

Summer 7-2018

HIV/AIDS Knowledge & Perceptions On a College Campus

Gabriel Navarro

Honors College, Pace University

Follow this and additional works at: https://digitalcommons.pace.edu/honorscollege_theses



Part of the [Immune System Diseases Commons](#), and the [Medical Education Commons](#)

Recommended Citation

Navarro, Gabriel, "HIV/AIDS Knowledge & Perceptions On a College Campus" (2018). *Honors College Theses*. 198.
https://digitalcommons.pace.edu/honorscollege_theses/198

This Thesis is brought to you for free and open access by the Pforzheimer Honors College at DigitalCommons@Pace. It has been accepted for inclusion in Honors College Theses by an authorized administrator of DigitalCommons@Pace. For more information, please contact rracelis@pace.edu.

HIV/AIDS Knowledge & Perceptions on a College Campus

Pace University

May 2018

Table of Contents

Abstract	3
Introduction	4
What Are HIV & AIDS.....	4
History of HIV/AIDS in the United States.....	5
Literature Review	7
HIV/AIDS Stigma Among College Students	10
HIV/AIDS Knowledge and College Students.....	10
Methodology.....	13
Participants.....	13
Survey Design.....	15
Survey Results – HIV/AIDS Knowledge	16
Survey Results – HIV/AIDS Stigma.....	18
Survey Results – Testing Behavior	19
Survey Results – Sexual Practices.....	20
Analysis of Results.....	22
Suggestions for Applying the Results in the Future	27
Limitations	29
Conclusion.....	30
Works Cited.....	31
Appendix.....	35
Survey Results	35
Advisor Approval Page.....	Error! Bookmark not defined.

Abstract

Our research project surveyed students at Pace University (both on the New York City and Pleasantville campuses) and looked into their understanding of *Human Immunodeficiency Virus (HIV) & Acquired Immunodeficiency Syndrome (AIDS)*. The goal was to better understand students' knowledge regarding HIV/AIDS, and the ways in which they might be misinformed. Our research looked to see if there was any stigma surrounding student's perceptions of the virus and its transmission. The study also asked students about their sexual practices. Specifically, we utilized an Institutional Review Board approved survey, to ask students about their sexual behavior to see if they were taking the necessary steps to protect themselves from contracting HIV and AIDS. The survey included questions on HIV general knowledge, transmission, and prevention methods. This included a section on *pre-exposure prophylaxis (PrEP)* and *post-exposure prophylaxis (PeP)*. The survey was conducted online and students were sent a link to complete the survey on their own. In total 202 students participated in the study and 169 complete responses were recorded. The demographics of the respondents were representative of the Pace University community and the student body. The results of the research supporting the finding that although students are aware of the measures to prevent against HIV, this knowledge does not always translate over to student sexual behaviors. In relation to students and their perception of HIV, the research found that some of this stigma still exists, but students who are more educated on HIV are less likely to maintain this stigma. Based on the findings of this project a number of suggestions for Pace University and for the Pace Health Care Center have been outlined. Through an integration of these suggestions, Pace University can better support students in their understanding of HIV the different resources available to students while at Pace.

Introduction

HIV is simultaneously one of the most well known, and most misunderstood viruses today. Because of the nature in which HIV, and subsequently AIDS, were introduced to many people, there are still a lot of misconceptions that surround HIV transmission, prevention, and awareness. Fortunately, a great deal of research has been performed within the past few decades that has provided a better understanding of this virus. This research has helped to remove much of the anxiety surrounding HIV/AIDS, and has shown that these diseases are no longer something that should be intensely feared or stigmatized. While scientists and educators are aware of this, the challenge now comes in expanding this knowledge to the public. One of the most important age groups to target with this knowledge is college-aged students (18-25) as they are in some of the highest risk categories for contracting HIV. In helping to provide the best education and resources for college students with regard to HIV/AIDS we first need to understand what they already know, their current perceptions towards HIV, and obtain a brief understanding of their sexual practices. This study will look in depth at all three of these aspects in order to provide more context to the best which in which students can be supported. Students will participate in a survey that covers 4 topics: demographics, HIV knowledge, testing behavior, and sexual practices. Through an analysis of these results, we will highlight different ways in which Pace University can better support and educate students on HIV/AIDS.

What Are HIV & AIDS

Human Immunodeficiency Virus or HIV is a virus that attacks a human's immune system. HIV reduces the number of "T cells" which can make an individual more susceptible to other types of diseases. Given enough time, and if untreated, HIV can lead to AIDS or *Acquired Immunodeficiency Syndrome*. AIDS is the most severe stage of HIV and is categorized by an

individual's inability to fight off new infections. While many people used the terms HIV and AIDS interchangeably it is important to note the difference between the two. In the United States most HIV positive individuals never progress to AIDS because of current medications that can slow down the progression of the virus. With proper treatment individuals living with HIV can continue to live healthy lives.

HIV is transmitted through body fluids such as blood, semen, vaginal fluid, and breast milk. It cannot be spread through saliva or through skin-to-skin contact. Additionally, HIV cannot be spread through the air, through tears or sweat, or through blood-sucking insects. Most commonly individuals become infected or spread HIV through sexual activities or by sharing needles or syringes. However, it is possible for mothers to transmit HIV to their children "...during pregnancy, birth, or breastfeeding" (HIV.gov). In the US, HIV is most commonly spread by having vaginal or anal sex with an individual who is HIV positive without using a condom, or by sharing needles or syringes that are used to prepare drugs for injection.

Today, living with HIV is manageable and many HIV positive individuals live just as long as those without the virus (HIV.gov). However, when HIV first became a topic of discussion in the United States in the 1980's, a strong negative stigma was attached to those who were infected, and contraction of the virus often lead to death as there was little knowledge surrounding how it was transmitted. In order to provide context to the current discussions of HIV/AIDS it is important to have a brief understanding of it's history in America.

History of HIV/AIDS in the United States

Public discussions of HIV/AIDS began in 1981 when a group of 5 gay men in Los Angeles were diagnosed with the rare lung infection, Pneumocystis pneumonia (PCP). Simultaneously,

in New York, reports of gay men with an unusually aggressive cancer, Kaposi's Sarcoma began to surface. By the end of the year there were 270 counts of immunodeficiency reported among gay men and 121 of them had died as a result ("History of HIV and AIDS Overview" 2018). The next year a group of men in California that become infected suggested to the public that the disease was transmitted sexually and the virus became known as GRID or Gay Related Immune Deficiency. By the end of 1982 the CDC used the term AIDS for the first time and described it as, "a disease at least moderately predictive of a defect in cell mediated immunity, occurring in a person with no known case for diminished resistance to that disease" (CDC 1982).

Within the next few years the number of reported HIV/AIDS cases climbed drastically. By 1984 there were 3,064 diagnosed cases of AIDS in the United States, and of those cases 1,292 had died ("History of HIV and AIDS Overview" 2018). In 1987 the first antiretroviral medication for HIV zidovudine (AZT) became available. By this time, it was discovered that HIV could be transmitted to females through vaginal sex. However, a strong stigma still surrounded gay men, and HIV was sometimes referred to as the "gay plague." One of the first instances that began to dispel this stereotype came in 1992 when NBA player, Erwin "Magic" Johnson announced he was HIV positive (New York Times 1991). Over the course of the next 20 years the number of HIV cases would continue to rise, and the virus would be found in all parts of the world. Today there are over 1 million individuals living with HIV in the US, and an estimated 37,000 new Americans were infected in 2014 alone (HIV.gov). While there has certainly been a great deal of research regarding HIV/AIDS, a large portion of the population remains uneducated on the specifics of the virus, and a negative stigma still surrounds those living with HIV/AIDS. According to a 2016 study performed by the CDC the population that is at

the highest risk of contracting HIV is individuals from the ages of 20-29, with 14,740 new cases being found in this age group (HIV.gov). In order to identify ways in which to best help this population a few studies have already been performed that examine students and their knowledge of HIV/AIDS, their understanding of transmission, and their perceptions of the virus.

Literature Review

When examining HIV/AIDS within the context of college students and young adults (ages 13-24) it is clear there is a need for proper education and resources. According to the Joint United Nations Program on HIV/AIDS there is an estimated 36.9 million people living with HIV worldwide (United Nations Program on HIV/AIDS) and the Centers for Disease Control (CDC) reports that youth ages 13-24 accounted for 22% of all new HIV infections in 2015 (CDC). Moreover, 81% of these new youth infections occurred among gay/bisexual men with young African American/Black, and Hispanic/Latino individuals being most at risk. Within all individuals between 13-24 that are living with HIV, 44% of them are unaware of their positive status as of 2016 (CDC).

While the number of new HIV infections continues to decline (the annual number dropped from 41,900 in 2010 to 37,600, a 10% decrease) (CDC) as of 2016, individuals ages 13-24 accounted for the largest number of new diagnosis in the US. The problem with combating HIV in this age group stems from a number issues and includes, but is not limited to, social and cultural perceptions, inadequate sex education, high risk behaviors in terms of sexual activity, and feelings of isolation.

