sexually active as a result of their diagnosis. ($p = .0001$)

Results of the SCL-90-R by Gender and STD Status

When the Pearson correlation coefficient was used to compare the results of the SCL-90-R by STD status for the entire sample, there were no significant differences between groups. However, when males and females were compared, there were significant differences between them ($p = .05$). The data in Table 4.4 (page 53) shows the results of these findings. As described on page 48, an "identified case" is when a person is demonstrating a certain level of symptomatology as defined by the SCL-90-R.

Table 4.4
SCL-90-R Scores for Women by STD Status

SCL-90-R	No STD	HPV	Curable	Total %
No Identified Case	n=25 26%	n=16 16.7%	n=7 7.3%	n=48 50%
Identified Case	n=13 13.5%	n=24 25%	n=11 11.5%	n=48 50%
Total %	n=38 39.6%	n=40 41.7%	n=18 18.8%	N=96 100%

Rape

In examining the responses to the question on the Sexual History Questionnaire inquiring about whether or not the respondent was a victim/survivor of rape, significant differences were determined at the .05 level. Women who had been raped were more likely to be in either the HPV or Curable STD group. Women who had not been raped were more likely to be in the No STD group.

Hypothesis 2

This hypothesis stated that there would be a statistically significant difference in pychological symtoms as measured by the SCL-90-R between subjects diagnosed with genital HPV and those diagnosed with a curable STD.

Raw score means and standard deviations for the nine sub-scales (somatization, depression, phobic anxiety, obsessive-compulsive, anxiety, paranoid ideation, interpersonal

sensitivity, hostility, and psychoticism) and the three global scores (the global severity index, positive symptom distress index, and positive symtom total) were calculated for the three groups and compared to the non-patient normative samples of the SCL-90-R. These results are shown in Table 4.5 (page 55). The data compares the results of the raw score means and standard deviations for the non-patient sample from the SCL-90-R with the subjects from the three groups used in this study.

Table 4.5
Means and S.D.'s from the SCL-90-R for the Non-Patient Normative Group (N=974) and Subjects from this Study (N=147)

Symptom	Subjects from Study Group	Mean	SD	Non-Patients Mean	SD
Somatization	No STD	.49	.36	.36	.42
	HPV	.44	.46		
	Curable	.58	.53		
Obsess.Comp.	No STD	.78	.47	.39	.45
	HPV	.86	.63		
	Curable	1.10	.73		
Inter. Sens.	No STD	.76	.57	.29	.39
	HPV	.84	.76		
	Curable	.86	.81		
Depression	No STD	.76	.52	.36	.44
	HPV	.97	.82		
	Curable	1.00	.77		
Anxiety	No STD	.49	.43	.30	.37
	HPV	.62	.66		
	Curable	.77	.68		
Hostility	No STD	.45	.34	.30	.44
	HPV	.66	.65		
	Curable	.67	.73		
Phob. Anx.	No STD	.14	.24	.13	.31
	HPV	.24	.50		
	Curable	.36	.79		
Paran. Id.	No STD	.57	.53	.31	.44
	HPV	.64	.76		
	Curable	.73	.77		
Psychoticism	No STD	.36	.42	.14	.25
	HPV	.59	.63		
	Curable	.60	.69		
GSI	No STD	.56	.36	.31	.31
	HPV	.69	.54		
	Curable	.76	.62		
PSDI	No STD	1.44	.33	1.32	.42
	HPV	1.63	.47		
	Curable	1.61	.48		
PST	No STD	33.03	16.17	19.29	15.48
	HPV	34.07	18.24		
	Curable	38.00	20.67		

Analysis of Variance

Analysis of variance was used to compare the sample means of the three different groups in this study (the No STD group, the HPV group, and the Curable group) with the non-patient normative sample. Table 4.6 (page 57) lists the results of the ANOVA computed for all three groups. There were significant differences between groups on the scales for psychoticism ($p = .05$) and the Positive Symptom Distress Index (PSDI) ($p = .04$). The HPV group and the Curable group had significantly higher mean scores than the No STD group in both of these scales.

Table 4.6
Means and Standard Deviations of the 9 Primary Symptom Dimensions and 3 Global Scores by Group (N=147)

Symptom	Group	Mean	SD	F Ratio	P Value
Somatization	No STD	.49	.36	.63	.54
	HPV	.44	.46		
	Curable	.58	.53		
Obsess. Comp.	No STD	.78	.47	2.94	.06
	HPV	.86	.63		
	Curable	1.10	.73		
Inter. Sens.	No STD	.76	.57	.25	.78
	HPV	.84	.76		
	Curable	.86	.81		
Depression	No STD	.76	.52	1.75	.06
	HPV	.97	.82		
	Curable	1.00	.77		
Anxiety	No STD	.49	.43	2.25	.11
	HPV	.62	.66		
	Curable	.77	.68		
Hostility	No STD	.45	.34	2.33	.11
	HPV	.66	.65		
	Curable	.67	.73		
Phob. Anx.	No STD	.14	.24	2.11	.13
	HPV	.24	.50		
	Curable	.36	.79		
Paran. Id.	No STD	.57	.53	.61	.55
	HPV	.64	.76		
	Curable	.73	.77		
Psychotic *	No STD	.36	.42	3.04	.05
	HPV	.59	.63		
	Curable	.60	.69		
GSI	No STD	.56	.36	1.89	.16
	HPV	.69	.54		
	Curable	.76	.62		
PSDI *	No STD	1.44	.33	3.19	.04
	HPV	1.63	.47		
	Curable	1.61	.48		
PST	No STD	33.03	16.17	.79	.45
	HPV	34.07	18.24		
	Curable	38.00	20.67		

* $p < .05$

Analysis of Variance by Gender

Subjects were separated by gender and by the three groups and evaluated to see if there were differences in scores on the SCL-90-R. The results shown in Table 4.7 (page 59) indicate that males in the No STD group had significantly higher scores on the somatization scale ($p = .01$) and the global PST score ($p = .03$).

For women the findings were measurably different. As seen in Table 4.8 (page 60), women's self-reported SCL-90-R indicated a higher level of symptomatology overall than did the male subjects. The HPV and curable groups differed significantly from the No STD group in their scores on depression ($p = .02$), hostility ($p = .01$) and psychoticism ($p = .002$) sub-scales. The curable group differed significantly from the No STD in their scores on somatization ($p = .05$), obsessive-compulsive ($p = .01$), anxiety ($p = .02$) and paranoid ideation ($p = .01$). The curable group differed significantly from the No STD group and the HPV group in the phobic anxiety sub-scale ($p = .01$).

An additional ANOVA was performed to determine if time of diagnosis of genital warts/HPV was significant for men or women. The results of this ANOVA were not significant for men or women, which means that one's scoring on the SCL-90-R was not influenced by time of diagnosis.

Table 4.7
Means and Standard Deviations of the 9 Primary Symptom Dimensions and 3 Global Scores for Men (N=51)

Symptom	Group	Mean	SD	F Ratio	P Value
Somatization*	No STD	.53	.40	4.26	.01
	HPV	.27	.25		
	Curable	.28	.17		
Obsess. Comp.	No STD	.92	.54	.97	.39
	HPV	.68	.60		
	Curable	.86	.49		
Inter. Sens.	No STD	.87	.69	2.27	.11
	HPV	.51	.63		
	Curable	.50	.32		
Depression	No STD	.86	.54	.88	.51
	HPV	.65	.60		
	Curable	.68	.49		
Anxiety	No STD	.52	.48	.12	.89
	HPV	.45	.52		
	Curable	.50	.39		
Hostility	No STD	.61	.39	1.13	.33
	HPV	.41	.43		
	Curable	.54	.42		
Phobic Anx.	No STD	.20	.31	2.91	.06
	HPV	.15	.18		
	Curable	.01	.04		
Paranoid Id.	No STD	.83	.64	2.86	.07
	HPV	.47	.67		
	Curable	.35	.43		
Psychotic	No STD	.50	.49	.88	.42
	HPV	.37	.42		
	Curable	.31	.39		
GSI	No STD	.68	.42	1.91	.06
	HPV	.47	.40		
	Curable	.47	.28		
PSDI	No STD	1.51	.41	.12	.33
	HPV	1.46	.42		
	Curable	1.43	.29		
PST *	No STD	38.45	18.24	3.69	.03
	HPV	25.39	15.10		
	Curable	27.54	11.96		

* $p < .05$

Table 4.8
Means and Standard Deviations of the 9 Primary Symptom Dimensions and 3 Global Scores for Women (N=96)

Symptom	Group	Mean	SD	F Ratio	P Value
Somatization *	No STD	.47	.34	3.05	.05
	HPV	.57	.50		
	Curable	.80	.60		
Obsess. Comp.*	No STD	.71	.41	5.48	.001
	HPV	.94	.63		
	Curable	1.27	.84		
Inter. Sens.	No STD	.70	.50	2.45	.09
	HPV	.98	.78		
	Curable	1.12	1.00		
Depression *	No STD	.71	.51	4.28	.02
	HPV	1.12	.85		
	Curable	1.23	.86		
Anxiety *	No STD	.48	.41	3.75	.03
	HPV	.69	.71		
	Curable	.96	.78		
Hostility *	No STD	.37	.28	4.66	.01
	HPV	.77	.70		
	Curable	.76	.89		
Phobic Anx. *	No STD	.11	.19	4.90	.01
	HPV	.29	.58		
	Curable	.62	.97		
Paranoid Id. *	No STD	.43	.42	4.75	.01
	HPV	.72	.78		
	Curable	1.01	.84		
Psychotic *	No STD	.28	.37	6.68	.001
	HPV	.69	.68		
	Curable	.82	.78		
GSI *	No STD	.50	.31	6.68	.001
	HPV	.78	.57		
	Curable	.98	.72		
PSDI *	No STD	1.40	.28	5.98	.001
	HPV	1.70	.48		
	Curable	1.73	.56		
PST *	No STD	30.18	14.43	4.85	.001
	HPV	37.96	18.34		
	Curable	45.56	22.57		

* $p < .05$

Qualitative Findings from Interviews

Thirteen students participated in an interview with the researcher to discuss how a diagnosis of genital warts/HPV has affected their lives. These interviews were informal and gave the participants an opportunity to discuss in more depth their reactions to a diagnosis of genital warts/ HPV. It was also an opportunity to have their specific questions answered and provide literature regarding the virus.

Following is a brief description of each person interviewed and segments of the interviews that emphasize the impact that this disease has had on his or her life.

For purposes of confidentiality, the names of those interviewed have been changed. Three basic questions were asked during each interview: How has a diagnosis of genital HPV/warts affected you on a daily basis? How has it affected your sexual relationships? How has it affected you emotionally?

Interview Subjects and Transcripts

Donna

Donna is a 23 year old Caucasian female who is a college senior living off-campus with friends. She identifies herself as being in a nonmonogamous relationship with someone of the opposite sex. She also indicated that this relationship was in the process of ending. At the time the interview took place she had only been diagnosed with genital warts/HPV for

three weeks. She also was diagnosed with chlamydia three years previously. Donna contracted genital warts/HPV from her current partner. She only practices safer sex "sometimes" and has had more than 10 partners in her lifetime. Last year she was in therapy because of an eating disorder.

Interviewer: How has this diagnosis affected you, how do you feel about it?

Donna: It definitely does. Because I'm familiar with what it is, and all the STDs around, it scares me more because I know exactly what it is related to as far as cervical cancer. It was one of my worst fears next to something fatal and when I found out, I found out that my boyfriend had it, so I was prepared before I even got it.

Interviewer: So he told you that he had it before?

Donna: Well I noticed it on him so we went to the doctors together. And he had it, so I knew because we had unprotected sex that I was very chancy that I would get it. So for that three month waiting period, I was just waiting and waiting; thinking you know, is it going to happen or not. I had no symptoms and waited for that three month period and after that three months, I noticed I had one so I came and they treated me. And so, I guess, I had so much time to prepare. But my roommate was just diagnosed with it and she had no idea, so it is different the reactions when you know about it and when

you don't. I think I was less upset because I was prepared. I was angry and.... I mean upset, of course I was upset, but I was more prepared so I was more level headed about it.

Interviewer: Are you still in this relationship?

