# Duquesne University Duquesne Scholarship Collection

**Electronic Theses and Dissertations** 

Spring 2009

# Why People Fail to use Condoms for STD and HIV Prevention

David T. Brunner

Follow this and additional works at: https://dsc.duq.edu/etd

# Recommended Citation

Brunner, D.~(2009).~Why~People~Fail~to~use~Condoms~for~STD~and~HIV~Prevention~(Master's~thesis, Duquesne~University).~Retrieved~from~https://dsc.duq.edu/etd/361

This Immediate Access is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Duquesne Scholarship Collection. For more information, please contact phillipsg@duq.edu.

# WHY PEOPLE FAIL TO USE CONDOMS FOR STD AND HIV PREVENTION

## A Thesis

Submitted To the McAnulty College & Graduate School of Liberal Arts

Duquesne University

In partial fulfillment of the requirements for

The degree of Masters of Social and Public Policy

By

David Brunner

May 2009

## WHY PEOPLE FAIL TO USE CONDOMS FOR STD AND HIV PREVENTION

By

## David Brunner

Approved January 26, 2009

Moni McIntyre, Ph.D.
Assistant Professor
Graduate Center for Social and Public
Policy
(Committee Chair)

Matthew Schneirov, Ph.D. Associate Professor Sociology Department (Committee Member)

Ralph L. Pearson, Ph.D. Provost Duquesne University

Joseph Yenerall, Ph.D.
Director
Graduate Center for Social and Public
Policy
Associate Professor of Sociology

## **ABSTRACT**

#### WHY PEOPLE FAIL TO USE CONDOMS FOR STD AND HIV PREVENTION

By

#### **David Brunner**

May 2009

Thesis supervised by professors Moni McIntyre, Ph.D. and Matthew Schneirov, Ph.D.

The world is almost 30 years into the AIDS pandemic. People know how to prevent HIV by using abstinence, monogamy and condom use. Despite this awareness, people still put themselves at risk for HIV and other sexually transmitted diseases. Why? This thesis catalogues the various reasons why people fail to use condoms during sexual intercourse. The qualitative information represents specific selections from anonymous personal interviews with over 1500 individuals combined with other available data and information from other HIV field workers and organizations. The findings show four major categories of influences effecting an individual's decision to engage in unprotected sexual intercourse. These major categories include 1. Partner influence 2. Perception of risk 3. Desire for health and 4. Personal barriers to condom use. Each major category is explained and analyzed. Finally a series of practical solutions are offered to address each of the different barriers to HIV and STD prevention.

# **DEDICATION**

The following research thesis is the result of many years of hard work and dedication to the cause of HIV prevention. While things of a sexual nature may seem controversial to some, the global HIV / AIDS pandemic has made sexual health something that we must face as a species in order to survive. It is my hopes to present the facts and ideas around this topic in a clear way that will open dialogue and move humanity beyond the old taboos and controversy surrounding sexual health and into the realm of creating pragmatic solutions for the world we live in today.

I want to thank all of those whom I have worked with in the HIV field over the years for their efforts in battling this modern plague that has destroyed the lives of so many people around the world. I also want to thank Duquesne University for providing me with an opportunity to address this important issue within the context of a formal study. Finally I want to thank Dr. McIntyre, Dr. Schneirov and Dr. Yenerall for their expertise and assistance during the thesis process.

# TABLE OF CONTENTS

F	Page
Abstract	.iv
Dedication	. <b>V</b>
Introduction	1
Thesis Question	3
Literature Review	.4
Methodology	14
Research Findings	18
Discussion of Results	36
Conclusion	.45
Policy Recommendations	47
References	56
Appendix I6	53
Appendix II6	65
Appendix III6	67

# WHY PEOPLE FAIL TO USE CONDOMS FOR STD AND HIV PREVENTION INTRODUCTION

"During 2006, around four million adults and children became infected with HIV (Human Immunodeficiency Virus), the virus that causes AIDS. By the end of the year, an estimated 39.5 million people worldwide were living with HIV/AIDS. The year also saw around 3 million deaths from AIDS, despite recent improvements in access to antiretroviral treatment."

The effects of the AIDS pandemic are felt throughout the United States of America. Costs to the healthcare systems, expensive medications not covered by insurance, lost productivity, and the suffering and loss of loved ones are just some of the hardships felt in the U.S.

The typical cost of living with HIV over a lifetime is \$618,900.<sup>2</sup> This is the cost not for life enhancing, but life sustaining care and treatment. In the fiscal year 2006, the U.S. Federal Government spent \$22 billion on the HIV/AIDS pandemic, 58% of which went specifically to care and treatment.<sup>3</sup>

Along with these mounting costs to individuals and society, new HIV infections in the U.S. are on the rise again following huge declines in the late 1990's. 2004 saw 42,466 new AIDS cases in the U.S. as opposed to 39,389 new cases in the year 2000.<sup>4</sup> "The country had roughly 56,300 new cases of HIV in 2006."