History provides a number of examples of “...prejudice, discounting, discrediting, and discrimination” (Herek, “AIDS and Stigma” 1999) towards individuals who are, or are perceived

to be, ill. However, the stigma surrounding HIV is often worse than other illnesses because it tends to be paired with other stigmatized behaviors such as sex work, drug use, and homosexuality. Given the precedent, there have been a number of awareness campaigns since the 1980's to reduce the stigma surrounding HIV and provide more context in terms of education and prevention. Unfortunately, many of the early campaigns contributed to the stigma as they generated messages of fear and were unclear in the way that HIV was transmitted (Foreman and Kern 2013). These messages were targeted mostly towards gay HIV-positive men and presented HIV infection as one of two absolutes. HIV-negative individuals were presented as the "healthy idealization" of the "clean" body, while those living with HIV were portrayed as "damaged and morally deficient" or "dirty" (Jones 396). These images connected the (socially constructed) shame of HIV/AIDS with the internalized fear of homophobia and gay men. Some of the language that is still utilized today, such as when it is reported that someone is infected with HIV through a "dirty" needle, references this similar mindset. Additionally, the lack of realistic picture of living with HIV at the time, eventually contributed to a great deal of backlash among younger gay men, as many believed that "contracting HIV is a rite of passage." This contributed to an additional sharp increase in new infections from 2001-2006 from men under 30 years old (Foreman and Kern 2013).

As a response to provide more inclusive and effective education, many of the modern campaigns are targeted to wider demographics, a push to again demonstrate that HIV is not limited to the gay-male population. "Know the Facts First" utilizes social media to educate teen girls on STI's (including HIV) so they can make informed decisions (HIV.gov). Concurrently, "HIV Treatment Works" provides resources for those already living with HIV and encourages them to

get in care and start taking HIV medications. These campaigns are vital in helping to reduce stigma as the American Journal of Public Health notes that "...stigma is more likely to thrive in an environment of ignorance and half-truths" (Valdiserri 2002). A 2009 study demonstrated that gaps in knowledge, as well as limited access to information has led to much of the labeling, discrimination, and stereotyping of people living with HIV (Chaudoir and Earnshaw, "Conceptualizing to Measuring HIV Stigma"). Education and awareness need to remain at the front of discussions surrounding HIV/AIDS in order to enable the public to provide their own informed opinions on ways help those living with HIV. Balfour et al reports a strong correlation between HIV knowledge and stigma. Those with high levels of knowledge, report low levels of stigma (Balfou, et al. "High HIV knowledge"). Fortunately, these campaigns and years of education by the Department of Health have helped to reduce much of the overt stigmatization that surrounds HIV. Even within the first 10 years of the AIDS crisis, much of the obvious expressions of prejudice against those living with HIV had decreased. However, a 1999 study showed that nearly 1 in 5 Americans "feared" people with AIDS, and 1 in 6 felt "disgust" towards people with AIDS (Herek, et al. "HIV-related Stigma"). Moreover, an Internet study in 2000 reported that nearly 20% of American adults agree with the statement "[p]eople who got AIDS through sex or drug use have gotten what they deserve (CDC).

As previously mentioned, in the United States many of the overt instances of HIV stigmatization that were seen in the early days of the AIDS crisis are gone. However, the effects of stigma are not only limited to the deliberate and jarring demonstrations of physical violence against people living with HIV, and the challenge now shifts to the subtle and indirect manifestations of stigma. For example, there has been an increase in opportunities to provide

HIV testing, but a series of focus groups of 73 young gay men (ages 13-19) showed that they were less likely to get tested “in environments where they perceive workers to be judgmental about their sexual and drug use behaviors” (“Hearing their Voices”, 1999). It is important for the public to understand the negative effects of their microaggressive behaviors and to provide equal opportunities for HIV-positive people to be free from judgment or fear.

HIV/AIDS Stigma Among College Students

Few of the previous literature on HIV/AIDS and college students has looked into the stigma that college students specifically may have against people living with HIV. Of the studies that have been conducted, the stigma level of American students appears to be generally low. Only about 30% of students in a 2017 survey reported that they were afraid of people living with HIV/AIDS and blamed them for acquiring HIV (Caroline, et al. 2017). However, this number was lower than the 2010 study conducted by Badahdah and Sayem in which 49% of participants blamed those who are HIV positive (2010). The level of stigma for college age students in the US is not as high as other countries such as Georgia, where it was reported that 92% of students had stigmatizing attitudes towards people living with HIV (Djibuti et al. 2015) In order to provide a more comprehensive picture of the stigma level among college students more research needs to be done surrounding this specific population.

HIV/AIDS Knowledge and College Students

Younger generations, specifically college aged students (18-24), are old enough to formulate their own understandings and opinions of HIV/AIDS. However, much of their (sometimes limited) knowledge of the virus has been provided to them by older generations who have their own perceptions of HIV based on their experiences of living through the initial

AIDS crisis. There have been a few studies that provide a deeper understanding of college student's understanding and opinion of HIV and those who are HIV-positive. Overwhelmingly, previous research has shown that while college students are fairly knowledgeable about HIV/AIDS, and have little concern with contracting the virus, they do not take the appropriate safe sex precautions to protect against transmission (Caroline 2017). A 2017 study of college students living in the Midwest showed that 79% of students have attended a prior HIV/AIDS education workshop or STD program. Concurrently, Opt and Loffredo reported that in a study of 200 students living in Florida about 80% of them participated in a middle or high school course that included some education of HIV/AIDS (2004). Through these studies about 65% of student self report that their knowledge of HIV/AIDS in general was "medium" and 50% of respondents considered themselves to have a "good" knowledge on HIV testing (Ellis 2014). It is clear that students are beginning to receive some form of HIV education, but it does not appear that this education is translating to their own sexual practices. For students who reported that they had an "adequate" understanding of HIV, only 34% of them consistently practiced safe sex (Brown et al. 2012). Moreover, even students who perceived themselves to be at-risk for HIV did not engage in safe sex intercourse. In conjunction with this finding, 64% of participants reported inconsistent condom use during their last sexual encounter, and have never been tested for HIV. Even with these stark responses, and with 89% of participants saying they believe that AIDS is a "serious or very serious" (Opt and Loffredo 2004) problem for college students, young people are seemingly unwilling to believe that they could ever be personally infected. These findings relay back to the initial understanding of HIV as a virus that is limited to a certain population and does not affect the general public. It can also be connected to young

people's belief that nothing bad will ever happen to them. Of course, this understanding of HIV is short minded and should be addressed in further education workshops.

Generally speaking, college students appear to be about as knowledgeable on HIV/AIDS as the average American, and slightly more knowledgeable than teenagers (Caroline 2017). Students have a basic understanding of the treatments for HIV and how HIV can lead to AIDS. Much of the current gaps in knowledge surround HIV testing and transmission. Many students, based on their belief that they are unable to contract HIV, have never been tested. Of those who had been tested the main reasons for getting tested included: part of a routine check-up (37%), having surgery or donated blood (36%), and having unprotected sex (24%) (Opt and Loffredo 398). Within this group only 42% had been tested more than once. These results differ from a 1999 study where the most common reasons for getting tested were: just wanting to know, having unprotected sex, and beginning a new sexual relationship (Anastasi et al. 1999). For the most part, testing is a reactive response, or only occurs out of convenience. Furthermore, a staggering 70% of students believed incorrectly that they could get tested for HIV one week after a sexual encounter and receive an accurate result. It is clear that students are inadequately educated on the need for continuous and routine HIV testing.

The second area where students are lacking in HIV/AIDS education is transmission. Beyond the understanding that HIV is transmitted through sexual intercourse, studies have reported that students are unclear about other modes of transmission. Some students were under the belief that mosquitoes could transmit HIV and were unaware that there is medicine to prevent transmission between a mother and child during birth (Hou 2004). Likewise, 60% of sample students were "not aware that latex condoms are more effective effective against HIV

transmission than natural skin condoms” and half of the students thought that all pregnant women would transmit HIV to their children during birth (Caroline 2017). A 2009 study found that 25% of students believed that a spermicidal agent would stop the transmission of HIV (Lewis et al. 2009).

The research is clear that there is a unique relationship between knowledge of HIV transmission and safe sex practices. In fact, Demmer & Caroleo argue that knowing more about HIV can actually lead to an increase in transmission risk. This is because “HIV knowledge is often related to a reduced concern about HIV and subsequently a less frequent need to used condoms” (Lewis et al. 2009). In educating students in the future, special attention should be paid to highlighting modes of transmission beyond sexual contact.