Donna: We just broke up two days ago. (She starts to laugh.) But I think when I found out, I was so angry because if we were ever to break-up he jeopardized all my future relationships so I have that anger inside of me. But after (I was diagnosed with genital warts/HPV) he was supportive, so that made it easier. But I've seen people go through shear anger because the guy is in denial because many times the guy doesn't show symptoms.

Interviewer: How do you feel like it is going to affect you now?

Donna: Well it's almost like a slap in the face, like you better protect yourself now which is great. I preach it but I don't always practice it. It's going to worry me and it is embarrassing to have to tell someone because I know I have to tell the next person I'm with but at the same time you don't want to.

Interviewer: Did the fact that you were diagnosed with this (genital warts/HPV) have to do with breaking up with your partner?

Donna: No, no it really didn't. Just because of other things I kind of lost an attraction, and no actually it kind of brought us closer together because we were there for each other about it and I told him all about it. When I went for my appointment he asked me "What did they do?" so he made it better, so I would say it almost brought us closer. If he had given it to me and didn't have symptoms I would be angry and you know it's all different. If he didn't think he had them, and I got them, and I was sure I got them from him.

Interviewer: Currently do you feel like it affects you at all, are you still upset about it?

Donna: I'm upset when I have to go for the appointment.

Interviewer: Why?

Donna: Because it's a reminder of it. And it's not that I'll ever forget about it but it's just something right now... I don't know... I think that when I found out I had it, I had it and I dealt with it and I can't go on being miserable. Cause I see so many people that have it and it almost eases the blow for me, and I know it's a

terrible way of thinking but it's so true.... when my close friends get it ..it's like phew, I'm not the only one...you know.

Interviewer: How do you feel about the difference between this type of sexually transmitted disease and something like herpes?

Donna: I think that herpes is even more frightening.

Interviewer: Why?

Donna: Because those were my two biggest fears warts, herpes and obviously AIDS both. Herpes, I think is much more obvious, cause when you get your first break out you can become extremely ill and sick, it's painful, it's really sickening... I mean I think anything is sickening to look at, but it's even more obvious to me. Warts are painless, you don't necessarily know you have them and the chances for a breakout for herpes is more possible than warts... it depends on the person but I would worry about stress and my diet more-so than I would worry about warts. My friend the other day said that they're both the same but I, for some reason, I think that herpes is that much worse.

Arlene

Arlene is a 28 year old Caucasian female who is a college junior and lives off-campus with a roommate. She is in a

nonmonogamous relationship with someone of the opposite sex. Her partner has not been examined for genital warts/HPV and therefore it is not clear whether or not he has it. She practices safer sex "sometimes" and has had more than 10 relationships in her lifetime. Arlene was diagnosed with genital warts/HPV four months ago. Currently, she is getting acupuncture weekly to treat the genital warts/HPV which costs her $35 per session.

Interviewer: How have you been affected by this (genital warts/HPV)?

Arlene: When I first found this spot on my body I had no idea and I first thought it was herpes. I talked to my sister, and she has herpes, and she said "Oh it could be herpes". So I quickly worked myself into a higher and higher panic. So I'm waiting in the waiting room at family planning and I'm looking through the book and reading the symptoms for herpes, because that is what I decided I had, and I thought I was reading the symptoms for herpes and I was actually reading the symptoms for syphilis. So... my mind was creating this huge... you know, I was just panic stricken, so when I finally found out that this was condylomata (genital warts) it was an initial feeling of wow, this is great, this is nothing. My first understanding of it was that it's a virus and my first understanding of it, which I still really don't have cleared up, is that you basically have it for your

life. But.... I have been going to acupuncture. And like I had it removed and then it came back. And so it came back and that was a bummer. So... I went to acupuncture and it was really helping and that was great because if it would just go away instead of get removed it would mean that there would be less chance that I would get like cervical cancer or whatever you know, the longer term thing that comes.

Interviewer: Has this (being diagnosed with genital warts/HPV) affected the relationship you are in?

Arlene: It kind of does. It sort of... I'm really unclear, like where this came from and that you know, I really don't want to have this conversation with him because I haven't remained faithful to him. And that in my mind that changed. You know, I don't even know if I want to know if he has had an affair or. I'm not really willing to come clean with him because this affair I was having was a long affair. Like it was never a positive thing and it just .. you know .. that person (the man she is having an affair with) you know, he feels really strongly that it could not have come from him.

Interviewer: Do you use latex condoms with both partners?

Arlene: No... not always. I never use them... I mean

sometimes I ...when I first came down with condylomata I started using them with my lover but..(She begins to get emotionally upset and cry.)

Interviewer: Why are you upset now just talking to me?
Arlene: It's like a bummer, you know, that my body is not strong or healthy. You know like immortal. It's kind of crushing. You can just die or something you know.

Joan

Joan is a 22 year old Caucasian female who is a college junior and lives on-campus in residential housing with a roommate. She is in a satisfying monogamous relationship with someone of the opposite sex. In her lifetime she has had between 5 to 10 sexual partners. Joan was diagnosed with genital warts/HPV eighth months ago. In the past she has also had pubic lice and chlamydia. She does not practice safer sex with her current partner.

Interviewer: What was getting this virus (HPV) like for you?

Joan: I was really drunk and I was with this guy. I totally blacked out so I just went into hibernation for the whole month. I had no idea I had them (genital warts/HPV) cause I didn't have a real severe case. Just now I'm clean. Then I stopped drinking. Then I got into

a relationship with the man that I'm with now. We both went to the doctors before we had sex just because I was really messed up from that whole thing. I didn't go out anymore. I didn't talk to anybody. I wasn't drinking or partying. I felt used, you know what I mean. I had no control over what was happening to me, but I did, because I was the one that got drunk. Then we went to the doctor and I thought we had gotten rid of them so we didn't use a condom.

Interviewer: Were you told by your doctor that you could transmit this virus without having the actual warts?
Joan: No... but I didn't transmit them to him anyway. He (her current partner) was checked continuously by his doctor and he kept coming up negative. He (the doctor) checked me after the summer and he wasn't sure they were warts but he treated them as if they were anyway.

Interviewer: Did he (the doctor) tell you that you could transmit them even if you didn't have any warts?
Joan: Uhm... no he.. uhm.. he is always saying use condoms. Because we used condoms for a while when I first found out but after, when I was clean, it was never really discussed, you know what I mean, whether or not I could transmit them. Because my big question was doesn't

he have them because I know that I slept with him without using a condom when I have had them (genital warts).

Interviewer: It doesn't mean that he doesn't have them. You could have transmitted them to him and he just doesn't have symptoms. There is no guarantee that anyone can give you that you won't be able to transmit this virus to your partner.

Joan: Even if I don't have them (genital warts) anymore.

Interviewer: Yes. That's what I'm saying.

Joan: So you're saying that this virus is just like herpes. So....I'll always be able to give this to my partner.

At this point in the interview, the interviewer explains in great detail transmission, and the asymptomatic nature and complications of diagnosing genital warts/HPV. Joan was clearly under the impression that if she had no symptoms and her boyfriend had no symptoms, there was no chance that she could transmit this virus. She was informed that she could transmit the HPV virus asymptomatically and that it was incurable. Counseling was provided to Joan and it was suggested that she return for a follow-up appointment if she felt it was the needed.

Janet

Janet is a 20 year old Caucasian female who is a college sophomore and lives on-campus in residential housing with a roommate. She is in a "very satisfying" three month monogamous relationship with someone of the opposite sex whodoes not have genital warts/HPV. She has had 2 to 4 partners in her lifetime and practices safer sex "always". She was diagnosed only six weeks ago.

Interviewer: How has being diagnosed with genital warts affected your life?

Janet: Mostly the way it affects it is in the way of uhm...sex in that sense. And sex with my boyfriend and fooling around with my boyfriend. If I look out into the future and what life is going to be like if I don't have him and I'm going to have to deal with this with a new person. It scares me.

Interviewer: What scares you?

Janet: Getting involved with somebody and the way guys are. They want to go down your pants and they want to do this or that and if you don't go along with it they think something is wrong with you or you don't like them. Having to deal with that. And then having to deal with the point where maybe I do feel comfortable telling them why I'm like that and how they are going to react.

Interviewer: Did you contract genital warts from your current partner?

Janet: No. No, I don't think he had anything to do with it. I think I had it this summer. I know who I got it from basically. I'm not definitely positive.

Interviewer: Did you contact this person?

Janet: No. no, I haven't said anything. I don't want to...I don't want to....You know because maybe...I don't know it's too embarrassing for me. Because what if it's not him, then he's going to know something that I don't want anyone to know.

Interviewer: How are you feeling in general?

Janet: I'm fine with it until I have to go for treatments. I go for treatments and they take my blood pressure and it's never normal, so I know I'm really effected by it. I always come in (to the Health Services) and I'm really nervous. You know, I'm afraid that it is going to be worse. I think about my appointments or going for the colposcopy and I just want to cry. (She begins to get upset.)

Interviewer: Are you done with your treatments now?

Janet: No. I have to go back this week. Every time I go (for a treatment) I hope it's going to be over with and it isn't. It could be another couple of months. I

still have two spots that are being treated. And then when I talk to my mom it's upsetting because it's harder for her than I think it is for me. (At this point in the interview Janet begins to cry.)

Janet: And when I talk to my mom it's upsetting. She.... it's harder for her than it is for me. You know my mom feels like it's her fault, that she should have told me that it would have prevented this from happening. She and my step dad don't talk about it a lot but when it does come up they always think... Why Janet, she doesn't deserve this, it so unfair. And I hate hearing her say that.... because I know she feels bad for me.

Mary

Mary is a 23 year old Asian female who is a college junior and lives alone on-campus in residential housing. She is in a monogamous relationship with someone of the opposite sex. She feels "moderately comfortable" about being sexually active and is a rape survivor. She was diagnosed with genital warts/HPV three years ago and practices safer sex "sometimes". She also has had an abnormal pap exam and has been diagnosed with HPV on her cervix.

Interviewer: How has this affected your relationships?

Mary: Well I'm not in the same relationship as I was in at the time (when I was diagnosed). When I first heard

that, I told the guy that if he never wanted to see me again that I would understand. I didn't feel like I could have a normal sex life ever. I found out that I had HPV the day after the first time I slept with him.
Interviewer: How did you find out, through a pap exam?
Mary: Yeah.

Interviewer: So did he keep seeing you?
Mary: Yeah, we kept seeing each other for about 7 more months maybe. And even though it wasn't the primary problem in the relationship, it did cause a lot of stress. Just the fact that I wanted to be so careful, I didn't want to have any kind of oral sex. I always had to use condoms, even when my doctor said I was clear. I advised him to get checked because for one time we were not using condoms, for a short period of time we were not using condoms at all. And I told him that there was 60% chance that he could have them as I was told here in Health Services. He refused to get checked, he says "no he doesn't have them, he doesn't see them, we are both clear why don't we have sex without condoms." It just caused a lot of arguments.

Interviewer: Were the arguments mostly because he didn't want to use condoms?
Mary: Not only that he didn't want to use condoms, but

I would come from a treatment and my doctor would say that it was best not to have sex for a few days and he just didn't understand that. Sex was very painful for me you know...with or without the use of a condom. You know I didn't want to have sex at that time and it caused a lot of arguments and it caused a lot of stress in the relationship.

Interviewer: What about in your life now, how does it affect you now?

Mary: Well, I've been in another relationship for almost two years now. I was reluctant to get into a commitment relationship for about maybe a year. For about a year maybe a year and a half after I got out of that relationship I was dating different people. I would always, anytime I slept with someone, I would always use a condom. I wasn't really trying to get serious with someone because I was afraid of having to tell them about it. I was afraid of how they might react. I just didn't want to deal with that type of thing. I felt that it would be very difficult for me to find a relationship with something like that. I made the mistake of one guy I was with, about two months before I started going with my present boyfriend. I told him everything and he started treating me badly. He still stayed with me but

he totally treated me different and I felt dehumanized like I just was not a person anymore. So that ended quickly.

Interviewer: Do you have any sense why?

Mary: I think he...I think he thought I was promiscuous.

Interviewer: And what about your current relationship?