Despite these grim statistics, people still put themselves at risk for HIV.

1

<sup>&</sup>lt;sup>1</sup> (<u>www.avert.org</u>, 2007)

<sup>&</sup>lt;sup>2</sup> (DeNoon, 2006)

<sup>&</sup>lt;sup>3</sup> (Kaiser Foundation, 2006)

<sup>(</sup>Kaiser Foundation, 2006)

<sup>&</sup>lt;sup>5</sup> (AP, 2008)

Currently, three main methods of HIV and Sexually Transmitted Disease (STD) prevention have been proven effective. The first method, which is 100% effective, is complete abstinence from sexual contact. The second method, which includes many more opportunities for failure, is strict monogamy or strict adherence to one or multiple HIV/STD-free partner(s). Finally, a third method of prevention is the use of condoms, which, when used correctly, is 98% effective.

# THESIS QUESTION

As we near the third decade of the HIV pandemic, millions of people remain sexually active outside of monogamous relationships and outside the context of marriage. "By age 44, 95% (94% of women, 96% of men, and 97% of those who have ever had sex) had had premarital sex. Even among those who had abstained until at least age 20, 81% had had premarital sex by age 44." Condom use is one of our most viable options for stopping the spread of HIV and other STDs. In this thesis, I will be investigating in light of this fact, why people do not use condoms.

<sup>6</sup> (Finer, 2007)

<sup>3</sup> 

#### LITERATURE REVIEW

Throughout history, technology has helped our species avoid disasters and solve problems. The field of health is filled with examples of the human ability to overcome disease with technology. From the first vaccine against cowpox,<sup>7</sup> to the use of fluoride in water to prevent tooth decay,<sup>8</sup> technology has been used to prevent diseases.

As we face the HIV and AIDS pandemic today, technology has played a key role in slowing down the spread of this virus. Unfortunately, the search for a vaccination for HIV has proven fruitless. HIV is especially difficult to eradicate through vaccination. "[HIV] infects mainly cells of our immune systems, specifically cells called 'T Helper cells' (known to immunologists as CD4 T cells). Unfortunately, it's these helper cells that tell the rest of the immune system (and the rest of the body) about viral infections; if you kill the messenger, the alarm can never be raised." Aside from the issue of HIV "killing the messenger," HIV is a retrovirus and must turn its RNA into DNA before taking over the host cell for replication. HIV has an error prone version of reverse transcriptase (the chemical used to turn RNA to DNA) and this causes HIV to mutate much more frequently than other viruses and retroviruses. It is because of this frequent mutation that an effective vaccine would be next to impossible to develop. 10

Currently there are two major types of HIV virus, Type 1 and Type 2. Within Type 1 there are three main groups of HIV that include the major "M" group, the outlier "O" group and the new "N" group. Within the M group there are subtypes A, B, C, D, F, G,

<sup>&</sup>lt;sup>7</sup> (Scott, 1996)

<sup>&</sup>lt;sup>8</sup> (Water Quality and Health Council, 2008)

<sup>&</sup>lt;sup>9</sup> (Best Of Immunology, 2004)

<sup>10 (</sup>Best of Immunology, 2004)

H, J and K.<sup>11</sup> With all of these subgroups and continuing mutations, a viable vaccination campaign would be a major world wide undertaking that is many years away.

Other approaches to HIV prevention must be developed in order to slow the rising tide of new infections. To this date, the most notable piece of technology in preventing the HIV virus is the condom. "The first known published description and trials regarding prophylactic condom use were recorded by the Italian Gabrielle Fallopius in the 1500's. He claimed to have invented a sheath made of linen and conducted trials amongst 1,100 men using the condom - none of who became infected with syphilis."

Today the condom has been vastly improved and has become a crucial technology in preventing HIV and other STDs.

"Meta-analysis of several studies showed an 85 percent decrease in risk of HIV transmission among consistent condom users versus non-users.... Studies also show a 49 percent to 100 percent reduction in risk of gonorrhea among [those] reporting condom use compared with non-users." <sup>13</sup>

"One study of latex condom effectiveness observed couples in which only one partner was living with HIV, comparing the couples using condoms consistently with those that did not. Of the 123 couples using condoms consistently no uninfected partners became infected with HIV. Of the 122 couples not using condoms consistently, 12 partners became infected with HIV."