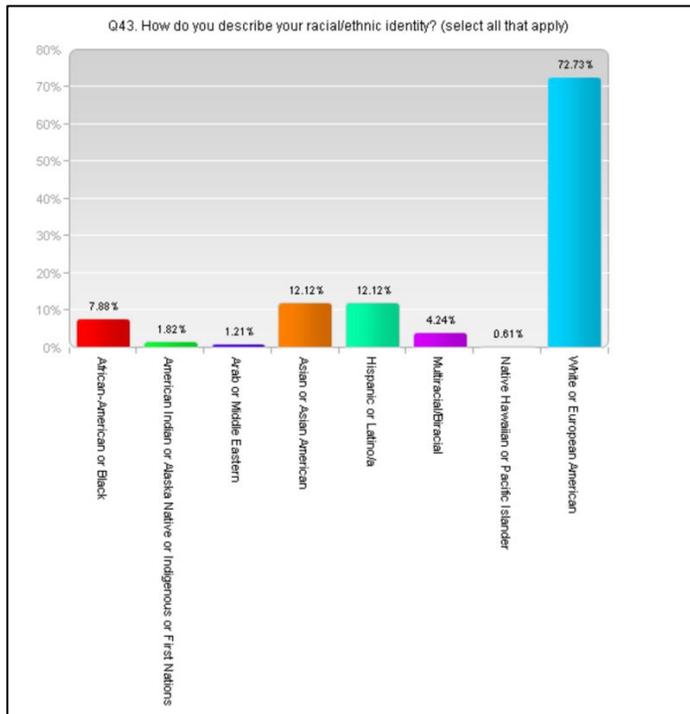
Previous research has been done to look into college students and their overall understanding of HIV & AIDS. This study extends much of the previous discussions and frames the research in the context of an urban university in a large metropolitan city.

Methodology

Participants

The participants for this study were were Pace University students on both the New York City and Pleasantville campuses. The survey was sent out by email, primarily through the LGBTQA and Social Justice Center and Pforzheimer Honors College list serves. Additionally, a link was posted on the LGBTQA & Social Justice Center Instagram account. The survey was also distributed via personal social media accounts such as Facebook and Twitter, and through word-of-mouth communication. This survey was open to all students at Pace University including undergraduate, graduate, and transfer students.

While the study was open to all students, 98% of respondents listed the NYC campus as their home campus. This is not surprising since the research team is based in the NYC campus. The subjects ranged in age from 17 -25 and the average age of each student was 20 years old. 35% of respondents were first-year students, 25% were sophomores, 22% were juniors, 13% were seniors, and only 5% were graduate students. This is a nice spread since a perfect distribution would see 25% in each class year. When looking at gender identity, 74% of the students surveyed were female, 19% were male, and 7% were transgender or gender nonconforming. Just over half (51%) of participants identified as heterosexual, 15% identified as gay or lesbian, 19% were bisexual, 13% identified as queer, and 3% self-identified as asexual or questioning. The racial/ethnic identity of the students can be seen in the graph below.



Generally speaking, the demographics of the participants in the study were reflective of those at Pace University. According to the Pace University website, 49% of the undergraduate

student body is White(non-Hispanic), 14% of students are Hispanic, 10% are African American, and 8% are Asian /Pacific Islander (Pace.edu 2015). Additionally, 61% of Pace students are female and 39% identify as male (no concrete data could be found on the percentage of transgender/gender nonconforming students). We acknowledge that the number of White and female students in our study is slightly higher than the numbers of those at Pace, while we do not believe it will impact our findings, and that the results will still be comparable to the Pace University population, it is important to this in mind as the results of the survey are listed.

Survey Design

The participants in the survey were asked to complete a short survey (about 5-10 minutes long) that inquired on four specific areas: HIV/AIDS Knowledge, Sexual Practices, Testing Behavior, and Demographic Information. The survey was designed to be comparable to previous research and a number of other surveys including the National Survey on the Public's Attitude Towards HIV/AIDS in the US and the World, and the US Census were consulted. The survey was designed to be taken by students with any level of HIV/AIDS knowledge and included informative notes to provide context for certain questions. For example, since many students would not know what PrEP and PeP are, a paragraph prefaces the "Testing Behavior" section that explains how they can be used to prevent HIV transmission. There was a combination of true/false, multiple choice, and short answer questions.

The survey was developed by the research team, but was reviewed and edited by the Baseline Corporation, a third-party company that provides surveying expertise to public and private organizations. Baseline examined the survey for errors and helped to reword questions

to provide clarity to respondents. Additionally, they helped in establishing the order of the questions in order to provide a systematic and organized flow.

Due to the sensitive nature of the survey participants remained anonymous and the survey did not ask for any identifying information such as name, date of birth, Pace UID, or email. It would not be possible to link participants to their answers. This ensured that subjects would be open and honest in their responses without fear of what would happen if their privacy was breached. Moreover, the survey was entirely voluntary and subjects were allowed to skip questions or refuse to participate at all. A complete list of the survey questions can be found in the appendix.

The survey was open to students for a period of six weeks and students were able to complete the survey at anytime on their own devices. In total, 202 students participated in the survey and 169 complete surveys were recorded.

Survey Results – HIV/AIDS Knowledge

The first section of the survey asked students fifteen different questions about their knowledge of HIV/AIDS. Students were asked to select the ways in which HIV can be transmitted from a list that included blood, semen, vaginal fluids, saliva, skin-to-skin contact, breast milk, and sneezing. They could choose as many of the options they believed to be correct. 94% of students were correct in saying that blood, semen, and vaginal fluids are three of the primary ways in which HIV is transmitted. However, only 60% correctly selected breast milk as another liquid that can transmit HIV. 1% selected skin-to-skin contact, 5% thought HIV could be transmitted through saliva, and less than 1% chose sneezing as a method of transmission. It is interesting to note that only 44% of the students were able answer the

question entirely correct (by selecting blood, breast milk, semen, and vaginal fluids, and none of the other options).

The next section asked more general questions regarding HIV. 96% of students correctly stated that there is not a cure for HIV, and 94% said that using a condom is one of the easiest ways to prevent against HIV. Interestingly, 87% of participants were correct in selecting that HIV cannot be transmitted through kissing. This finding is odd since 80% of students reported that saliva is not a method for transmission. Since these two questions are essentially asking the the same question, it would be expected that the numbers would be the same. Next, the survey asked about the difference between HIV and AIDS. 76% of students correctly selected that HIV causes AIDS. However, 14% believed that the difference between HIV & AIDS is that AIDS is a bacteria and HIV is a virus. The only question in this section that provided unexpected responses was when students were asked if it was possible for HIV-positive individuals to become undetectable. The answers were spilt almost even, but 51% of students did not think that it was possible to become undetectable, even given proper treatment and time.

The responses to HIV transmission and knowledge were fairly standard and reassuring. Pace students are, for the most, part well educated on HIV transmission and the difference between HIV & AIDS. However, the next portion of the survey, which questioned students on their knowledge of PeP and PrEP, is concerning, especially given the risky behavior that college students engage in. The survey correctly assumed that many students would not be aware of PeP and PrEP, and therefore gave a brief description of them before students answered questions. When asked if they had heard about these preventative measures before completing this survey 47% of students knew about PrEP, but only 35% of them had heard of PeP.

Moreover, only 27% know where they are able to access PeP/PrEP, and when asked if PeP/PrEP were expensive 76% were “unsure”, 19% thought they were expensive, and the other 5% believed PeP/PrEP to be inexpensive. While the Pace University Health Center does indeed offer both PeP and PrEP to students, only 43% of respondents were aware of this. However, 94% of students said that they believed the Pace Health Care Center should offer PeP and PrEP to students.

Overall, about half of all participants reported that they “somewhat agree” with the statement, “overall I feel knowledgeable about HIV & AIDS.” Furthermore, 40% “somewhat disagree” or “strongly disagree” to this statement. When looking at where students are receiving their knowledge of HIV/AIDS 43% stated that they obtained most of their information from sex education classes. 22% get their information regarding HIV from the Internet. Other sources of information include television/movies, friends/family, and LGBTQA centers. Although the findings show that students are generally well educated on HIV/AIDS, areas that students wanted to learn more about included: ways to support individuals living with HIV/AIDS (38%), ways in which they are at risk of contracting HIV (31%), and ways to prevent HIV (30%).

Survey Results – HIV/AIDS Stigma

Once the students were questioned about their knowledge of HIV/AIDS, they were presented with five statements that looked into their perceptions of the virus and those living with HIV, and were asked to rank their level of agreement (strongly agree, somewhat agree, somewhat disagree, strongly disagree) to each statement. A majority of participants (74%) “strongly” or “somewhat” agreed in saying that they would feel comfortable with sharing food with a HIV-positive individual. 97% of students felt sympathetic towards those living with

HIV/AIDS, and 91% said they were not afraid of those living with HIV. These responses were not unexpected, and students generally answered in the same categories. However, the final two statements, “I would be roommates with an individual who I know has HIV/AIDS” and “I would date an individual who I know has HIV/AIDS” yielded a wider range of responses. 52% of students “strongly agreed”, that they would be roommates with a HIV-positive individual, 33% “somewhat agreed”, and 15% “disagreed”. Most interestingly, the responses to “I would date an individual who I know has HIV/AIDS” were very spread out as 14% “strongly agreed”, 34% “somewhat agreed”, 35% “somewhat disagreed” and 17% “strongly disagreed”.