Mary: Well I told him when we first started having sex. Well first of all, when I slept with him, I don't think I was ready to sleep with him. But, I just did. You know it was my choice, I did. I felt that this was the kind of guy I wanted to be with for a long time. I liked him a lot and started caring about him early. I felt that he cared about me and I didn't want to screw it up by bringing this into it. I wanted to wait a while and make sure that everything about us was compatible before I made the decision to sleep with him because in that decision, I also had to tell him. I had to be honest. And when I was dating people, during that period, I didn't tell anyone, but I would always use a condoms, I would always use spermicides. I didn't use to be careful before, but it abruptly changed my behavior a lot. I use condoms and a spermicide all the time, without that I just wouldn't have sex. When I first started seeing this guy, I was kind of scared to tell him because I felt like, you know, I was afraid that he just wouldn't want

to see me anymore. But I didn't want to be in a relationship where I had to hide so many things. It's very stressful. And so... I decided that I was going to tell him. I don't know, but maybe I was being manipulative. He told me he thought I was being manipulative about two months after I told him. He accepted it because the warts were not active at the time. I had about 4 or 5 months of being clear and he decided that he didn't want to use condoms anymore since we were in a monogamous relationship as far as I was concerned. That's what he told me. He said that you know I'm clear and he wasn't worried about it. I told him that they could pop back up at any time within the next I don't know how many years.

Mary: My boyfriend also has a sexual problem... he can't ejaculate and therefore, I have to manually stimulate him in order for him to. So with that, I noticed that I had some warts here on my finger, and I don't masturbate, so there is only one way I could have got it there. I told him about that, I told him to get himself checked. He went and got checked and they told him that they didn't see anything. But the thing is, when you go and get checked you have to ask to be checked for warts because they're not going to see them straight off. You have to be checked for them with the vinegar solution, but I

guess he didn't want to believe it. He still insists on not using condoms. Any time I argue with him we just get into a big fight. He even gets angry when I go for my pap smear exams or to get checked out to see if I have any exterior warts. He is in total denial about this. He doesn't even want to think about it.

Interviewer: Does it affect your sexual relationship now?

Mary: I feel that I've become... not so much anymore, but for a period of time, I was very sexually uptight. I was just afraid of everything. Like if I had sexual intercourse and if some gets on his testicle or something like that, it felt like I should be wearing rubber gloves every time and it was not a pleasurable event.

Interviewer: Did you find that it affected any other part of your life, other than sexual?

Mary: Yeah, I got very depressed for a really long period of time. I never smiled. It was very difficult to make me laugh. I was not a sociable person at all. I just did not want to be around people. Even though I was in a dysfunctional relationship at the time, I felt that I was really lucky and that I should hang onto this guy because I didn't know of anyone else who would accept me with this. When we broke up, that's when I started

thinking all these things. I'm never going to be able to find a relationship. I don't know of any person that would accept me with this. Usually, when I'm depressed I eat more, but I lost a lot of weight.

Interviewer: Do you feel like you are staying in this relationship for the wrong reasons?

Mary: Yes, the fact that I'm not going to find someone else that would put up with that (genital warts/HPV). My current partner is not respectful to women. These kind of guys who are like violent and not respectful to women, these are the kind of guys most women would not choose to go out with. I don't think that I would choose to go out with them either. But... I choose to go out with them, fall in love, and then I start seeing these things that I don't want to be around. Then I want to get out but there are a few things holding me in the relationship. I think that this virus is a major reason why I stay. I don't feel that I can find an adequate partner; someone that I would be satisfied with. I have to settle...there is something wrong with these guys. I have to settle for it because with a normal guy they can just get a normal woman.

Karen

Karen is a 20 year old Caucasian female who is a college sophomore and lives on-campus alone in residential housing. She has been in a monogamous relationship with a man for one year. She has had between 5 to 10 partners in her lifetime and always uses condoms. Karen had an abnormal pap exam about 8 months ago and was diagnosed with genital warts/HPV on her cervix.

Interviewer: How has this virus affected your life?

Karen: When I think about choosing to be sexually active it certainly makes it harder to be comfortable with that decision. I did grow up religious, and I still am very strongly religious, so I probably have a hard time deciding to be sexually active and staying with that. And being diagnosed (with genital warts/HPV) made it all the harder to stay within my convictions to do so. It upset me, it reminded me that I hadn't been careful at a point in my life. It bothered me that I had been that naive I guess. Really, I had no idea under the sun that I had any kind of disease.

Interviewer: Are you currently in a relationship now and does he know that you have genital HPV?

Karen: Yes, he knows. I told him as soon as I found

out. I was told that there was nothing that I could do and that he had probably been infected by now. We still use condoms all the time.

Interviewer: Does it affect your sexual life?
Karen: No. I don't know what he thinks about it, but I was more upset when I got this. I think he was more concerned because I was upset. I was already in this relationship when I was told I had this. I doubt I got it from him. I had a feeling I had this for a while.

Interviewer: Did you experience any emotional changes when you were diagnosed?
Karen: I had the colposcopy when I was at home. I felt that the doctor was very flip with me. He told me that I had nothing to worry about. So at that point, I was very upset. He (the doctor) didn't even tell me that I had an STD; he just told me that I had a virus. I found out because I was talking to a friend of mine that I didn't want to know, and she told me that it was an STD. I have no plans of seeing this doctor again.

Kristen

Kristen is a 21 year old Caucasian female who is a college junior living alone on-campus in residential housing. She is in a monogamous relationship with someone of the

opposite sex that she indicates is a "happy" one. She has had between 5 to 10 partners in her lifetime and "always" practices safer sex. Kristen is a rape survivor. She was diagnosed with genital warts/HPV six months ago and had an abnormal pap exam one month ago, but HPV was not diagnosed on her cervix.

Interviewer: How does having genital HPV affect your sexual relationships?

Kristen: My boyfriend and I don't have oral sex. I like it but he's not able to do it to me because he's scared. (The interviewer explained that genital HPV is very difficult to transmit through oral sex.) I feel like he has this fear in him and nothing I say is going to change that. In other ways, occasionally he'll tease me about it, and it bothers me. In some ways, I joke about it with my friends, but in some ways, it makes me sad because I know that I can't get into a relationship with somebody without having told him something like that which is very scary.

Interviewer: Did you feel any kind of emotional change when you were diagnosed with this?

Kristen: I wouldn't say I was clinically depressed but I was sad. I'm still sad. Deep down it makes me very sad and anxious because my relationship with this person

is going to end. He's going away in June so I'm kind of nervous about telling people in other relationships.

Interviewer: What's the sadness about?

Kristen: I'm pretty sure that at some point I'll be rejected because of it or I'll miss out on something. Maybe a relationship that could have been very good because somebody was scared justifiably.

Arnold

Arnold is a 24 year old Caucasian male who is a college graduate student living with a roommate on-campus in residential housing. He is in a nonmonogamous relationship with someone of the opposite sex. Arnold has had 5 to 10 relationships in his lifetime and "always" practices safer sex. He was diagnosed with genital warts/HPV about one year ago and also has had chlamydia.

Interviewer: Did it affect you in any way when you were diagnosed with genital warts?

Arnold: Well, actually I knew I had it when I saw it. I recognized it because my friends had it a couple of months ago. So I wasn't surprised when I went to the hospital.

Interviewer: Has being diagnosed with genital warts affected you emotionally?

Arnold: No, not emotionally. I mean I wasn't glad when I saw it, but that's life.

Interviewer: Has it affected you sexually?

Arnold: Yeah, it's a lesson that I've learned, of course, and I guess I'm lucky that's it's not that bad. You can't die from it or anything. I take more care now and use condoms.

Interviewer: Does the woman you are dating now know about your genital warts?

Arnold: Yeah, she didn't think it was a big deal. She is not afraid of picking it up. I mean, we don't have intercourse without condoms.

Steven

Steven is a 23 year old Black male who is a college senior living alone on-campus in residential housing. He is in a nonmonogamous relationship with someone of the opposite sex. He has had 10 plus relationships in his lifetime and "sometimes" practices safer sex. During this interview he discussed, in great detail, his discomfort about using condoms. He was diagnosed with genital warts/HPV about one year ago, he also has genital herpes, and has had chlamydia.

Steven went to see a Mental Health counselor six months prior to this interview because he was using a lot of drugs and alcohol.

Interviewer: How has being diagnosed with genital warts affected your life?

Steven: When I realized that I had another infection, you know, I was like wait a minute. Then the fact that I infected someone with genital herpes that just was hard. (He had transmitted genital herpes to one of his girlfriends.) I never slept with anyone while I was active, so you know, I didn't feel like I was putting anyone in jeopardy. There is a lot of ambiguity in the medical literature in regards to that (to transmission). Now I have two permanent infections, you know that at a given time I can transmit, it's a trip.

Interviewer: How does this (having genital warts) affect you daily?

Steven: It's always on my mind. My sex life has almost over ridden almost anything else. It just engulfs, encompasses, everything else. You know what I mean. You know I had a big phobia, I was very AIDS phobic, you know I thought I must have it. You know what I mean. The thing is, I'm a very smart individual, but in this one regard of my life I haven't exhibited proper control. The thought of being with just one woman is just beyond

my scope of my imagination. I just wanted to sleep around in college like everybody else. When I started caring about this one woman, that's when this started becoming an issue because I wanted to tell her. We were so close and things were so good, but there was this one barrier. Something I needed to tell her and I wanted to tell her. There was never the right time, you know, I put it off and put off because of fear of rejection. It's like in light of the AIDS crisis, issues like herpes and warts have taken a great big back seat. You know your quality of life is severely impaired. I'm considered attractive you know, I have no problems finding girls and getting girls, but I might as well be a sexual leper.

Interviewer: How have you changed as a result of all this?

Steven: Well, I slowed down (sexually) for a long time. But when I use a rubber, I might as well not be having sex. I might as well drop it. That frustration, and you know the performance anxiety sets in and I'm like, to hell with it, I'm just going to go ahead and do this (have unprotected sex) bull. You know take the risk.

Interviewer: So when you date women, do you tell them that you have herpes and warts before you sleep with them?

Steven: No and I don't use condoms. All in all, the way I see it is that I just don't feel like I can perform well enough to keep a woman with a rubber. You know what I mean. It's just bizarre... because at the same time, if you let something develop it's almost inherent that it's going to stop if you tell them. Even if they really accepted you or not, you should have divulged it at the beginning. But by virtue of the fact that you did take that risk with someone's health, when you do tell them, it's automatic that it will end.

Steven: After I have sex, I'm fidgety, it's almost criminal. I'm very unsure about this part of myself. My not telling them is a big cop out. In lieu of the consequences, it's a big cop out. I got myself into this predicament by being irresponsible. My irresponsibility shouldn't transfer onto someone else.

Interviewer: How do you enjoy sex when you are putting other people at risk?

Steven: I can see in my life that I am going to have a lot of sexual partners and move from one to the other. When you stay with a person, this is when all these other

issues just come flooding in. If you're not active and you have no warts, and you're using a condom, your chances of transmitting these viruses, from all the data I've seen, your chances, from a single encounter are pretty slim. I see this as the only way I can go through life. You know I'm not hyperactive about sex anymore, a lot of this issue has taken out my sex drive a lot. To be honest with you, I would love to take a drug and just kill my sex drive.

Interviewer: Why did you go see a counselor at Mental Health? (Earlier in this interview, Steven mentioned that he had seen someone over at Mental Health.)

Steven: It was a couple of things...like you know, I used to get.. You know I used to get zooted (stoned on marijuana and alcohol) all the time also, you know high, drunk whatever you know, a lot too. You know what I mean, primarily it centered around these issues. (The issues being referred to are having genital HSV and HPV and experiencing difficulties using condoms.) I fell into kind of like a depression thinking about this twenty-four hours a day.

Jack

Jack is a 26 year old Caucasian male who is a college junior living on-campus in residential housing with a

roommate. He is single and feels "moderately comfortable" about being sexually active. He has had 5 to 10 relationships in his lifetime but has not been sexually active in the last year. Jack was diagnosed with genital warts/HPV approximately three years ago. He had a history of drug and alcohol abuse and is currently sober.

Interviewer: How has this (being diagnosed with genital warts/HPV) affected your life?

Jack: After filling out the survey I thought about it. It's hard too, there have been different times in my life before I came down with this, where I have not been sexually active. And... in general that has been staying away from romantic relationships. So it's hard to tell the very specific ways it has changed my behavior. Certainly, I worry about transmitting this disease or what a partner will think. I'm more anxious in a sexual situation for those reasons. I'm worried that just for that single reason that someone wouldn't want to sleep with me. It's been bothering me more recently.