In Thailand, one study used STD statistics to evaluate the effectiveness of their condom distribution program. "Condom use was reported as 84% in 1992 which was

<sup>&</sup>lt;sup>11</sup> (Avert, 2008)

<sup>&</sup>lt;sup>12</sup> (Rip n Roll inc., 2008)

<sup>13 (</sup>U.S. Dept. of Health & Human Services, 2001)

<sup>&</sup>lt;sup>14</sup> (American Red Cross, 2001)

increased from 14% in 1989.... All five STD declined dramatically in 1989, the beginning of the condom program, by over 70% in some populations. The declines were greater in the more urbanized areas. CONCLUSIONS: The accelerating decrease in STD prevalence corresponds to the initiation of the government policy in 1990 to push large quantities [of condoms] through the commercial sex network."<sup>15</sup>

Alan Jones, certified HIV prevention counselor at the Pittsburgh AIDS Task

Force, has found condoms to be very effective in preventing HIV. "Over the years of testing, I have run into a number of people who have been in long term sexual relationships where one partner is HIV negative and the other partner is HIV positive. By using condoms every time, the HIV negative partners have remained without HIV after all of these years."

16

When used properly, condoms are physically durable and reliable. Tests are not only done by the manufacturers but also independent researchers. "We test condoms by inflating them until they burst; an established predictor of real-world performance. The best had no premature breakage among the 120 samples we tested for each model. When inflated, they also averaged at least 38 liters of air. The worst, however, broke 18 of 120 times at volumes below our strength threshold of 25 liters."

The Food and Drug Administration also tests condoms for effectiveness using a different test. "Manufacturers 'spot check' their condoms using a 'water-leak' test. FDA inspectors do a similar test on sample condoms they take from warehouses. The condoms

<sup>&</sup>lt;sup>15</sup> (Benjarattanapron, 1993)

<sup>&</sup>lt;sup>16</sup> (Jones, 2007)

<sup>&</sup>lt;sup>17</sup> (Consumer Reports, 2005)

are filled with water and checked for leaks. An average of 996 of 1000 condoms must pass this test." <sup>18</sup>

Despite all of these advantages, condoms are still not used enough. One study of ninth – twelfth grade students in the U.S. showed that, "overall condom use at last sexual intercourse increased significantly from 1991 to 1997 (46.2% to 56.8%).... After more than ten years of HIV prevention education through schools, families, and communities, sexual intercourse rates are level and condom use is increasing. While these findings are encouraging, many high school students are establishing patterns of behavior that put them at risk of HIV infection. More must be done to help young people delay initiation of sexual activity and increase condom use among those who choose to be sexually active." Today the rate of condom use is still far from 100%. "Among single, sexually active participants, almost three-quarters (71 percent) said they never use barriers when having oral sex, and 23 percent, nearly a fourth, never use condoms for vaginal sex, the survey found."

Condoms are effective, but they are not being used. Why? Literature has shown that there are many answers to this question. "Twenty-seven percent of women and 80% of men who considered themselves to have no risk or a small risk of contracting HIV were actually at moderate or high risk. For both men and women, the prevalence of condom use at last sex was more than twice as high among those who assessed their risk correctly (30% and 16%, respectively) as among those who did not (14% and 6%)."<sup>21</sup>

\_

<sup>&</sup>lt;sup>18</sup> (FDA, 1990)

<sup>&</sup>lt;sup>19</sup> (Kann, Lowry, 1998)

<sup>&</sup>lt;sup>20</sup> (Oglesby, 2004)

<sup>&</sup>lt;sup>21</sup> (Prata, Morris, 2006)

Another research finding shows that media coverage of HIV in the U.S. has decreased since the initial alarm of the 1980's. "For the newspapers and broadcasts included in this study, total coverage of HIV/AIDS increased during the early 1980's, peaked at over 5,000 stories in 1987, and declined steadily to fewer than 1,000 stories in 2002.",22

"A study published last summer in the New England Journal of Medicine reported that a majority of 3,005 American adults surveyed, aged 57 to 85, continued to have sex two to three times each month. But only 38 percent of the men and 22 percent of the women had discussed sex with a doctor since they turned 50, according to the report funded by the National Institutes of Health."<sup>23</sup> "In Newark, New Jersey (USA), among senior citizens (50 years and older) rates of infection for HIV/AIDS make up 16% of all new reported cases."24

Misconceptions around HIV and STDs can influence condom use among all ages. "Teens are particularly susceptible to STDs for several reasons. Many know little about the STDs that most commonly affect them. Instead, misconceptions abound, such as: 'If a person looks "clean," they can't have an STD.' In fact, most people with an STD have no initial symptoms at all. Or, 'I don't need to use a condom-I'm on the pill.' In fact, birthcontrol methods such as the pill or Depo-Provera offer no STD protection. And, 'my boyfriend / girlfriend loves me.' Love and trust have nothing to do with it-most people with an STD don't even know they're infected."25