Survey Results – Testing Behavior

In terms of previous testing behavior only 34% of the students that participated in the survey had previously been tested for HIV. The primary reasons for getting tested as as part of a routine check-up (67% of students). Additionally, 28% of students got tested because they wanted to know their HIV status. It is interesting to note that no one reported that they got tested because they felt like they were engaging in high risk behavior, or that they had recently come in contact with HIV. The most common method for getting tested was at the doctor’s office, but 16% reported that they were tested at the Pace Health Care Center. Furthermore, 73% of students who had previously been tested had been tested within the last 6 months, with 23% reporting that their test had occurred within the past 30 days. Of those who had not been tested, the primary reason for not doing so was because the student was not sexually active. The second largest answer (41% of those who hadn’t been tested) was because the student did not feel like they were at risk of contracting HIV.

When respondents were asked where a Pace University student could go to get tested for HIV, only 56% of students knew that the Pace Health Care Center offered HIV testing. Additionally, 12% of students did not know where they could be tested, or that there was no access at Pace University to get tested. The last question asked participants if they knew where to go for help if they found out they were HIV positive, and 52% reported that they would not know where to go.

Survey Results – Sexual Practices

The final section of the survey asked the students ten questions about their sexual history while in college and the types of sexual activities they are engaging in. Students were first asked to report the number of sexual partners they have had in the past six months, and throughout their entire time in college. These time frames were selected because we wanted to see how often students are getting tested in relation to the number of sexual partners they have had. Since it is recommended that individuals who are at a moderate or high risk of contracting HIV get tested every 6 months, we wanted to see how many different sexual partners students have within each time frame of getting tested.

For the purposes of the study, the term “sexual partner” was defined as, “any individual with whom you have engaged in sexual activity with. This includes, but is not limited to, oral sex, anal sex, and mutual masturbation.” The survey found that on average each of the students had 5 sexual partners while in college. The total number of sexual partners ranged from 0 – 150, with the median number being 1 partner and the mode of 0 appearing 51 times. The average for the number of sexual partners within the past 6 months was 2 partners. The median number was 1, and the mode (which occurred 68 times was 1). Within the past 6

months, the number of partners ranged from 0 – 15. Note: if the outlier of 150 is removed from the data, the average number of sexual partners while in college drops to 4.

Students were then asked to select which types of sexual activities they are engaging in from a list that included vaginal sex, oral sex, and anal sex. Students were allowed to select more than one option if it applied to them. The responses showed that 98% of students are engaging in oral sex, 76% are participating in vaginal sex, and 26% have had anal sex while in college. Once the participants were asked about the type of sex (oral, vaginal, or anal) they were having, they were then asked how often they use a condom when engaging in each act (always, sometimes, rarely, or never). 79% of students listed that they never use a condom while engaging in oral sex. In terms of vaginal sex, 50% always use a condom, 23% sometimes use condoms, 6% rarely utilize condoms, and 21% never use a condom. Lastly, when looking at condom use for anal sex 47% of participants always use a condom, 12% sometimes use condoms, 2% rarely use condoms, and 39% reported that they never use a condom during anal sex.

The final section asked students about the measures they take to prevent against HIV transmission. The number one method of prevention was external (male) condoms, as 79% of students listed this as their primary method of protection. Only 4% of participants reported that they have utilized PeP or PrEP to prevent against HIV. In terms of how often students will utilize these methods, 34% said they always take measures to prevent against contracting HIV during a sexual encounter. However, 19% reported they only “sometimes” take measures to protect themselves, and 16% stated that they never take measures to protect themselves or their partners during sex.

When the students were surveyed on how often they ask their sexual partner about their HIV status before engaging in sexual acts with them, the responses were distributed almost equally. 24% listed that they “always” ask their sexual partners, 13% “often” ask, 14% “sometimes”, 10% “rarely”, and 39% “never” inquire about their partner’s HIV status. The final question in this section looked at the students’ overall agreement to the statement “I feel I am at risk of contracting HIV.” In response to this statement 46% strongly disagree, 25% somewhat disagree, 16% were “not sure”, 12% somewhat agree, and only 1% strongly agree.

Analysis of Results

Overall the results of the HIV knowledge section were as expected and were comparable to much of the previous research in the literature review. As previously mentioned, there was an interesting discrepancy between why the number of people who thought HIV could be transmitted through saliva, and the number of who thought HIV could be transmitted through kissing. Since the two are the same thing it would make sense that the numbers matched. However, about 10% more people thought that HIV could be transmitted through saliva. In retrospect, perhaps the question was not specific enough, the term “kissing” could be interpreted a number of ways and maybe students were thinking of a kiss where no saliva is transferred between individuals (which is where the discrepancy would make sense).

The other questions in this section, regarding HIV transmission and prevention were not surprising and it was nice to see that students were fairly educated on ways in which HIV is transmitted and the difference between HIV and AIDS. Almost all the students knew that using a condom is one of the easiest ways to protect against HIV. However, although they are aware of this, this knowledge does not transfer over to their sexual practices, and their use of

condoms during sexual encounters. Only 50% of participants selected that they always use a condom for vaginal sex, despite knowing that condoms are one of the easiest ways to prevent against HIV transmission. This number drops to 45% for the number of students who always use a condom for anal sex, and know that using a condom is one of the easiest ways to prevent transmission. Students are aware of the preventative measures, but are not taking the measures in their own practices. Theoretically, 77% of students reported that they use male condoms to prevent against HIV (question 37). However, in practice students will only use a condom about 50% of the time for both anal and vaginal sex. These results are similar to findings in past studies and it again shows that the theoretical knowledge of the benefits of condoms, and practical usage are not the same.

One of the first questions where we saw an interesting split in the answers was the question with regard to becoming undetectable. The answers were split almost exactly down the middle, with about 49% of students being incorrect in thinking that it is not possible to become undetectable. This is an example of the misunderstanding that of the progress that has been made towards fighting HIV. It appears that this misunderstanding also contributes to some of the stigma that still remains. When comparing the answers to this question, with the questions regarding stigma, we found that if a student is aware that it is possible to become undetectable then they are more likely to date or be roommates with an individual who has HIV/AIDS, and are less likely to be afraid of those living with HIV/AIDS. Moreover, if a student is aware that it is possible to become undetectable then they are would also feel more comfortable sharing food with a HIV positive individual. These findings show that education is

key, and that a lot of the stigma remains in the misunderstanding or misconception of what it means to living with HIV/AIDS.

In continuing to look at the questions that focused on HIV/AIDS stigma, the study found that generally speaking students are comfortable sharing food with a HIV-positive individual, feel sympathetic towards them, and are not afraid of those living with HIV/AIDS. The question that provides the widest range of answers asked if students would date someone with HIV/AIDS. The answers were almost 50/50 in terms of those agreeing and disagreeing with the statement. While we do not know exactly what lead students to select why they would/would not date someone with HIV, it is interesting that we again see that if someone feels they are more knowledgeable about HIV/AIDS then they are more likely to be willing to date someone with HIV. In addition, the more knowledgeable a student feels about HIV/AIDS, the less likely they are to fear those living with the virus. These findings again provide additional reasoning to believe that we need to focus on proper education, as one of the largest barriers in reducing the stigma of HIV/AIDS is lack of proper education and awareness.

When looking at education, and where students receive their knowledge of HIV/AIDS the most popular answer was “sex education classes.” Because sex education varies drastically from school to school it is unclear exactly what “sex education class” entails. Most of the respondents who chose that option were first-year students so we can assume that these are high school/middle school sex education classes. It is clear that there is no standard for these classes as the answers to the HIV knowledge differs. However, it is important to note that of the students who felt most knowledgeable about HIV/AIDS, 65% of them received their knowledge from a sexual education class. This shows that formal education does indeed contribute to

overall knowledge of HIV/AIDS. Furthermore, if students are primarily receiving their knowledge from the Internet, they are less likely to report that they feel knowledgeable about HIV/AIDS. Students were also able to write in their own answers as to where they received their knowledge and some of the most popular answers were: biology class, LGBTQA center, and through personal conversations with friends/others living with HIV. Students are receiving their education from a number of different sources and this can guide our practices in creating educational opportunities in the future. For the time being, it appears that we still need formal classes in order to properly educate students on HIV/AIDS; however, this may change in the future.

Despite sex education classes and other conversations surrounding HIV/AIDS, it does not appear that PeP and PrEP are part of the discussions that are taking place. Only 47% of students had ever heard of PrEP before this survey, and the number was even lower (35%) for PeP. The data suggests that students are on their own when learning about PeP/PrEP. When looking at the two most popular ways that students receive their HIV/AIDS education (sex education classes and the Internet) students are more about 15% more likely to know about PeP/PrEP if they receive their information from the Internet than if they were just attending sex education classes. Additionally, older students were more likely to know about PeP/PrEP than younger students, and were also more likely to know where to access PeP/PrEP. Although the Pace Health Center offers both PeP and PrEP for students, it is clear that students are not aware of this information. Only about 50% of students know that the Health Center offers PeP/PrEP regardless of their year in school. Despite this there is a clear demand for PeP and PrEP on campus, with 94% of students reporting that it should be offered at the health center. This

shows that even students who are uneducated about PeP/PrEP see the value in providing these preventative measures on campus.