Interviewer: Why?

Jack: Well taking that survey, just thinking about stress and things like that. I think that I have been under a lot more stress this semester for a lot of various reasons. I know when I'm under stress. A lot of negative things, you know, come to the fore front. I

concentrate on negative thoughts more than the positive things. So maybe that's why it has been bothering me more.

Interviewer: Have you had a relationship since you were diagnosed with genital warts?

Jack: Yes, two relationships.

Interviewer: Did you tell the person?

Jack: Yeah.

Interviewer: Well, what was the response, did it get in the way?

Jack: No, actually she thanked me for my honesty. And we used condoms and it was fine. But these aren't rational feelings needless to say, so by just that one experience it wasn't enough to get rid of all the other fears. I was fairly positive, but I wasn't one hundred percent certain, that a condom would be a sufficient enough barrier to prevent the spreading of it. When I told her, I said, you know...if you don't want to have sex because of this, that's fine, you don't have to. But it didn't affect our relationship one way or the other.

Interviewer: And you are not in this relationship anymore?

Jack: No.

Interviewer: You said there were two relationships, was the other one a similar response?

Jack: Well... no, but in that one I wasn't open about it at all. I knew I had them (genital warts), but I wasn't diagnosed. I had just come off a long period of drug and alcohol abuse and a lot of stuff bothered me, but I couldn't get my act together to go see a doctor. Needless to say this affected my sexual behavior too because I just didn't care if I was spreading this. At that point, I certainly knew that the warts were contagious and that's how I had got them. The partner I did get them from, I never talked to her or told her that I had gotten them from her. Soon after that, the relationship ended. She ended up calling me to tell me that she had them and that I should get myself checked out. When I had finally sobered up I realized that I had to take care of this.

<u>John</u>

John is a 22 year old Caucasian male who is a college senior living on-campus in residential housing with a roommate. He is in a monogamous relationship with someone of the opposite sex. He has had 5 to 10 sexual relationships in his lifetime. In the last year he only practiced safer sex "sometimes" but since his diagnosis with genital warts/HPV one year ago; he has "consistently" practiced safer sex.

Interviewer: How has having genital warts affected your life?

John: It hasn't that much because basically I've been with the same partner. It hasn't really changed anything except for safer sex I guess.

Interviewer: Has it affected your sexual relationships?

John: Yeah, it has made it a bit more stressed probably. I don't think it has really changed anything else dramatically.

Todd

Todd is a 27 year old Caucasian male who is a college junior living on-campus in residential housing with a roommate. He is single and has had more than 10 sexual partners in his lifetime. He "always" practices safer sex and was diagnosed with genital warts/HPV approximately 12 to 15 months ago. He is a recovering alcoholic. Todd continues to have problems with recurrences and is using Condylox which is a topical self-treatment.

Interviewer: How did you feel when you were diagnosed with genital warts?

Todd: In some ways I wish I didn't have it but in other ways, I lived a very unsafe life and I was grateful that I didn't have AIDS or something like that so it was a mixed bag. I wish I didn't have them.

Interviewer: Does it affect you daily in any way?

Todd: I don't know so much if it affects me daily, but I haven't had a girlfriend since I've had them. I pretty much see these two women when they clear up (the genital warts). So when they come up (the warts) we don't really see each other.

Interviewer: Do you think that it (not being in a relationship) is a result of having genital warts?

Todd: Yeah, I do.

Interviewer: Why?

Todd: Because I don't want to tell anyone that I've got them. You know, we just use condoms, and that's that.

Interviewer: Did you get depressed or anything?

Todd: Yeah, I mean it wasn't like a week long depression but I was sad for a little bit.

Interviewer: Does it affect you sexually when you're making love to a woman, the fact that you haven't told her?

Todd: No, because these women... it's not really a caring... it's pretty much a sexual relationship. I'm really attracted to someone right now and that's what some of the problem is. That's why some of my answers

are funny on the questionnaire. I haven't felt this way, the way I feel about this woman, in maybe four or five years.

Interviewer: What does this bring up for you?
Todd: Well you know, I'm going to have to tell her. I'm going to have to open myself up, all of these things. I can't sleep some nights. I feel nervousness.

Linda

Linda is a 20 year old Caucasian female who is a junior living off-campus with friends. She was diagnosed with genital warts/HPV only one week ago. Linda is certain that her current boyfriend (of six months) transmitted it to her because he was diagnosed before her. They were friends before they got involved and he didn't know that HPV was a virus that could be transmitted after treatment was over. Her boyfriend also did not know that genital warts/HPV was incurable. She has had between 5 to 10 partners in her lifetime and only practices safer sex "sometimes".

Interviewer: How did you feel when you were diagnosed with genital warts?
Linda: Well, I kind of knew because when my boyfriend came back from the doctor, he couldn't even face me. He just called me up, and I went to go pick him up. And I said that "I want you to tell me what it is, I want you

to tell me what it is" he said "I can't tell you, I'll give you a pamphlet". So he hands me a pamphlet that said what it is. So I drove home and read through the pamphlet. I felt like, Oh God, I smoke which puts me at high high risk for cervical cancer. Plus, after I went and talked to the doctor, she was telling me you have this for life. The thing I think I was most upset with was I have the disease now, but no matter who I'm with, I'm going to have to tell them. How do I know that someone is going to accept this? That was like my biggest thing. Whoever I marry is going to get it. That's like what upset me the most. I don't know what my future has in store for me as far as guys and marriage.

Interviewer: Has it changed your relationship with your partner even though it has only been a week?

Linda: Definitely, because at first I was just so mad at him that he was so stupid not to find out more things about it. So stupid not to remind me that he had had it at the beginning of our relationship. I mean, I guess, it didn't cross his mind because he himself didn't know that he still had it. Do you know what I mean? I was just so mad that he gave it to me. Sort of blaming him, and it's not his fault, it's my fault too because I should have practiced safer sex. I was really mad at him for a while. The funny thing is, he thought I would not

talk to him ever again. Just because he basically, he was overwhelmed with guilt that he had ruined my life. The weird thing was that the whole weekend after he found out, we never left each other's side. Just because I think, I don't really want to tell anyone about this. I think that we are the only ones who really understand our feelings. I think that we have different feelings about it. He feels worse than I do, just because he feels that this is all his fault. He felt like so awful, he cried in front of me. We have agreed to be completely and totally honest with each other no matter what the circumstances are. (She indicated during the interview that he had slept with his old girlfriend while he was involved with her.)

Interviewer: Is there anything else you would like to share with me?

Linda: Yeah. I think that it is so good that you're doing a study on it. I don't think that a lot of kids, like my age or anytime in college, know how to deal with this. Something like this is such a burden, it's such a burden on me. It's not like I'm not going to go on living, but for the time being, it's one of the things that is always on my mind.

Summary of Interview Transcripts

The eight women and five men that participated in being interviewed had some specific recurring themes expressed. Both the men and women had a fear of transmission and sharing their diagnosis of this disease with current and future partners and therefore had a fear of rejection. If they were currently in a relationship, they were afraid of what would happen if the relationship ended and they would have to divulge this information to their future partner. If they weren't in a relationship, they were afraid of telling their future partners about their disease. Most of the subjects interviewed expressed the negative impact this disease has had on their sexual relationships.

The men interviewed were more likely to engage in sexual intercourse with someone and not divulge their history of genital warts/ HPV for fear of rejection. The women, however, as fearful as they were of rejection, were more likely to take the risk and share their diagnosis with their partners.

The women seemed to be more apt to stay in a relationship that might not be as satisfying because they had a difficult time imagining a man accepting them with this condition. The men, on the other hand, did not appear to see their condition as a personal liability.

Women tend to seek out treatment on a more regular basis because of cervical involvement and annual pap smear exams.

For some of the participants the medical appointments appeared to be a constant reminder of this disease and tended to upset them emotionally.

A diagnosis such as an incurable STD like genital warts/HPV seems to have a negative effect on one's self-esteem. Some subjects even referred to themselves as "being clean" after the genital warts were removed following medical treatment. This implies that having genital warts means that they feel dirty or contaminated. This was evident in almost all subjects interviewed. Two subjects interviewed (Donna and Arlene) believed that being diagnosed with genital herpes was worse than being diagnosed with genital warts. These women were almost relieved that they didn't have herpes.

Drug and alcohol abuse contribute to the practice of unsafe sex which was evident in the interviews with Jack, Joan and Steven. The men reported engaging in unsafe sex knowing that they were possibly transmitting the HPV virus to their partners.

Based on the interview information, subjects appeared confused about medical facts pertaining to this disease such as transmission, subclinical infections, and asymtomatic transmission. In general subjects felt that they had received conflicting information from their health care providers.

CHAPTER 5

SUMMARY AND DISCUSSION

This concluding chapter will pull together the information presented in the preceding four chapters in order to answer the initial research questions that prompted this study. The quantitative data will be reviewed first and the findings will be evaluated and compared to similar research studies. Following this section will be the qualitative results. These results will also be reviewed and a desription of how these findings support the research questions of the study will be provided. Finally, the implications and limitations of this study will be addressed and recommendations for future research in this field will be discussed.

The study described here is unique in the research literature on STDs. Previous researchers (Persson et al., 1993; Palmer et al., 1993; HPV NEWS, Summer 1993; The Helper, 1981; Hillard et al, 1989; Longo & Yeager, 1988; Shaw & Rosenfeld, 1987; Aral, Vanderplate, & Magder, 1987; Stout & Bloom, 1986; Drob et al., 1985, Luby & Klinge, 1985; Silver et al., 1985; Manne & Sandler, 1984; The Helper, 1982;) have used subjects diagnosed only with genital HSV and HPV. Very few studies (Vail-Smith & White, 1992; Campion et al., 1988; Shaw & Rosenfeld, 1987) used control groups in their research

designs. There has been only one other study found (Houck & Abramson, 1986) which examines three different groups: people with an incurable STD, people with a curable STD and people with no diagnosed STD. This study was unique because it included male subjects in both of the experimental and the control groups.

Quantitative Findings

The first research question in this study stated that there would be significant differences in people diagnosed with genital warts/HPV when compared with people diagnosed with a curable STD or no diagnosed STD. Results indicated that subjects in this study who were older (more than 20 years old), had more than two to four sexual partners in the past year, had at least five to ten sexual partners in their lifetimes, had their first sexual intercourse at an early age (13 to 15 years old), and only practiced safer sex "sometimes" were significantly more likely to have been diagnosed with either genital warts/HPV or a curable STD than the control group.

A significant number of subjects diagnosed with genital warts/HPV indicated that they had changed their sexual behavior in response to their diagnosis by practicing safer sex "consistently". Even though it was not a significant

finding 17% of the subjects with genital warts/HPV reported that they have stopped being sexually active as a result of their diagnosis.

Women who had reported that they had been raped were more likely to have genital warts/HPV or a curable STD. There is no evidence which suggests that the STD was transmitted during the rape. The experience of surviving a rape may have a long standing effect on a person's character, especially their self-esteem. The result of a lowered self-esteem could have many ramifications in an individual. Women, for example, might place themselves in higher risk situations sexually or have more sex with more partners as a way of gaining more acceptance or boosting their self-esteem knowing, that this behavior is detrimental to her health.

There were no significant differences between any of the three groups studied and the following variables: gender (when rape survivors were excluded), grade point average, relationship status, sexual satisfaction, parental relationships, living situation, religious training and beliefs, therapeutic history and sexual abuse history. The lack of significant differences between the three groups indicates that a diagnosis of STDs (curable or genital warts/HPV) did not affect some important areas of one's life.

The second research question stated that there would be a statistically significant difference in psychological

symptoms as measured by the SCL-90-R between subjects diagnosed with genital warts/HPV and those diagnosed with a curable STD.

There were only two significant differences between the experimental and control groups on the SCL-90-R. The two experimental groups had higher scores on the psychoticism scale and the Positive Symptom Distress Index (PSDI) than the control subjects. There were no differences between the two experimental groups. The elevated scores on the psychoticism scale may suggest that the subjects in the HPV group and the curable group were experiencing some mild interpersonal alienation. Alienation can be the result of the shame a person experiences when he or she is diagnosed with a STD and the fear of rejection that is so often experienced by people who get STDs.

The differences in the PSDI scores may have something to do with the way the subjects were feeling when they filled out the SCL-90-R. For example, some students participating in this study might have been visiting the Health Center for a variety of reasons, such as an illness, which could influence their responses to the SCL-90-R.

When the subjects were evaluated by gender, the scores of the women in the curable and HPV groups were significantly higher than the No STD group in the depression, hostility and psychoticism sub-scales. The curable group differed significantly from the No STD group in the somatization,

obsessive-compulsive, anxiety, and paranoid ideation sub-scales. The curable group also differed significantly from the No STD group and the HPV group in the phobic anxiety subscale.

It is logical to expect elevations in the somatization, depression, anxiety and hostility sub-scales for those diagnosed with a curable STD and genital warts/HPV. These people are very likely to be preoccupied with their bodies and feel anxious and depressed since they have been diagnosed with a STD. In addition, people diagnosed with genital warts/HPV may also feel hostility at the person who transmitted the disease to them, the medical establishment for the lack of a "cure", or anger at themselves for being careless and not practicing safer sex.

In Persson et al.'s (1992) study on women and the physical and psychological effects of genital warts, participants in the study felt angry, depressed, disgusted and blamed themselves for getting this disease. Likewise, a study by Hillard et al. (1989) supports these findings. There investigators documented significant levels of acute stress on the SCL-90, usually associated with clinical psychiatric populations, for women with genital herpes. Higher scores on the phobic anxiety, paranoid ideation, and psychoticism sub-scales may indicate that these subjects have a more severe reaction than previous research has indicated. The symptoms represented by these scales suggest that these participants

spend a great deal of time dwelling inward, being self-centered, feeling isolated and mistrustful of others.

The fact that there were differences between the curable and HPV groups indicates that "curability" may not be a factor in distinguishing between the two. Those whose disease is curable are still manifesting the same reactions. Since the subjects in the curable group had higher scores than those subjects in the HPV group may be an indication that they are experiencing anticipatory fears. Typically when someone is diagnosed with a STD, the health care provider will exam the person for other STDs as well. Another factor that may have some influence on a person diagnosed with a curable STD, is the information that the health care provider gives the person upon diagnosis. For example, because of the lack of a "definitive" diagnosis for genital herpes and genital warts/HPV, the health care provider treating the person for the curable STD might have told the person that they have put him or herself at risk for other STDs which can not be confirmed. Another important factor they could influence the way someone is affected by a diagnosis of a curable STD is guilt. The literature (Houck & Abramson, 1986) has suggested that people who feel guilty regarding their sexual behavior are more likely to experience stress after contracting a STD. Each individual will manifest stress differently.

The only symptom dimension that was significantly different for male subjects was somatization. Subjects who

were not afflicted with any STD had the highest scores. One can speculate that the increased somatization score was the result of the certain factors regarding the male subjects not afflicted with any STD. A large percentage (39%) were recruited from classrooms where the majority of students were first year students and the sampling was done in the beginning of the fall semester therefore, the increase in somatization may have been the result of feelings of anxiety being masked by somatic complaints as a result of living away from home for the first time and the stress involved in entering college.

Due to the fact that men have not been included in most of the research on genital HSV and HPV, these findings regarding low SCL-90-R scores are unique. It may indicate that men are reluctant to admit to the symptoms suggested by the scale; it may indicate that they do suffer less than the women and are, therefore, less affected by a diagnosis of STDs. Since men are more likely to have subclinical infections, they may have more difficulty believing they actually have the disease (Lucas, 1988). Men do not experience the annual health markers women must schedule into their lives like annual pap exams, and so may not confront the possibility of the disease as often as women.

In studying the psychological reaction to genital warts/HPV, differences might have been more evident between the two groups had this study been a longitudinal study. The researcher speculates that over time, as women have to return

for medical treatment, take annual pap exams, and deal with the risk of cervical cancer; their psychological symptomatology might increase compared to the curable STD group (Persson et al., 1992). To study this difference would require more research.

Qualitative Findings

Fear of transmission, rejection, frustration with the medical establishment, and telling future partners were recurring concerns in all those interviewed.

Women were obviously more concerned and worried about the potential complications of cervical neoplasia. Therefore, having to return for follow-up appointments can be very disconcerting. Annual pap exams can bring up emotional issues for the woman diagnosed with genital warts/HPV. Palmer, et al. (1993) studied women's responses to treatment for cervical intra-epithelial neoplasia (which is highly correlated with genital HPV) and found that this affected their body image and sexual relationships.

> I'm upset when I have to go for the appointment. Because it's a reminder of it. And it's not that I'll ever forget about it but it's just something right now." (Donna, p. 64)

> "I'm fine with it until I have to go for treatments. I go for treatments and they take my blood pressure and

it's never normal, so I know I'm really affected by it. I always come in (to the Health Center) and I'm really nervous. You know, I'm afraid that it is going to be worse. I think about my appointments or going for the colposcopy and I just want to cry." (Janet, p. 72)

People with genital warts/HPV have a constant fear of transmitting this virus to either their current partner or future partners.

"If I look out into the future and what life is going to be like if I don't have him (my current partner) and I'm going to have to deal with this with a new person. It scares me." (Janet, p. 71)

"I'm pretty sure that at some point I'll be rejected because of it (having genital warts/HPV) or I'll miss out on something. Maybe a relationship that could have been very good because somebody was scared justifiably." (Kristen, p. 83)

This fear can have a severe impact on their sexual relationships. A study completed by the American Social Health Association (HPV News, Summer 1993) found that women experienced depression, shame, and a negative impact on their sex drive and on their enjoyment of sexual contact significantly more often than men did.

"I would come from a treatment and my doctor would say that it was best not to have sex for a few days and he (my partner) just didn't understand that. Sex was very painful for me you know... with or without the use of a condom." (Mary, p. 75)

"My boyfriend and I don't have oral sex. I like it but he's scared. I feel like he has this fear in him and nothing I say is going to change that." (Kristen, p. 82)

The interviews support the findings of Campion et al. (1988) and Palmer et al. (1993) who found that a diagnosis of genital warts/HPV has profound effects on one's sexuality. Hillard et al. (1989) also found that the parts of one's life that were most affected were sexuality, self-image and love relationships.

The Sexual History and Demographic Questionnaire, which asked specific questions regarding sexual satisfaction, did not find that sexual satisfaction was effected by a diagnosis of genital warts/HPV or a curable STD. This could be the result of how the questions regarding this issue were addressed. (For results of the Sexual History and Demographic questionnaire please refer to Appendix F on page 140.)

Men seemed to be less concerned about engaging in sexual intercourse with someone and not divulging their history of genital warts/HPV to their partners, mainly because they feared rejection.

> "No (I don't tell women I date that I have herpes and warts before I sleep with them) and I don't use condoms. All in all, the way I see it is that I just don't feel like I can perform well enough to keep a woman with a rubber. After I have sex, I'm fidgety, it's almost criminal. I'm very unsure about this part of myself. My not telling them is a very big cop out". (Steven, p. 87)

> "I worry about transmitting this disease or what a partner will think. I'm more anxious in a sexual situation for those reasons. I'm worried that just for that single reason (having genital warts/HPV) that someone wouldn't want to sleep with me." (Jack, p. 89)

> "I don't want to tell anyone that I've got them. You know we just use a condom, and that's that". (Todd, p. 93)

Due to the fact that men are understudied in the literature, there is no additional support for this finding. For example, the reluctance to practice safer sex or discuss

one's STD history could possibly have something to do with performance anxiety. Men diagnosed with genital warts/HPV need to be evaluated and interviewed more extensively.

Women report that they are more accepting and nurturing of their partners and are more likely to take the risk of sharing their diagnosis with their partners.

> "I wanted to wait a while and make sure everything was compatible before I made the decision to sleep with him because in that decision, I also had to tell him. I had to be honest." (Mary, p. 76)

> "It's going to worry me and it is embarrassing to have to tell someone because I know I have to tell the next person I'm with but at the same time you don't want to." (Donna, p. 63)

> "The thing I think I was most upset with was I have the disease now, but no matter who I'm with, I'm going to have to tell them. How do I know that someone is going to accept this?" (Linda, p. 95)

Drug and alcohol abuse contribute to the practice of unsafe sex and the transmission of STDs. Students who are away from home for the first time in their lives will tend to experiment with alcohol and drugs.

"I knew I had them (genital warts), but I wasn't diagnosed. I had just come off of a long period of drug and alcohol abuse and a lot of stuff bothered me, but I couldn't get my act together to go see a doctor. Needless to say this affected my sexual behavior too because I just didn't care if I was spreading this (genital warts/HPV)." (Jack, p. 91)

"You know, I used to get zooted (high on alcohol and marijuana) all the time also, you know high.. drunk ...whatever, you know, a lot too. You know what I mean, primarily it centered around these issues. (i.e. using condoms)." (Steven, p. 88)

If someone is feeling inhibited or shy, which is often the case regarding dating and being sexual, drinking will lessen their inhibitions. Unfortunately, if people are not practicing safer sex when they are sober, there is even a lesser chance that this behavior will take place when they are intoxicated. Therefore, alcohol and drug use creates a high risk situation for the transmission of STDs in most cases.

Indicative in the interviews was the negative effect on one's self-esteem and sexuality. The fact that subjects referred to themselves as being "clean" after removal of the genital warts means that they had felt "unclean". Buckwalter (1982) actually found that people associate skin diseases with

"uncleanliness". Anderson and Jochimsen (1985) reported that 82% of a sample of women who had experienced gynecologic cancer reported poorer body image. The effects on one's self-esteem was evident in how subjects viewed themselves now that they had genital warts/HPV.

> "I don't feel that I can find an adequate partner; someone that I would be satisfied with. I have to settle... there is something wrong with these guys (I currently date). I have to settle for it because with a normal guy, they can just get a normal woman." (Mary, p. 79)

> "I told him everything and he started treating me badly. He still stayed with me but he totally treated me different and I felt dehumanized like I just was not a person anymore." (Mary, pp. 75, 76)

> "You know your quality of life is severely impaired. I'm considered attractive you know, I have no problems finding girls and getting girls, but I might as well be a sexual leper." (Steven, p. 86)

Dr. Richard Keeling (HPV News, Summer, 1992) believes that Americans have a very limited view of health because they think that people are either healthy or unhealthy. They don't view health as being on a continuum. This limited perspective

can make a person diagnosed with a disease such as genital warts/HPV feel like their health has ended.

> "It's like a bummer, you know, that my body is not strong or healthy. You know like immortal. It's kind of crushing. You can just die or something." (Arlene, p. 68)

Frustration with the medical establishment for the perceived lack of definitive information regarding genital warts/HPV can make things difficult for both the health care provider (HPV News, Spring 1993) and the patient. This frustration was evident in two of the subjects interviewed.

> "I felt that the doctor was very flip with me. He told me that I had nothing to worry about. So at that point, I was very upset. He (the doctor) didn't even tell me that I had an STD; he just told me that I had a virus. I found out because I was talking to a friend of mine that I didn't want to know, and she told me that it was an STD. I have no plans of seeing this doctor again." (Karen, p. 81)

> "No (This response was to the question of whether or not her doctor had told her that she could transmit the HPV with no symptoms.)... he is always saying use condoms. Because we used condoms for a while when I first found

out, but after, when I was clean, it was never really discussed, you know what I mean, whether or not I could transmit them." (Joan, p. 69)

What is missing in the medical treatment for people diagnosed with genital warts/HPV is accurate information regarding transmission, asymptomatic infection and transmission, the difficulty in diagnosing asymptomatic infection, and the permanence of this disease.

A couple of subjects indicated that a diagnosis of genital herpes was worse than a diagnosis of genital warts/HPV.

"I think that herpes is even more frightening... Herpes, I think is much more obvious cause when you get your first break out you can become extremely ill and sick, it's painful, it's really sickening...I mean I think anything is sickening to look at, but it's even more obvious to me." (Donna, p. 65)

"So I quickly worked myself into a higher and higher panic. (The response she had before she was diagnosed with genital warts/HPV.) So I'm waiting in the waiting room at family planning and I'm looking through the book and reading the symptoms for herpes, because that is what I decided I had. So... my mind was creating this huge...you know, I was just panic stricken, so when I

finally found out that this was condylomata it was an initial feeling of wow, this is great, this is nothing." (Arlene, p. 66)

"So you're saying that this virus is just like herpes. (The response Joan had when she found out in the interview that genital warts/HPV is incurable.) So... I'll always be able to give this virus to my partner." (Joan, p. 70)

Genital herpes has received much more attention in the popular press than genital warts/HPV and therefore the negative stigma regarding HPV is not as prevalent, although the problem is as serious and as widespread.