While only a small portion (34%) of students reported that they have previously been tested for HIV it is good to know that these students are getting tested regularly, with 73% of respondents getting tested within the past 6 months. This is compliant with the suggestion that those who are sexually active should get tested every few months. When looking at why students got tested it was interesting to see that no student reported that they felt like they had come into contact with HIV. Only 17% of students said they had been tested at the Pace Health Care Center. Although the Health Center offers these resources no many students are taking advantage of the opportunities on campus. This could be for a number of reasons including insurance reasons, or perhaps students prefer the confidentiality of a doctor's office where they know that they will most likely not be seen by someone they know. The primary reasons for not getting tested were "I do not feel I am at risk of contracting HIV" and "I am not sexually active." The data shows that 84% of students who did not feel at risk of contracting HIV had 1 or 0 sexual partners within the past six months. It is unclear whether this is a partner, who they are engaging in sexual acts with multiple times, or someone who they only engaged with once. However, if it is a partner that would make sense that students do not feel at risk since they are more likely to engage in conversations around STIs and sexual health with their partners. Either way, this portion of the data is reassuring as it demonstrates that a majority of students who do not feel at risk of contracting HIV are not engaging in high risk behavior with multiple people. However, students were also able to fill in their own options as to why they have not been tested, these open-ended responses reinforce the fear/misunderstanding of

getting tested for HIV. One student reported that they, “haven’t gotten around to it but I’ve been meaning to” another said, “I’ve been told that since I haven’t had anal sex I can’t get free tested.” Moreover, 3 students reported that they were scared of getting tested, and one student wrote, “I’m afraid to see if I’m positive. I am afraid I’ll be perceived even lower in [a] social way. I [am] afraid to confront if I made a mistake how to have safe sex. I think I’ll feel bad about feeling incompetent.” These answers are definitely concerning. Students are afraid of getting tested out of the fear that they will be treated differently based on their results. Again, this idea reinforces the negative stigma that still surrounds HIV, and could possibly be related to the finding that only 48% of students would know where to go if they discovered they were HIV-positive. If students were more aware of their resources, and knew where to turn if they were diagnosed with HIV, then it is possible that they would be more likely to get tested. Our data backs up this reasoning. Students were 7% more likely to get tested for HIV if they knew where to turn if they discovered they were positive. Additionally, if they knew where to go for help, then they were more likely to know that the Pace Health Care Center offers testing for students. Education of resources and reducing the fear behind getting tested are key to increasing a student’s chances of getting tested.

Suggestions for Applying the Results in the Future

The findings of this research, while scary at times, are important to understand and address as we continue to look at the best ways to help college students and educate them on HIV/AIDS. As we have discussed thoroughly, proper education is vital in reducing the stigma that still surrounds HIV/AIDS. This education can come in many forms, but it is important that students become aware of exactly what it means to live with HIV. Education needs to be

evidenced based and focused on preventative measures such as PeP/PrEP. This education should also discuss the truth of what it is like to live with HIV. Students want to learn more about ways to help those living with HIV, which should also be integrated into the education. This is beneficial because it is clear that students want to learn, but they are not always afforded the opportunity to obtain HIV/AIDS knowledge without having to perform their own research. Although students are aware of HIV transmission, they do not always take the proper measures to protect themselves. We need to better understand why this is the case, and educate students on the importance of applying theory to practice. The largest population in the sample size was first-year students. Integrating these conversations about HIV and sexual health into summer orientation sessions could allow students to be properly educated from their first day on campus.

As we look to HIV testing and PeP/PrEP access, there are clear ways in which the Pace Health Care Center can improve the ways they engage students. New measures should be taken to promote the resources and availability at the Health Center. While they have a number of different resources to help students, students are not aware of what is available to them, despite their need for these opportunities. A new marketing campaign could showcase what is open to students and how they can take advantage of everything they offer. Furthermore, the Pace Health Care Center should be aware that when they are engaging with students they need to be conscious of the language they are using and make an effort to reduce the fear of being tested. It would be nice to have connections with other resources for students to utilize if they discover they are HIV-positive. This would increase the number of students that are getting tested, and allow them to feel comfortable in doing so.

Based on our study and analysis these are a few suggestions for Pace University as they look for new ways to educate and interact with students on sexual health. It does not appear that these important conversations are happening on campus, but there is a need for proper education and opportunities if we want to be able to provide for all students with regard to sexual health.

Limitations

When completing this study and research there are certainly some limitations we have identified that may affect the results of the survey. First, since the survey was distributed to students online, we do not know that their answers were entirely their own. Students could have easily searched the Internet for their answers or discussed the questions with each other. Additionally, due to the sensitive nature of the questions on the survey, none of the questions were mandatory and students were free to skip questions they did not want to answer. However, we did not provide a “prefer not to answer” option for students to select. Because of this, it is unclear as to why students skipped the questions that they did. It could have been because they were in fact uncomfortable, or maybe they were simply skipping to the end of the survey. Lastly, there was a discrepancy between the number of respondents to some questions in the sexual practices section. The number of students that identified that they had engaged in oral, vaginal, and anal sex were 114, 88, and 30, respectively. However, in the subsequent questions the number of respondents increased, which does not make sense. For example, in question 31, 114 students reported that they have engaged in oral sex, therefore the number of students that are answering question 32, “how often do you use a condom when engaging in oral sex” should be 114; however, the number increases to 131. We see a similar increase for

the vaginal (88 in question 31, but 121 in question 34) and anal sex (30 in question 31, but 105 in question 33) responses as well. This discrepancy suggests that students were answering the question as to how often they use a condom during each of those encounters, without ever actually having been in that situation. If the numbers were closer together we could infer that the discrepancy comes from those students who engaged in those acts while not in college (because the question only concerns which acts they have performed while in college), but the difference between the numbers is too large to pass off as such. Despite these limitations and items to keep in mind, we believe that the survey results are still valid and representative of the student population at Pace University.

Conclusion

The results of this study provide a deeper understanding of Pace University students' perceptions of HIV/AIDS. While students are fairly educated and willing to learn, they have not always been provided with the opportunities, or exposed to the resources they need surrounding HIV/AIDS. There are steps that educators and universities can take to fill the necessary gaps in this knowledge, and to provide the opportunities to help even more students become aware of their HIV status. The focus needs to be on what it is like to live with HIV, and the ways in which students can access different type of preventative measures. Hopefully, through and inclusion of the findings in this research, Pace University will be able to see the need for different resources on both campuses, and make an effort to provide these valuable tools for students. There is still a great deal of work that needs to be done before all students are fully and properly educated on HIV/AIDS, but there are steps that can be taken to address the necessary changes.

Works Cited

- Anastasi, M., Sawyer, R. G., & Pinciaro, P. J. (1999). A descriptive analysis of students seeking HIV antibody testing at a university health service. *Journal of American College Health*, 48, 13-20.
- Badahdah, A.M. and N. Sayem. "HIV-Related Knowledge and AIDS Stigma among College Students in Yemen/ Connaissances en Termes De VIH Et Stigmatisation Associee Au Sida Chez Des Etudiants en Republique Du Yemen." *Eastern Mediterranean Health Journal*, no. 8, 2010, p. 901. EBSCOhost, [rlib.pace.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsgao&AN=edsgcl.238270462&site=eds-live&scope=site](http://search.ebscohost.com/login.aspx?direct=true&db=edsgao&AN=edsgcl.238270462&site=eds-live&scope=site).
- Balfou, Louise, et al. "High HIV Knowledge Relates to Low Stigma in Pharmacists and University Health Science Students in Guyana, South America." *International Journal of Infectious Diseases*, vol. 14, no. 10, Oct. 2010, pp. e881–e887.
- Brown CW, Shepperson JT, Gopalan H, et al. (2012) HIV: Facts, fiction, and the impact on behavior of students at an Historically Black College/University. *Int J Health Promot Educ* 50: 61-67.
- Caroline, Kingori, et al. "Factors Associated with HIV Related Stigma among College Students in the Midwest." *AIMS Public Health*, Vol 4, Iss 4, Pp 347-363 (2017), no. 4, 2017, p. 347. EBSCOhost, doi:10.3934/publichealth.2017.4.347.
- Centers for Disease Control (CDC) 'Current Trends Update on Acquired Immune Deficiency Syndrome (AIDS) - United States' *MMWR* 31(37):507-508

Centers for Disease Control (CDC) and Prevention. HIV Cost-effectiveness, 2017. Available from:
<http://www.who.int/hiv/pub/progressreports/2016-progress-report/en/>.

Centers for Disease Control and Prevention (CDC). HIV-related knowledge and stigma—United States, 2000. *MMWR Morb Mortal Wkly Rep.* 2000; 49: 1062–1064.

Djibuti, Mamuka, et al. "Factors Associated with HIV Counseling and Testing Behavior among Undergraduates of Universities and Vocational Technical Training Schools in Tbilisi, Georgia." *BMC Public Health*, vol. 15, no. 1, May 2015, pp. 1-9. EBSCOhost, doi:10.1186/s12889-015-1760-z.