Some students interviewed were so devastated by this disease that they felt it consumed them.

"I fell into kind of like a depression thinking about this (having genital HSV and HPV and experiencing difficulty using condoms) twenty-four hours a day." (Steven, p. 88)

"I think that is so good that you're doing a study on it. I don't think that a lot of kids, like my age or anytime in college, know how to deal with this. Something like this is such a burden, it's such a burden on me. It's

not like I'm not going to go on living, but for the time being, it's one of the things that is always on my mind." (Linda, p. 96)

Although these interviews are interesting and support the research both in this study and others, the sample of students who volunteered to be interviewed was not selected randomly. It is also a relatively small sample, compared to the number of students diagnosed with genital warts/HPV, therefore, generalizations should not be made regarding the findings.

Summary

As described in this study, genital warts/HPV is a chronic illness. The diagnosis of this disease and a curable STD requires certain psychological assistance and patient education. People at high risk (those with multiple sex partners, who experienced first intercourse at an early age, have a history of STDs and alcohol abuse) need to be informed about genital warts/HPV, its prevalence, its virulent nature, and its medical complications. According to a study done by Vail-Smith and White (1992) college age students are at considerable risk for contracting genital warts/HPV because of their lack of awareness of HPV and the high incidence of students not practicing safer sex.

Education about safer sex practices, high risk sex and the ramifications of these behaviors should be introduced at

the age of thirteen or even earlier. Resources should be available for adolescents who have questions and need counseling regarding all aspect of sexuality.

The psychosocial aspects of any STD are of great importance in treating the person "systemically" to fully deal with all aspects of the disease, including its impact on his or her life, especially when an STD is potentially carcinogenic, like genital warts/HPV. A study by Anderson and Jochimsen (1985) confirmed that women who had experienced gynecologic cancer reported poorer body image when compared to women with breast cancer. A woman with genital warts/HPV should be evaluated by her health care provider to assess if she is susceptible to experiencing a negative body image as a result of her diagnosis, and referred for counseling if so. This type of diagnosis requires attention from the entire medical and mental health community.

It is crucial to schedule a follow-up appointment with a health educator or a health care provider so that all questions pertaining to the specific disease can be addressed. Due to the general nature of HPV and the course of treatments that must be followed, compliance with safer sex practices, treatment regimes, and follow-up examinations are critical.

When warranted, a mental health assessment should be completed to assess whether or not the person should be referred for counseling. People who are most at risk for adverse psychological reactions, once an STD diagnosis is

made, should be screened and a specific intervention most effective for that person should be determined.

Curable STDs (i.e. chlamydia, gonorrhea, and chancroid) even though they are treatable, may cause an increase in psychological symptomatology. Health care providers might not be aware of the negative effects these diseases may have on their patients because they can be "cured ". If a person is experiencing any level of guilt for experimenting with his or her sexuality, whether it is religious or culturally based, a diagnosis of a STD could potentially exacerbate a full range of difficult emotions. As demonstrated in this study, this population also has needs that may require some counseling to alleviate their psychological discomfort.

College health educators need to focus on increasing their efforts in STD prevention and education. In order for these efforts be effective, health educators, physicians, and mental health practitioners need to work collaboratively to reach the high risk populations. Education curricula dealing with AIDS and STDs needs to stress HPV as a serious disease.

This study has demonstrated, through the interviews and results of the SCL-90-R, that public education, identification of high risk groups, prevention and counseling are critical measures that should be taken if the spread of genital warts/HPV is to be contained. We need to take what we have learned from the HIV/AIDS epidemic and apply it to other STDs.

Limitations of the Study

This study has several limitations which must be considered in evaluating the results. The first problem was with the subject sample. There are more female participants than men, making it more difficult to generalize the findings to both gender groups.

Another important limitation in this study was the sample recruitment. There are certain biases to be expected studying participants who have volunteered to be in the study. However, the majority of subjects from the HPV group and the incurable group were recruited from the University Health Center and paid $5 for participating in the study. The No STD group (or control group) were volunteers from various academic classes on campus and were not paid for participating in the study. Therefore, the majority of students from the No STD group were recruited from a "well" population as opposed to the HPV and curable groups which were seeking out some kind of medical care at the University Health Center and then referred to the study. The nature and secrecy of acquiring an STD and issues of confidentiality, made it difficult to recruit subjects for this study.

This study took place in a rural northeastern public university so caution has to be exercised in generalizing the findings to an urban or non-college population.

Another important limitation was in the qualitative section of this study. The interviews were collected by the

researcher herself who acknowledges possible biases in the direction of confirming her own hypotheses. It would have been better if the interviews were conducted by someone who was not aware of the research questions and was given standard questions to ask all participants.

A final limitation was that this study was a cross-sectional as opposed to a longitudinal study and caution should be taken when making conclusions about the long term results. There can be no conclusions made regarding the psychologcial symptomatology evident in the experimental groups and time.

Suggestions for Future Research

Similar studies should be replicated with some significant changes. The researcher recommends that the study be done jointly with a medical staff so subjects can be recruited in the clinic when they are initially diagnosed with a curable STD and genital warts/HPV. In order to examine the differences in how someone responds to a curable STD versus genital warts/HPV, this future study should be a longitudinal one in which subjects are retested 6-9 months after their initial diagnosis. A strong attempt should be made to include a large percentage of male subjects due to the lack of male participants in most studies on STDs. Because the interviews yielded important details, the researcher recommends that a

structured interview be a mandatory piece of the study design. All subjects, including the control group or NO STD group should be recruited from the Health Center.

Possible alcohol and drug abuse/use should be addressed in the sexual history and demographic questionnaire and the date of when subjects were diagnosed with an STD should be recorded. Even though time was not a significant variable for when someone was diagnosed with genital warts/HPV, the researcher speculates that as HPV becomes more well known by the general public, and cervical cancer continues to increase in this age group, the time factor might become more significant.

APPENDIX A

SEXUAL HISTORY AND DEMOGRAPHIC QUESTIONNAIRE

Sexual History and Demographic Questionnaire

Please circle the most appropriate response or fill in the blank.

1. My sex is:
   1. Female
   2. Male

2. My age is:
   1. 17-18
   2. 19-20
   3. 21-24
   4. 25-30
   5. 31+

3. My student I.D. number is _____.

4. My grade point average is _____.

5. My race is:
   1. White, non-hispanic
   2. Black, non-hispanic
   3. Hispanic
   4. Asian, Pacific Islander
   5. American Indian, Alaskan Native
   6. Other_____
   7. unknown

6. My year is:
   1. first year
   2. sophomore
   3. junior
   4. senior
   5. graduate student
   6. not applicable

7. I live:
   1. on-campus in residential housing
   2. on-campus in family housing
   3. off-campus with friends
   4. off-campus with family
   5. other_____

8. My current lifestyle is:
   1. single
   2. married and living with spouse
   3. monogamous relationship with someone of the same sex
   4. monogamous relationship with someone of opposite sex
   5. nonmonogamous relationship with someone of the same sex
   6. nonmonogamous relationship with someone of the opposite sex
   7. divorced
   8. separated

9. My current living situation is:
   1. living alone
   2. living with someone that I am sexually involved with
   3. living with someone that I am not sexually involved with

10. I have had this living arrangement for_____year(s) and _____months

11. My current living situation is:
   1. very good
   2. good
   3. satisfactory
   4. unsatisfactory
   5. very unsatisfactory

12. My religious training as a child was:
   1. Protestant
   2. Catholic
   3. Jewish
   4. other_____
   5. none

13. My religious faith is:
   1. very strong
   2. strong
   3. moderate
   4. weak
   5. very weak
   6. nonexistent

14. My current relationship with my parent(s) or guardian(s) is:
   1. very good
   2. good
   3. moderate
   4. bad
   5. very bad
   6. nonexistent

15. Currently I would identify myself as:
    1. not sexually active
    2. in a sexual relationship with one partner
    3. in a sexual relationship with more than one partner

16. If you are currently in a sexual relationship(s), how would you identify the overall satisfaction of this (or these) relationship(s)?
    1. very happy
    2. happy
    3. satisfactory
    4. unsatisfactory
    5. very unhappy
    6. I am currently not in a sexual relationship

17. My sexual partner(s) are usually:
    1. of the same sex
    2. of the opposite sex
    3. of both sexes
    4. not in a sexual relationship

18. I feel the following about my sexual orientation or preference:
    1. very comfortable
    2. comfortable
    3. moderately comfortable
    4. uncomfortable
    5. very uncomfortable

19. I feel the following about being sexually active:
    1. very comfortable
    2. comfortable
    3. moderately comfortable
    4. uncomfortable
    5. very uncomfortable

20. My first experience having sexual intercourse was when I was:
    1. 13 or younger
    2. 14-15 years old
    3. 16-17 years old
    4. 18 or older
    5. not applicable (never had sexual intercourse)

21. During the past year, I have had sex with the following number of partner(s):
    1. 0
    2. 1
    3. 2-4
    4. 5-10
    5. greater than 10

22. During the past year, I have had sex on the average about_____times per week.

23. In my lifetime I have had the following number of sexual partner(s):
    1. 0
    2. 1
    3. 2-4
    4. 5-10
    5. greater than 10

24. Overall, I would rate my sexual encounters as:
    1. very pleasurable
    2. pleasurable
    3. satisfactory
    4. unsatisfactory
    5. very unsatisfactory
    6. not applicable

25. I have been diagnosed with the following sexually transmitted diseases: (circle all that apply)
    1. Genital warts
    2. Genital herpes
    3. Chlamydia
    4. Gonorrhea
    5. Syphilis
    6. other_____.
    7. I have never been diagnosed with a sexually transmitted disease.

26. Are you currently in therapy with a mental health practitioner?
    1. yes
    2. no

27. Have you ever been in therapy with a mental health practitioner?
    1. yes
    2. no
    3. If yes, when?_____

28. In the last year, how often have you used condoms and spermicide when having sex? (please circle only one answer)
    1. always
    2. sometimes
    3. never
    4. have not had sex in the last year
    5. I am a woman not sexually involved with men.

29. How open were your parents or guardians about sexual information before you reached puberty?
    1. very open
    2. somewhat open
    3. neither uptight nor open
    4. somewhat uptight
    5. very uptight

30. How open are your parents or guardians now?
    1. very open
    2. somewhat open
    3. neither uptight nor open
    4. somewhat uptight
    5. very uptight

31. Are you the victim/survivor of rape?
    1. yes
    2. no

32. Are you the victim/survivor of incest/childhood sexual abuse?
    1. yes
    2. no

33. Have you changed your behavior since learning about your diagnosis with a sexually transmitted disease?
    1. yes
    2. no
    3. not applicable

34. How would you say your sexual behavior has changed since being diagnosed with genital warts(HPV)?

    (Please circle only one response)

    1. I practice safer sex (i.e. such as condoms and dental dams) consistently while being sexual with my partner(s).
    2. I practice safer sex sometimes while being sexual with my partner(s).
    3. I do not practice safer sex while being sexual with my partner(s).
    4. I have stopped being sexually active as a result of my diagnosis.
    5. Not applicable.

35. How would you say your emotions have changed since being diagnosed with genital warts(HPV)?

(Please circle only one response)

1. My emotions haven't changed.
2. I feel guilty when being sexual with my partner(s).
3. I feel more depressed.
4. I feel more anxious.
5. Not applicable

36. Have you talked to or had an appointment with someone in Health Education for counseling for a diagnosis of a sexually transmitted disease?
1. yes
2. no
3. not applicable

37. I was diagnosed with genital warts (HPV)_____months ago.

For the following questions please only answer those that apply.

(Questions 38 - 40 are for women only)

38. I had a abnormal pap exam_____months ago.

39. I had a colposcopy exam_____months ago.

40. As a result of the colposcopy exam, genital warts or HPV was diagnosed on my cervix.
1. yes
2. no

Thank you for participating in this study.

In addition to the information obtained in these questionnaires, I am also interested in interviewing people to learn more about how people are affected by STDs. If you are willing to participate in a 15 minute interview, please complete the information on the next page.