Earnshaw, Valerie A., and Stephenie R. Chaudoir. "From Conceptualizing to Measuring HIV Stigma: A Review of HIV Stigma Mechanism Measures." *AIDS and behavior* 13.6 (2009): 1160–1177. PMC. Web. 18 Apr. 2018.

Ellis WL (2014) Perceptions of HIV/AIDS-STD risk among first-year African-American college students: The decomposition of self-esteem to promote a positive behavioral change in risk-reduction practices. *Soc Work Ment Health* 12: 155-173.

"History of HIV and AIDS Overview." AVERT, 9 Mar. 2018, www.avert.org/professionals/history-hiv-aids/overview.

HIV.gov. "U.S. Statistics." HIV.gov, 14 Mar. 2018, www.hiv.gov/hiv-basics/overview/data-and-trends/statistics.

Hearing Their Voices: A Qualitative Research Study on HIV Testing and Higher-Risk Teens. Washington, DC: Kaiser Family Foundation; June 1999

Herek, Gregory. "AIDS and Stigma." *American Behavioral Scientist*, vol. 42, no. 7, 1999, pp. 1106–1116., psc.dss.ucdavis.edu/faculty_sites/rainbow/html/abs99_intro.pdf.

Herek GM, Capitanio JP, Widaman KF. HIV-related stigma and knowledge in the United States: prevalence and trends, 1991–1999. *Am J Public Health*. 2002;92:371–377.

Hou SI (2004) Objective and subjective knowledge and HIV testing among college students. *J Health Educ* 35: 328-337

“Joint United Nations Program on HIV/AIDS (UNAIDS). Fact Sheet 2015: Global Statistics, 2015.” UNAids, 1 Jan. 2016, www.unaids.org/sites/default/files/media_asset/20150901_FactSheet_2015_en.pdf.

Jones, R. (1997). Marketing the damaged self: The construction of identity in advertisements directed towards people with HIV/AIDS. *Journal of Sociolinguistics*,1, 393–418

Kern, R. and A. Forman. "Stigma and Salvation: Advertising HIV Awareness in New York City: A Case Study." *Journal of Homosexuality*, no. 8, 2013, p. 1143. EBSCOhost, rlib.pace.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN352961199&site=eds-live&scope=site.

Lewis, John E., et al. "HIV Risk Behavior among College Students in the United States." *College Student Journal*, vol. 43, no. 2, June 2009, pp. 475-491. EBSCOhost, rlib.pace.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2009-09524-001&site=eds-live&scope=site.

Opt, Susan K. and Donald A. Loffredo. "College Students and HIV/AIDS: More Insights on Knowledge, Testing, and Sexual Practices." *The Journal of Psychology: Interdisciplinary and Applied*, vol. 138, no. 5, Sept. 2004, pp. 389-402. EBSCOhost, [doi:10.3200/JRLP.138.5.389-403](https://doi.org/10.3200/JRLP.138.5.389-403).

“Student Body Profile | Undergraduate Admission.” Pace University, 2015,

www.pace.edu/admissions-aid/undergraduate-admission/freshman/pace-student-body-profile.

The New York Times (1991, 8 November) 'Magic Johnson Ends His Career, Saying He Has AIDS Infection'

Valdiserri, Ronald O. "HIV/AIDS Stigma: An Impediment to Public Health." *American Journal of Public Health*, vol. 92, no. 3, Mar. 2002, pp. 341-342. EBSCOhost, rilib.pace.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cmedm&AN=11867303&site=eds-live&scope=site.

Appendix

Survey Results

Q1. Through which of the following can HIV be transmitted? (select all that apply)

Count	Respondent %	Response %	
10	4.95%	1.33%	Skin to skin contact
41	20.30%	5.44%	Saliva
197	97.52%	26.13%	Blood
190	94.06%	25.20%	Semen
191	94.55%	25.33%	Vaginal Fluids
120	59.41%	15.92%	Breast Milk
5	2.48%	0.66%	Sneezing

202 Respondents

754 Responses

Q2. There is a cure for HIV/AIDS

Count	Percent	
8	3.98%	True
193	96.02%	False

201 Respondents

Q3. HIV/AIDS can be contracted by kissing

Count	Percent	
27	13.50%	True
173	86.50%	False

200 Respondents

Q4. What is the difference between HIV and AIDS?

Count	Percent	
5	2.49%	They are the same
29	14.43%	AIDS is a bacteria and HIV is a virus
153	76.12%	HIV causes AIDS
14	6.97%	AIDS can lead to HIV

201 Respondents

Q5. Using a condom is one of the easiest ways to protect against HIV

Count	Percent	
189	94.03%	True
12	5.97%	False

201 Respondents

Q6. There is a daily medication that can prevent against contracting HIV

Count	Percent	
111	55.22%	True
90	44.78%	False

201 Respondents

Q7. With proper treatment individuals with HIV can become "undetectable" and they cannot transmit the virus to others

Count	Percent	
98	49.25%	True
101	50.75%	False

199 Respondents

Q8. Please indicate your level of agreement to the following situations: - I am comfortable sharing food with someone who is HIV positive

Count	Percent	
82	40.59%	Strongly agree
67	33.17%	Somewhat agree
33	16.34%	Somewhat disagree
20	9.90%	Strongly disagree

202 Respondents

Q9. Please indicate your level of agreement to the following situations: - I feel sympathetic towards individuals living with HIV/AIDS

Count	Percent	
155	78.28%	Strongly agree
37	18.69%	Somewhat agree
6	3.03%	Somewhat disagree
0	0.00%	Strongly disagree

Q9. Please indicate your level of agreement to the following situations: - I feel sympathetic towards individuals living with HIV/AIDS		
Count	Percent	
198	Respondents	

Q10. Please indicate your level of agreement to the following situations: - I am afraid of individuals living with HIV/AIDS		
Count	Percent	
5	2.59%	Strongly agree
13	6.74%	Somewhat agree
34	17.62%	Somewhat disagree
141	73.06%	Strongly disagree
193	Respondents	

Q11. Please indicate your level of agreement to the following situations: - I would date an individual who I know has HIV/AIDS		
Count	Percent	
28	14.29%	Strongly agree
66	33.67%	Somewhat agree
68	34.69%	Somewhat disagree
34	17.35%	Strongly disagree
196	Respondents	

Q12. Please indicate your level of agreement to the following situations: - I would be roommates with an individual who I know has HIV/AIDS		
Count	Percent	
103	52.28%	Strongly agree
64	32.49%	Somewhat agree
22	11.17%	Somewhat disagree
8	4.06%	Strongly disagree
197	Respondents	

Q13. Please indicate your level of agreement to the following situations: - Overall I feel knowledgeable about HIV/AIDS		
Count	Percent	
28	13.93%	Strongly agree
94	46.77%	Somewhat agree
59	29.35%	Somewhat disagree
20	9.95%	Strongly disagree
201	Respondents	

Q14. Where do you get your information regarding HIV/AIDS?		
Count	Percent	
86	43.00%	Sex education classes
20	10.00%	Television/movies
2	1.00%	My Parents/guardians taught me
45	22.50%	The Internet
32	16.00%	Other, please specify
Count Percent		
1	3.13%	Biology class in college
1	3.13%	A class at Pace University
1	3.13%	A friend who is HIV+
1	3.13%	AIDs awareness programs through groups such as GSA and PFLAG.
1	3.13%	all of the above
1	3.13%	All of the above.
1	3.13%	Another class in addition to sex Ed.
1	3.13%	Biology Class
1	3.13%	Biology classes
1	3.13%	Class
1	3.13%	classes specifically about LGBTQ+ issues, especially the AIDS epidemic
1	3.13%	Course: AIDS & Society
1	3.13%	Doctors
1	3.13%	I work at Pace University Health Care
1	3.13%	LGBT community
1	3.13%	LGBTQA Center
1	3.13%	Magic Johnson
1	3.13%	Microbiology/Reproductive Biology
1	3.13%	Multiple sources: internet, sex education, parents, media

Q14. Where do you get your information regarding HIV/AIDS?		
Count	Percent	
1	3.13%	My friend has AIDS
1	3.13%	My friends at the table with me
1	3.13%	My major
1	3.13%	Resources such as Equity Fights AIDS and other AIDS education initiatives
1	3.13%	School health courses, not Sex Ed
1	3.13%	SexEd, parents, and internet.
1	3.13%	Television, movies, parents, friends
1	3.13%	The clinic I work at. And Planned Parenthood.
1	3.13%	The internet, sex ed events in college, my doctors office, and friends who are HIV+
1	3.13%	The LGBTQA and Social Justice Center
1	3.13%	Trainings and personal readings
1	3.13%	Trainings on HIV/AIDS
15	7.50%	I have not received any education regarding HIV/AIDS

200 Respondents

Q15. I would like to be more knowledgeable about:			
Count	Respondent %	Response %	
132	67.35%	30.07%	Ways to prevent HIV/AIDS
134	68.37%	30.52%	Ways in which I am at risk of contracting HIV/AIDS
165	84.18%	37.59%	Ways in which I can support individuals living with HIV/AIDS
6	3.06%	1.37%	I am not interested in learning more about HIV/AIDS
2	1.02%	0.46%	Other, please specify
Count Percent			
1	50.00%		Everything about HIV
1	50.00%		Please, can additional knowledge be paused until midterms/finals are over? I would be more interested at that time.

196 Respondents

439 Responses

Q16. Before reading the above statements I knew about PrEP.

Count	Percent	
85	47.22%	True
95	52.78%	False

180 Respondents

Q17. Before reading the above statements I knew about PeP.

Count	Percent	
63	35.20%	True
116	64.80%	False

179 Respondents

Q18. I know where I can access PeP and PrEP.

Count	Percent	
48	26.67%	True
132	73.33%	False

180 Respondents

Q19. PeP and PrEP are expensive.

Count	Percent	
34	18.89%	True
10	5.56%	False
136	75.56%	Not sure

180 Respondents

Q20. The Pace University Health Center offers PeP & PrEP for students

Count	Percent	
77	42.78%	True
103	57.22%	False

180 Respondents

Q21. Regardless to your answer to the previous question, do you think the Pace University Health Center should offer access to PeP and PrEP?		
Count	Percent	
170	94.44%	Yes
2	1.11%	No
8	4.44%	No Opinion
180	Respondents	

Q22. I have previously been tested for HIV		
Count	Percent	
60	33.52%	True
119	66.48%	False
179	Respondents	

Q23. When you are at Pace University, where can you get tested?		
Count	Percent	
97	55.43%	Pace Health Center
2	1.14%	CVS or other drug store
54	30.86%	Doctor's office
12	6.86%	There is no access at Pace University to get tested
10	5.71%	Other (please specify)
	Count	Percent
	1	10.00% I don't know
	1	10.00% Local area testing ctrs
	1	10.00% N/A
	1	10.00% No clue
	1	10.00% no idea
	1	10.00% Not sure
	1	10.00% Pace itself does not do testing to my knowledge. You can go to other drug stores however and get a quick at home test
	1	10.00% Unknown
	1	10.00% Unsure
175	Respondents	

Q24. Why did you get tested?		
Count	Percent	
35	58.33%	As part of a routine check up
17	28.33%	I wanted to know my HIV status
0	0.00%	I thought I came in contact with HIV
3	5.00%	Someone told me to get tested
5	8.33%	Other (please specify)
<p>Count Percent</p> <p>1 20.00% As part of a test for other STIs</p> <p>1 20.00% Complete STI test</p> <p>1 20.00% E.R. doctors did it as a part of routine.</p> <p>1 20.00% It was offered, I was already at the doctor's office anyway. I had come into blood contact with someone living with HIV.</p> <p>1 20.00% Thought I had HPV so since I was already getting tested for one STD I thought I might as well get tested for all of them</p>		

60 Respondents

Q25. Why haven't you been tested for HIV?		
Count	Percent	
49	41.18%	I do not feel I am at risk of contracting HIV
9	7.56%	I do not know where to get tested
0	0.00%	I do not have access to get tested
3	2.52%	Getting tested is too expensive
51	42.86%	I am not sexually active
7	5.88%	Other (please specify)
<p>Count Percent</p> <p>1 14.29% Always used condoms</p> <p>1 14.29% i havenâ€™t gotten around to it but iâ€™ve been meaning to</p> <p>1 14.29% I'm afraid to see if I'm positive. I'm afraid I'll be perceived even lower in social way. I afraid to confront if I made a mistake how to have safe sex. I think I'll feel bad about feeling incompetent.</p> <p>1 14.29% Iâ€™m afraid of getting my blood drawn</p> <p>1 14.29% Iâ€™ve been told since I have not had anal sex I canâ€™t get free tested</p> <p>1 14.29% not sure</p> <p>1 14.29% Tbh im scared</p>		
119	Respondents	

Q26. How did you get tested?		
Count	Percent	
10	16.67%	Pace Health Care center
37	61.67%	Doctor's office
1	1.67%	At-home test
10	16.67%	Third party clinic
2	3.33%	Other (please specify)
Count Percent		
1	50.00%	E.R. (unrelated to reason for visit)
1	50.00%	Pace Health Center, Planned Parenthood, CityMD, GMHC (different occasions)

60 Respondents

Q27. When were you last tested?		
Count	Percent	
14	23.33%	Within the past 30 days
12	20.00%	Within the past 3 months
18	30.00%	Within the past 6 months
16	26.67%	More than 6 months ago

60 Respondents

Q28. If I found out I was HIV positive I would know where to go for help		
Count	Percent	
86	48.04%	Yes
93	51.96%	No
179		Respondents

Q29. Approximately how many sexual partners have you had while in college? (whole number only)		
Count	Percent	
167	100.00%	
Count Percent		
51	30.54%	0

Q29. Approximately how many sexual partners have you had while in college? (whole number only)		
Count	Percent	
	42	25.15%
	6	3.59%
	1	0.60%
	1	0.60%
	2	1.20%
	1	0.60%
	1	0.60%
	17	10.18%
	2	1.20%
	1	0.60%
	2	1.20%
	9	5.39%
	1	0.60%
	5	2.99%
	12	7.19%
	6	3.59%
	6	3.59%
	1	0.60%

167 Respondents

Q30. Approximately how many sexual partners have you had within the past 6 months? (whole number only)		
Count	Percent	
167	100.00%	
	Count	Percent
	56	33.53%
	68	40.72%
	1	0.60%
	1	0.60%
	1	0.60%
	10	5.99%
	11	6.59%
	7	4.19%
	6	3.59%

Q30. Approximately how many sexual partners have you had within the past 6 months? (whole number only)			
Count		Percent	
	2	1.20%	6
	3	1.80%	7
	1	0.60%	8

167 Respondents

Q31. While in college I have engaged in the following with at least one other individual (select all that apply):			
Count	Respondent %	Response %	
114	98.28%	49.14%	Oral sex
88	75.86%	37.93%	Vaginal sex
30	25.86%	12.93%	Anal sex
116	Respondents		
232	Responses		

Q32. How often do you use a condom when engaging in the following? - Oral Sex		
Count	Percent	
10	7.63%	Always
8	6.11%	Sometimes
10	7.63%	Rarely
103	78.63%	Never
131	Respondents	

Q33. How often do you use a condom when engaging in the following? - Anal Sex		
Count	Percent	
49	46.67%	Always
13	12.38%	Sometimes
2	1.90%	Rarely
41	39.05%	Never
105	Respondents	

Q34. How often do you use a condom when engaging in the following? - Vaginal Sex

Count	Percent	
60	49.59%	Always
29	23.97%	Sometimes
7	5.79%	Rarely
25	20.66%	Never

121 Respondents

Q35. Please indicate the frequency with which you perform the following: - How often do you ask your sexual partners about their HIV status before engaging in sexual acts with them?

Count	Percent	Answer
33	24.81%	Always
17	12.78%	Often
18	13.53%	Sometimes
14	10.53%	Rarely
51	38.35%	Never

133 Respondents

Q36. Please indicate the frequency with which you perform the following: - When engaging in sexual activity, how often do you take measures to protect yourself from contracting HIV?

Count	Percent	
45	34.35%	Always
33	25.19%	Often
25	19.08%	Sometimes
7	5.34%	Rarely
21	16.03%	Never

131 Respondents

Q37. When engaging in sexual activity, which measures do you take to prevent HIV?

Count	Percent	
107	78.68%	Using male condoms
3	2.21%	Using female condoms
5	3.68%	PeP or PrEP
21	15.44%	Not listed (please specify)

Q37. When engaging in sexual activity, which measures do you take to prevent HIV?		
Count	Percent	
Count Percent		
1	4.76%	All partners got tested beforehand
1	4.76%	As a lesbian I would use a dental dam to prevent HIV
1	4.76%	been solely partnered for almost 10 yrs
1	4.76%	Doesn't apply to me
1	4.76%	Gardasil
1	4.76%	get tested before hand, do not use condoms
1	4.76%	I don't.
1	4.76%	N/A - in a committed relationship w/ someone HIV-negative
1	4.76%	never engaged in sexual activity
1	4.76%	none, I rarely have sex with people I don't know or trust
1	4.76%	Nothing
1	4.76%	PrEP and sometimes male condoms

136 Respondents

Q38. I feel I am at risk of contracting HIV		
Count	Percent	
2	1.25%	Strongly agree
19	11.87%	Somewhat agree
25	15.63%	Not sure
40	25.00%	Somewhat disagree
74	46.25%	Strongly disagree

160 Respondents

Q39. Are you a Pace University student?		
Count	Percent	
164	97.62%	Yes
4	2.38%	No

168 Respondents

Q40. What is your primary campus?		
Count	Percent	
164	97.62%	NYC

Q40. What is your primary campus?