Please insert the completed questionnaires in the envelope, seal and return today to the Health Education Office on the second floor of the University Health Center.

Yes, I am willing to participate in a 15 minute interview.

First name_____

Telephone ( )_____

APPENDIX B

SYMPTOM CHECK LIST-90-R

SCL—90—R®

SIDE 1

INSTRUCTIONS:

Below is a list of problems people sometimes have. Please read each one carefully, and circle the number to the right that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Circle only one number for each problem and do not skip any items. If you change your mind, erase your first mark carefully. Read the example below before beginning, and if you have any questions please ask about them.

SEX

MALE ○

FEMALE ○

NAME: _____

LOCATION.

EDUCATION.

MARITAL STATUS MAR __SEP __DIV __WID __SING __

DATE			ID. NUMBER	AGE
MO	DAY	YEAR		

VISIT NUMBER

EXAMPLE HOW MUCH WERE YOU DISTRESSED BY	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
1. Bodyaches	0	1	2	(3)	4

HOW MUCH WERE YOU DISTRESSED BY:		NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
1. Headaches	1	0	1	2	3	4
2. Nervousness or shakiness inside	2	0	1	2	3	4
3. Repeated unpleasant thoughts that won't leave your mind	3	0	1	2	3	4
4. Faintness or dizziness	4	0	1	2	3	4
5. Loss of sexual interest or pleasure	5	0	1	2	3	4
6. Feeling critical of others	6	0	1	2	3	4
7. The idea that someone else can control your thoughts	7	0	1	2	3	4
8. Feeling others are to blame for most of your troubles	8	0	1	2	3	4
9. Trouble remembering things	9	0	1	2	3	4
10. Worried about sloppiness or carelessness	10	0	1	2	3	4
11. Feeling easily annoyed or irritated	11	0	1	2	3	4
12. Pains in heart or chest	12	0	1	2	3	4
13. Feeling afraid in open spaces or on the streets	13	0	1	2	3	4
14. Feeling low in energy or slowed down	14	0	1	2	3	4
15. Thoughts of ending your life	15	0	1	2	3	4
16. Hearing voices that other people do not hear	16	0	1	2	3	4
17. Trembling	17	0	1	2	3	4
18. Feeling that most people cannot be trusted	18	0	1	2	3	4
19. Poor appetite	19	0	1	2	3	4
20. Crying easily	20	0	1	2	3	4
21. Feeling shy or uneasy with the opposite sex	21	0	1	2	3	4
22. Feelings of being trapped or caught	22	0	1	2	3	4
23. Suddenly scared for no reason	23	0	1	2	3	4
24. Temper outbursts that you could not control	24	0	1	2	3	4
25. Feeling afraid to go out of your house alone	25	0	1	2	3	4
26. Blaming yourself for things	26	0	1	2	3	4
27. Pains in lower back	27	0	1	2	3	4
28. Feeling blocked in getting things done	28	0	1	2	3	4
29. Feeling lonely	29	0	1	2	3	4
30. Feeling blue	30	0	1	2	3	4
31. Worrying too much about things	31	0	1	2	3	4
32. Feeling no interest in things	32	0	1	2	3	4
33. Feeling fearful	33	0	1	2	3	4
34. Your feelings being easily hurt	34	0	1	2	3	4
35. Other people being aware of your private thoughts	35	0	1	2	3	4

Please continue on the following page ▶

SCL—90—R®

SIDE 2

HOW MUCH WERE YOU DISTRESSED BY:		NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
36. Feeling others do not understand you or are unsympathetic	36	0	1	2	3	4
37. Feeling that people are unfriendly or dislike you	37	0	1	2	3	4
38. Having to do things very slowly to insure correctness	38	0	1	2	3	4
39. Heart pounding or racing	39	0	1	2	3	4
40. Nausea or upset stomach	40	0	1	2	3	4
41. Feeling inferior to others	41	0	1	2	3	4
42. Soreness of your muscles	42	0	1	2	3	4
43. Feeling that you are watched or talked about by others	43	0	1	2	3	4
44. Trouble falling asleep	44	0	1	2	3	4
45. Having to check and double-check what you do	45	0	1	2	3	4
46. Difficulty making decisions	46	0	1	2	3	4
47. Feeling afraid to travel on buses, subways, or trains	47	0	1	2	3	4
48. Trouble getting your breath	48	0	1	2	3	4
49. Hot or cold spells	49	0	1	2	3	4
50. Having to avoid certain things, places, or activities because they frighten you	50	0	1	2	3	4
51. Your mind going blank	51	0	1	2	3	4
52. Numbness or tingling in parts of your body	52	0	1	2	3	4
53. A lump in your throat	53	0	1	2	3	4
54. Feeling hopeless about the future	54	0	1	2	3	4
55. Trouble concentrating	55	0	1	2	3	4
56. Feeling weak in parts of your body	56	0	1	2	3	4
57. Feeling tense or keyed up	57	0	1	2	3	4
58. Heavy feelings in your arms or legs	58	0	1	2	3	4
59. Thoughts of death or dying	59	0	1	2	3	4
60. Overeating	60	0	1	2	3	4
61. Feeling uneasy when people are watching or talking about you	61	0	1	2	3	4
62. Having thoughts that are not your own	62	0	1	2	3	4
63. Having urges to beat, injure, or harm someone	63	0	1	2	3	4
64. Awakening in the early morning	64	0	1	2	3	4
65. Having to repeat the same actions such as touching, counting, or washing	65	0	1	2	3	4
66. Sleep that is restless or disturbed	66	0	1	2	3	4
67. Having urges to break or smash things	67	0	1	2	3	4
68. Having ideas or beliefs that others do not share	68	0	1	2	3	4
69. Feeling very self-conscious with others	69	0	1	2	3	4
70. Feeling uneasy in crowds, such as shopping or at a movie	70	0	1	2	3	4
71. Feeling everything is an effort	71	0	1	2	3	4
72. Spells of terror or panic	72	0	1	2	3	4
73. Feeling uncomfortable about eating or drinking in public	73	0	1	2	3	4
74. Getting into frequent arguments	74	0	1	2	3	4
75. Feeling nervous when you are left alone	75	0	1	2	3	4
76. Others not giving you proper credit for your achievements	76	0	1	2	3	4
77. Feeling lonely even when you are with people	77	0	1	2	3	4
78. Feeling so restless you couldn't sit still	78	0	1	2	3	4
79. Feelings of worthlessness	79	0	1	2	3	4
80. The feeling that something bad is going to happen to you	80	0	1	2	3	4
81. Shouting or throwing things	81	0	1	2	3	4
82. Feeling afraid you will faint in public	82	0	1	2	3	4
83. Feeling that people will take advantage of you if you let them	83	0	1	2	3	4
84. Having thoughts about sex that bother you a lot	84	0	1	2	3	4
85. The idea that you should be punished for your sins	85	0	1	2	3	4
86. Thoughts and images of a frightening nature	86	0	1	2	3	4
87. The idea that something serious is wrong with your body	87	0	1	2	3	4
88. Never feeling close to another person	88	0	1	2	3	4
89. Feelings of guilt	89	0	1	2	3	4
90. The idea that something is wrong with your mind	90	0	1	2	3	4

APPENDIX C

SUMMARY OF NINE SYMPTOM DIMENSIONS AND THREE GLOBAL SCORES FOR THE SYMPTOM CHECK LIST-90-R

Summary of Nine Symptom Dimensions and Three Global Scores for the Symptom Check List-90-R

It is important that the reader understands what the nine symptom dimensions (9 sub-scales) and three global scores of the SCL-90-R represent. Following is a brief summary of the symptom dimensions and global scores for the SCL-90-R as described in the SCL-90-R: Administration, Scoring & Procedures Manual by Leonard R. Derogatis.

The somatization dimension typically indicates distress arising from physical disease or perceptions of bodily dysfunction. The obsessive-compulsive dimension indicates that the person scoring highly on this sub-scale is focusing on thoughts, impulses, and actions that are irresistible to him or her, yet are of an unwanted nature. The depression dimension represents a generalized range of symptoms such as loss of sexual interest or pleasure, crying easily and feeling lonely or blue, associated with clinical depression. The anxiety dimension represents symptoms typically associated with high levels of anxiety such as trembling, feeling fearful, feeling tense or keyed up or feeling restless. The hostility dimension can represent the negative affect of being in an angry state. Symptoms typical of this state would include, feeling easily annoyed or irritated, getting into frequent arguments, and shouting or throwing things. The

phobic anxiety dimension reflects a persistent irrational disproportionate fear response to a specific person, place, object, or situation. The paranoid ideation dimension reflects a paranoid behavior that is represented as a disordered way of thinking. Examples of this dimension would be hostility, feeling that people will take advantage of you, and feelings that others are to blame for most of your troubles. The psychoticism dimension is indicative of a withdrawn, isolated, schizoid life style. Examples of this dimension would be having thoughts that are not your own, having thoughts about sex that bother you, the idea that you should be punished for your sins, and never feeling close to another person. The Global Severity Index (GSI) is a single score that best represents the current level or depth of the psychological disorder. The Positive Symptom Distress Index (PSDI) measures one's response style by communicating whether the subject is increasing or decreasing his/her symptomatic distress in how he or she reports his or her disorder. The Positive Symptom Total (PST) is a count of the positive number of symptoms the subject reported when filling out the SCL-90-R.

APPENDIX D

LETTER TO PARTICIPANTS

October 28, 1992

To All Participants in Research Study:

The goal of this research study is to determine the needs of people diagnosed with sexually transmitted diseases (STDs) that go beyond the medical treatment. The study will provide information that will assist the health profession in learning more about STDs and should be of value to you as well.

All individual information collected from this study is confidential and will not be shared, included in your medical record, or reviewed by anyone except me. To assure this, your name will not appear on any questionnaire filled out today. I have worked as a Health Educator for 11 years at the University Health Services and am completing my Ph.D. in Counseling Psychology, specializing in the area of STDs.

You will find the following information in this packet: an informed consent form, the SCL-90-R, and a sexual history questionnaire. Please fill out the enclosed information while you are here at the Health Services, seal it and place it in the attached envelope and return it to the secretary at the Health Education Office located on the second floor of this building. If you are interested in participating in a post-study discussion of the results or have any personal concerns, please include your first name and phone number in the packet. I will get back to you. Thank you for participating in this study. If you have any questions about this study please do not hesitate to call me at 549-2671 ext. 181.

All participants who return a <u>completed</u> packet to the Health Education Office will receive $5.00.

Sincerely,

Debra Edelman

APPENDIX E

PATIENT INFORMED CONSENT FORM

Patient Informed Consent Form

I,_____ have been asked to participate in a study investigating sexually transmitted diseases. I voluntarily give the researcher, Debra Edelman, permission to review my medical record. I understand that all information obtained by her will be held in strict confidence. I agree to complete the SCL-90-R and sexual history and demographic questionnaires. I also agree that the results of these questionnaires will not be included in my medical record or revealed to anyone. If I desire, I can obtain the questionnaires that I have filled out today. I understand that by participating in this study, even though I may not have a sexually transmitted disease, I will be able to meet with the researcher, Debra Edelman, to find out the results of the study. I understand that my participation is voluntary and that I may withdraw at any time. I also understand that there are no risks involved in participating in this study and that the results can only benefit the treatment of people with sexually transmitted diseases.

_____

Patient

_____

Date

APPENDIX F

SUMMARY OF DISCRETE RESULTS FOR THE SEXUAL HISTORY AND DEMOGRAPHIC QUESTIONNAIRE BY GROUPS

Summary of Discrete Results for the Sexual History and Demographic Questionnaire By Groups (N = 147)

My sex is:

Sex	No STD	HPV	Curable	Totals & % of Totals
Female	38 65.5%	40 69.0%	18 58.1%	96 65.3%
Male	20 34.5%	18 31.0%	13 41.9%	51 34.7%

My age is:

Age	No STD	HPV	Curable	Totals & % of Totals
17-20	42 72.4%	21 36.2%	14 45.2%	77 52.4%
21-30	16 27.6%	37 63.8%	17 54.8%	70 47.6%

My year is:

Year	No STD	HPV	Curable	Totals & % of Totals
First year	13 22.4	3 5.2%	5 16.7%	21 14.4%
Sophomore	14 24.1%	8 13.8%	2 6.7%	24 16.4%
Junior	19 32.8%	19 32.8%	9 30.0%	47 32.2%
Senior	12 20.7%	20 34.5%	11 36.7%	43 29.5%
Grad Student	0 .0%	2 3.4%	3 10.0%	5 3.4%
Non student	0% .0%	6 10.3%	0 .0%	6 4.1%

I live:

Living Situation	No STD	HPV	Curable	Totals & % of Totals
On campus/ Dormitory	44 75.9%	25 43.1%	10 32.3%	79 53.7%
On campus/ with family	0 .0%	4 6.9%	3 9.7%	7 4.8%
Off campus with friends	12 20.7%	23 39.7%	16 51.6%	51 34.7%
Other	2 3.4%	6 10.3%	2 6.5%	10 6.8%

My current lifestyle is:

Current lifestyle	No STD	HPV	Curable	Totals & % of Totals
Single	26 44.8%	17 29.3%	9 29.0%	52 35.4%
Married	0 .0%	0 .0%	1 3.2%	1 .7%
Monogamous	30 51.7%	34 58.6%	16 51.6%	80 54.4%
Non-monogamous	2 3.4%	5 8.6%	4 9.7%	11 7.5%
Divorced	0 .0%	1 1.7%	0 .0%	1 .7%

My current living situation is:

Current living situation	No STD	HPV	Curable	Totals & % Totals
Very good	21 36.2%	23 39.7%	13 41.9%	57 38.8%
Good	23 39.7%	15 25.9%	12 38.7%	50 34.0%
Satisfactory	12 40.0%	14 46.7%	4 13.3%	30 20.4%
Unsatisfactory	2 3.4%	6 10.3%	2 6.5%	10 6.8%

My religious training as a child was:

Religious training	No STD	HPV	Curable	Totals & % of Totals
Protestant	9 15.5%	15 25.9%	5 16.1%	29 19.7%
Catholic	26 44.8%	26 44.8%	11 35.5%	65 44.2%
Jewish	4 6.9%	7 12.1%	3 9.7%	14 9.5%
Other	5 8.6%	3 5.2%	6 19.4%	14 9.5%
None	14 24.1%	5 8.6%	6 19.4%	25 17.0%

My religious faith is:

Strength of religious faith	No STD	HPV	Curable	Totals & % of Totals
Very strong	3 5.3%	2 3.4%	2 6.5%	7 4.8%
Strong	5 8.8%	12 20.7%	4 12.9%	21 14.4%
Moderate	18 31.6%	20 34.5%	12 38.7%	50 34.2%
Weak	12 21.1%	8 13.8%	6 19.4%	26 17.8%
Very weak	6 10.5%	8 13.8%	2 6.5%	14 9.6%
Nonexistent	13 22.8%	10 17.2%	5 16.1%	28 19.2%

My current relationship with my parent(s) or guardian(s) is:

Current relationship	No STD	HPV	Curable	Totals & % of Totals
Very good	27 46.6%	24 41.4%	20 64.5%	71 48.3%
Good	21 36.2%	20 34.5%	5 16.1%	46 31.3%
Moderate	7 12.1%	7 12.1%	6 19.4%	20 13.6%
Bad	3 5.2%	5 8.6%	0 .0%	8 5.4%
Very bad	0 .0%	1 1.7%	0 .0%	1 .7%
Nonexistent	0 .0%	1 1.7%	0 .0%	1 .7%

Currently I would identify myself as:

Sexual status	No STD	HPV	Curable	Totals & % of Totals
Not sexually active	23 39.7%	15 25.9%	8 25.8%	46 31.3%
Sexual w/ one partner	32 55.2%	40 69.0%	22 71.0%	94 63.9%
Sexual w/ 1+ partners	3 5.2%	3 5.2%	1 3.2%	7 4.8%

If you are currently in a sexual relationship(s), how would you identify the overall satisfaction of this (or these) relationship(s)?

Satisfaction of sexual relationship(s)	No STD	HPV	Curable	Totals & % of Totals
Very happy	19 33.9%	16 29.1%	12 41.4%	47 33.6%
Happy	12 21.4%	19 34.5%	7 24.1%	38 27.1%
Satisfactory	2 3.6%	4 7.3%	3 10.3%	9 6.4%
Unsatisfactory	1 1.8%	3 5.5%	1 3.4%	5 3.6%
Very unhappy	1 1.8%	1 1.8%	0 .0%	2 1.4%
Currently not sexual	21 37.5%	12 21.8%	6 20.7%	39 27.9%

My sexual partner(s) are usually:

Sexuality	No STD	HPV	Curable	Totals & % of Totals
Homosexual	3 5.2%	3 5.2%	2 6.5%	8 5.4%
Heterosexual	46 79.3%	52 89.7%	25 80.6%	123 83.7%
Bisexual	1 1.7%	2 3.4%	3 9.7%	6 4.1%
Not sexual	8 13.8%	1 1.7%	1 3.2%	10 6.8%

I feel the following about my sexual orientation or preference:

Comfort w/ sexuality	No STD	HPV	Curable	Totals & % of Totals
Very comfortable	45 77.6%	49 84.5%	27 87.1%	121 82.3%
Comfortable	9 15.5%	8 13.8%	4 12.9%	21 14.3%
Moderately comfortable	3 5.2%	1 1.7%	0 .0%	4 2.7%
Uncomfortable	1 1.7%	0 .0%	0 .0%	1 .7%

I feel the following about being sexually active:

Comfort w/ sex	No STD	HPV	Curable	Totals & % of Totals
Very comfortable	25 43.9%	31 53.4%	15 48.4%	71 48.6%
Comfortable	20 35.1%	10 17.2%	10 32.3%	40 27.4%
Moderately comfortable	9 15.8%	10 17.2%	5 16.1%	24 16.4%
Uncomfortable	3 5.3%	7 12.1%	1 3.2%	11 7.5%

My first experience having sexual intercourse was when I was:

Age of first sexual intercourse	No STD	HPV	Curable	Totals & % of Totals
13-15 yrs old	8 21.6%	15 25.9%	14 45.2%	37 26.2%
16-17 yrs old	27 51.9%	27 46.6%	8 25.8%	62 44.0%
18/older	17 32.7%	16 27.6%	9 29.0%	42 29.8%

During the past year, I have had sex with the following number of partner(s):

# of Partners in past year	No STD	HPV	Curable	Totals & % of Totals
0	10 17.2%	5 8.6%	0 .0%	15 10.2%
1	33 56.9%	24 4.4%	10 32.3%	67 45.6%
2-10	15 25.9%	29 50.0%	21 67.7%	65 44.2%

In my lifetime I have had the following number of sexual partner(s):

# of partners in lifetime	No STD	HPV	Curable	Totals % of Totals
1	14 25.9%	4 7.0%	3 9.7%	21 14.8%
2-4	25 46.3%	13 22.8%	6 19.4%	44 31.0%
5-10	9 16.7%	30 52.6%	15 48.4%	54 38.0%
10+	6 11.1%	10 17.5%	7 22.6%	23 16.2%

Overall, I would rate my sexual encounters as:

Pleasure of sexual encounters	No STD	HPV	Curable	Totals & % of Totals
Very pleasurable	25 46.3%	17 29.3%	11 35.5%	53 37.1%
Pleasurable	17 31.5%	26 44.8%	13 41.9%	56 39.2%
Satisfactory	8 14.8%	9 15.5%	5 16.1%	22 15.4%
Unsatisfactory	4 7.4%	6 10.3%	2 6.5%	12 8.4%

Are you currently in therapy with a mental health practitioner?

Currently in therapy	No STD	HPV	Curable	Totals & % of Totals
Yes	4 6.9%	9 15.5%	2 6.5%	15 10.2%
No	54 93.1%	49 84.5%	29 93.5%	132 89.8%

Have you ever been in therapy with a mental health practitioner?

Ever been in therapy	No STD	HPV	Curable	Totals & % of Totals
Yes	22 37.9%	28 48.3%	13 41.9%	63 42.9%
No	36 62.1%	30 51.7%	18 58.1%	84 57.1%

In the last year, how often have you used condoms and spermicide when having sex?

Practiced safer sex in past year	No STD	HPV	Curable	Totals & % of Totals
Always	14 24.1%	12 21.1%	7 22.6%	33 22.6%
Sometimes	26 44.8%	40 70.2%	19 61.3%	85 58.2%
Never	8 13.8%	4 7.0%	5 16.1%	17 11.6%
No sex	10 17.2%	1 1.8%	0 .0%	11 7.5%

How open were your parents or guardians about sexual information before you reached puberty?

Openness of parents in prepuberty	No STD	HPV	Curable	Totals & % of Totals
Very open	11 19.0%	13 22.8%	7 22.6%	31 21.2%
Somewhat open	17 29.3%	13 22.8%	8 25.8%	38 26.0%
Neither uptight nor open	21 36.2%	20 35.1%	7 22.6%	48 32.9%
Somewhat uptight	3 5.2%	3 5.3%	2 6.5%	8 5.5%
Very uptight	6 10.3%	8 14.0%	7 22.6%	21 14.4%

How open are your parents or guardians now?

Openness of parents	No STD	HPV	Curable	Totals & % of Totals
Very open	20 34.5%	24 42.9%	15 48.4%	59 40.7%
Somewhat open	18 31.0%	13 23.2%	4 12.9%	35 24.1%
Neither uptight nor open	10 17.2%	12 21.4%	7 22.6%	29 20.0%
Somewhat uptight	5 8.6%	4 7.1%	3 9.7%	12 8.3%
Very uptight	5 8.6%	3 5.4%	2 6.5%	10 6.9%

Are you the victim/survivor of rape?

Rape Survivor	No STD	HPV	Curable	Totals & % of Totals
Yes	7 12.1%	11 19.0%	9 29.0%	27 18.4%
No	51 87.9%	47 81.0%	22 71.0%	120 81.6%

Are you the victim/survivor of incest/childhood sexual abuse?

Survivor of sexual abuse	No STD	HPV	Curable	Totals & % of Totals
Yes	8 13.8%	7 12.1%	5 16.1%	20 13.6%
No	50 86.2%	51 87.9%	26 83.9%	127 86.4%

Have you changed your behavior since learning about your diagnosis with a sexually transmitted disease?

Behavior change	No STD	HPV	Curable	Totals & % of Totals
Yes	1 1.7%	46 82.1%	23 79.3%	70 47.6%
No	0 .0%	10 17.9%	6 20.7%	16 10.9%
Not applicable	57 98.3%	2 3.4%	2 3.4%	61 41.5%

How would you say your sexual behavior has changed since being diagnosed with genital warts(HPV)?

Behavior change since HPV	No STD	HPV	Curable	Totals & % of Totals
Consistently practice safer sex	0 .0%	23 39.7%	5 16.7%	28 19.2%
Sometimes practice safer sex	0 .0%	16 27.6%	4 13.3%	20 13.7%
Do not practice safer sex	0 .0	2 3.4%	0 .0%	2 1.4%
Stopped being sexual	0 .0%	10 17.2%	0 .0%	10 6.8%
Not applicable	58 100.0%	7 12.1%	21 70.0%	86 58.9%

How would you say your emotions have changed since being diagnosed with genital warts(HPV)?

Emotions	No STD	HPV	Curable	Totals & % of Totals
No change	0 .0%	20 35.1%	1 3.3%	21 14.7%
More guilty	0 .0%	8 14.0%	3 10.0%	11 7.7%
More depressed	0 .0%	13 22.8%	1 3.3%	14 9.8%
More anxious	0 .0%	15 26.3%	0 .0%	15 10.5%
Not applicable	56 100.0%	1 1.8%	25 83.3%	82 57.3%

Have you talked to or had an appointment with someone in Health Education for counseling for a diagnosis of a sexually transmitted disease?

Counseling for STD	No STD	HPV	Curable	Totals & % of Totals
Yes	1 1.7%	17 29.3%	9 29.0%	27 18.4%
No	10 17.2%	39 67.2%	21 67.7%	70 47.6%
Not applicable	47 81.0%	2 3.4%	1 3.2%	50 34.0%

As a result of the colposcopy exam, genital warts or HPV was diagnosed on my cervix.

HPV on Cervix	NO STD	HPV	Curable	Totals & % of Totals
Yes	0 .0%	21 70.0%	0 .0%	21 61.8%
No	2 3.4%	9 30.0%	2 6.4%	13 38.2%

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