Count	Percent	
4	2.38%	PLV

168 Respondents

Q41. What is your age? (whole number only)

Count	Percent	
167	100.00%	

Count Percent		
1	0.60%	17
36	21.56%	18
48	28.74%	19
41	24.55%	20
21	12.57%	21
13	7.78%	22
1	0.60%	23
3	1.80%	24
3	1.80%	25

167 Respondents

Q42. What year in college are you?

Count	Percent	
57	34.55%	Freshman/First Year
42	25.45%	Sophomore
36	21.82%	Junior
22	13.33%	Senior
8	4.85%	Graduate Student

165 Respondents

Q43. How do you describe your racial/ethnic identity? (select all that apply)

Count	Respondent %	Response %	
13	7.88%	6.99%	African-American or Black
3	1.82%	1.61%	American Indian or Alaska Native or Indigenous or First Nations

Q43. How do you describe your racial/ethnic identity? (select all that apply)			
Count	Respondent %	Response %	
2	1.21%	1.08%	Arab or Middle Eastern
20	12.12%	10.75%	Asian or Asian American
20	12.12%	10.75%	Hispanic or Latino/a
7	4.24%	3.76%	Multiracial/Biracial
1	0.61%	0.54%	Native Hawaiian or Pacific Islander
120	72.73%	64.52%	White or European American

165 Respondents

186 Responses

Q44. How do you describe your gender identity?																										
Count	Percent																									
31	18.79%	Male																								
122	73.94%	Female																								
11	6.67%	Transgender (Please describe your gender identity)																								
<table border="0"> <thead> <tr> <th>Count</th> <th>Percent</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>9.09%</td> <td>Agender</td> </tr> <tr> <td>1</td> <td>9.09%</td> <td>amab nonbinary</td> </tr> <tr> <td>1</td> <td>9.09%</td> <td>Female</td> </tr> <tr> <td>1</td> <td>9.09%</td> <td>Man</td> </tr> <tr> <td>2</td> <td>18.18%</td> <td>Nonbinary</td> </tr> <tr> <td>1</td> <td>9.09%</td> <td>trans man</td> </tr> <tr> <td>4</td> <td>36.36%</td> <td>Trans man</td> </tr> </tbody> </table>			Count	Percent		1	9.09%	Agender	1	9.09%	amab nonbinary	1	9.09%	Female	1	9.09%	Man	2	18.18%	Nonbinary	1	9.09%	trans man	4	36.36%	Trans man
Count	Percent																									
1	9.09%	Agender																								
1	9.09%	amab nonbinary																								
1	9.09%	Female																								
1	9.09%	Man																								
2	18.18%	Nonbinary																								
1	9.09%	trans man																								
4	36.36%	Trans man																								
1	0.61%	Self-identify:																								
<table border="0"> <thead> <tr> <th>Count</th> <th>Percent</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>100.00%</td> <td>androgynous</td> </tr> </tbody> </table>			Count	Percent		1	100.00%	androgynous																		
Count	Percent																									
1	100.00%	androgynous																								

165 Respondents

Q45. Do you consider yourself to be:		
Count	Percent	
85	51.83%	Heterosexual or straight
24	14.63%	Gay or Lesbian
31	18.90%	Bisexual

Q45. Do you consider yourself to be:		
Count	Percent	
21	12.80%	Queer
3	1.83%	Not Listed (please specify)
Count Percent		
1	33.33%	Asexual
1	33.33%	Questioning: straight maybe bi

164 Respondents

Q46. Please list your hometown (for example: Atlanta, Georgia):		
Count	Percent	
158	100.00%	
Count Percent		
1	0.63%	Albany, New York
1	0.63%	Andover, New Jersey
1	0.63%	Augusta, Maine
1	0.63%	Bloomington, Indiana
1	0.63%	Boston
1	0.63%	Boston, MA
2	1.27%	Boston, Massachusetts
1	0.63%	Bradley Beach, New Jersey
1	0.63%	Bridgeport, CT
1	0.63%	Bridgewater, New Jersey
1	0.63%	Brockton, MA
2	1.27%	Bronx, New York
2	1.27%	Bronx, NY
2	1.27%	Brooklyn
4	2.53%	Brooklyn, New York
1	0.63%	Brooklyn, Ny
2	1.27%	Brooklyn, NY
1	0.63%	Buffalo, New York
1	0.63%	Calabasas, California
1	0.63%	Central Islip, New York
1	0.63%	Charlotte
1	0.63%	Charlotte, NC
1	0.63%	Chesapeake Virginia

Q46. Please list your hometown (for example: Atlanta, Georgia):		
Count	Percent	
1	0.63%	Chesapeake, Virginia
1	0.63%	Cheshire, Connecticut
1	0.63%	Colorado
1	0.63%	Colorado Springs
1	0.63%	Colorado Springs, CO
1	0.63%	Colorado Springs, Colorado
1	0.63%	Cranford, NJ
1	0.63%	Danbury, CT
1	0.63%	Denver, CO
1	0.63%	Denver, Colorado
1	0.63%	District of Columbia
1	0.63%	Dunnellon, Florida
1	0.63%	Durham, Connecticut
1	0.63%	East Longmeadow, Massachusetts
1	0.63%	East Stroudsburg, Pannsylvania
1	0.63%	Elizabeth, NJ
1	0.63%	Erie, Pennsylvania
1	0.63%	Freehold, New Jersey
1	0.63%	Fujian, China
1	0.63%	Germantown
1	0.63%	Glenside, PA
1	0.63%	Hamilton, New Jersey
1	0.63%	Hasbrouck Heights, New Jersey
1	0.63%	Hesperia, California
1	0.63%	HoHoKus, NJ
1	0.63%	Hong Kong
1	0.63%	Jackson, New Jersey
1	0.63%	Jacksonville, FL
2	1.27%	Jacksonville, Florida
1	0.63%	Kansas City, Missouri
1	0.63%	Keansburg, New Jersey
1	0.63%	Kenosha, Wisconsin
1	0.63%	Lansdale, Pa
1	0.63%	Lewes, Delaware
1	0.63%	Little Falls, New Jersey
4	2.53%	Long Island, New York

Q46. Please list your hometown (for example: Atlanta, Georgia):		
Count	Percent	
1	0.63%	Long Island, NY
1	0.63%	Long Valley, New Jersey
1	0.63%	Los Angeles, California
1	0.63%	Louisville, Kentucky
1	0.63%	Mamaroneck, New York
1	0.63%	Marion, Ohio
2	1.27%	Marlboro, New Jersey
1	0.63%	Marlborough, Connecticut
1	0.63%	Massapequa (Long Island), New York
1	0.63%	Mesa, Arizona
1	0.63%	Miami, Florida
1	0.63%	Millstone, New Jersey
1	0.63%	Milwaukee, Wisconsin
1	0.63%	Montgomery, New Jersey
1	0.63%	Montgomery, New York
1	0.63%	Mt. Airy, MD
1	0.63%	Nashville, Tennessee
1	0.63%	Nevada City, CA
1	0.63%	New Brunswick, New Jersey
1	0.63%	New Haven, Connecticut
2	1.27%	New Jersey
1	0.63%	New Orleans, Louisiana
6	3.80%	New York
1	0.63%	New York City
5	3.16%	New York, New York
1	0.63%	Newark, Delaware
1	0.63%	Niagara, New York
1	0.63%	Norwich, Connecticut
2	1.27%	NYC
1	0.63%	Oklahoma City, Oklahoma
1	0.63%	old bridge, new jersey
1	0.63%	Ontario, California
1	0.63%	Ormond Beach, Florida
1	0.63%	Out of US
1	0.63%	Palm Bay, Florida
1	0.63%	Phillipsburg, New Jersey

Q46. Please list your hometown (for example: Atlanta, Georgia):		
Count	Percent	
	1	0.63% Port Jefferson Station, New York
	1	0.63% Portland, Connecticut
	1	0.63% Portland, OR
	1	0.63% Redwood City, California
	1	0.63% Roanoke, Virginia
	1	0.63% Rockland county, New York
	2	1.27% Rockville Centre, NY
	1	0.63% Roxbury, New Jersey
	1	0.63% San Clemente, California
	2	1.27% San Jose, CA
	1	0.63% Sedona, Arizona
	1	0.63% Shelton, Connecticut
	1	0.63% Smithtown, New York
	1	0.63% South River, New Jersey
	1	0.63% Sparta, New Jersey
	1	0.63% Stamford, Connecticut
	4	2.53% Staten Island, New York
	1	0.63% Suffolk County, NY
	1	0.63% surat, india
	1	0.63% Syracuse, NY
	2	1.27% Tampa, Florida
	1	0.63% Toms River, NJ
	1	0.63% Utica
	1	0.63% Vail, Colorado
	1	0.63% Valley Cottage, NY
	1	0.63% Valley Stream, NY
	1	0.63% Wall, New Jersey
	1	0.63% Washington, D.C.
	1	0.63% Washington, DC
	1	0.63% Westborough, Massachusetts
	1	0.63% Westchester, New York
	1	0.63% Weston, Florida
	1	0.63% Woodbridge, NJ
158	Respondents	