<sup>(</sup>Kaiser Foundation, 2004)(Huffstutter, 2007)

<sup>&</sup>lt;sup>25</sup> (Davis, 1998)

Partner influence has also been shown to influence perception of HIV risk. One research study showed, "After controlling for socio-demographic variables: communication with the partner was negatively associated with HIV risk...." When a condom is not used, it is sometimes because the two partners trust each other. Another study showed that, "teens used condoms more often during vaginal and anal sex with casual partners than with main partners. Even so, they used condoms only half the time -far too little for protection from sexually transmitted diseases. And teens with main partners used condoms only 37% of the time." International findings were similar. "In most countries, respondents most frequently reported trusting of their partner as the reason they did not use a condom with a marital or regular partner. In Mozambique, this was even true with casual partners."

Another study investigated the decision making process of women who opted against condom use with their HIV positive partners. "Patterns of coping that influenced women's decision to risk unprotective sex with their [HIV positive] partners were tentatively classified as follows: Destructive: women who manifested their anger in aggression towards herself and/or others; Symbiotic: women who established a relationship of total dependence with partner; Submissive: women who resigned themselves to their partner's wishes for fear of his reaction; Romantic: women who established unrealistic and ingenuous expectations of love, where dying for love had an altruistic connotation; Mystic: women who wished to give birth to a child thinking that he/she would have the magical powers to restore his/her parents' health; Fatalistic: women who believed in predetermination of life where control was on a divine being

<sup>&</sup>lt;sup>26</sup> (Cianelli, Ferrer, 2002)

<sup>&</sup>lt;sup>27</sup> (Lescano, 2006)

<sup>&</sup>lt;sup>28</sup> (Population Services International, 2002)

who could always change the end; Penitent: women who attributed the infection to a divine punishment; Gambler: women whose inadequate behavior was related to the pleasure of risk taking; Denial: women who denied the seriousness of the situation or their role in determining the outcome; Apathetic: women whose prolonged depression interfered in taking constructive attitudes; Victim: women who constantly complained but never took any constructive decision. Conclusions: Not all women wish to protect themselves against their partner's infection."<sup>29</sup>

Monogamous couples can face a scenario similar to the "submissive woman" in the previous study. "The monogamy presumption, then, makes it more difficult to introduce condom use inside a relationship, thereby heightening the risk to both members of the couple should an unsafe encounter occur outside the relationship."<sup>30</sup>

Even with communication between partners, and frequent HIV and STD testing, there is a high level of potential risk when not using condoms. This is especially true when it comes to the window period during HIV testing. To determine HIV status, an HIV antibody test is used. This test can only detect an HIV infection, after the production of the HIV antibodies, which usually takes between twenty-four and sixty days, with 99% of people showing up positive for HIV antibodies by ninety days. In rare cases, some people have taken up to 6 months to show up as HIV positive with this test. This period of time before a newly infected person shows up with the HIV antibody, is known as the "window period," where someone could be infected yet test negative.

An example of the problem created by this window period is demonstrated within the adult film industry. "During the time between his two negative tests, the index

<sup>&</sup>lt;sup>29</sup> (Pinel, 1996)

<sup>&</sup>lt;sup>30</sup> (Adam, Husbands, 2005)

patient performed in film productions in Brazil, engaging in unprotected sexual acts. While in Brazil, he experienced an influenza-like illness that resolved before his return to California on or around March 10, 2004. According to LACDHS investigators, upon the return of the index patient to California, he participated in film productions in which he engaged in unprotected sexual acts with 13 female partners. Three of these 13 female partners subsequently tested HIV-positive by PCR after having tested HIV-negative during the preceding 30 days."<sup>31</sup>

"The AIDS optimism hypothesis, which became the most widely prevailing explanation for rising HIV rates, claims that MSM [men who have sex with men] have become complacent following the introduction of more effective treatments (primarily protease inhibitors), have lost the sense of urgency surrounding AIDS, and have been reverting to unsafe sex."

This change in sentiment is reflected in the results of one Australian study that found, "MSM [men who have sex with men] in the country are complacent about the virus. 'Our feeling is that HIV is now considered a manageable lifetime chronic disease and not the scary death threat it was many years ago when we didn't have treatment, so a lot of complacency has set in."

"The Gift" is a documentary that explores the phenomenon of "Bug Chasing," where an HIV negative individual actively seeks to become infected. Such rationale for looking to become HIV infected included trying to fit in, and wanting to put the guessing of one's own status to rest.<sup>34</sup> These cases are very rare and make up a small, but very real, "micro culture" of those who become infected with HIV.

<sup>&</sup>lt;sup>31</sup> (CDC, 2005)

<sup>&</sup>lt;sup>32</sup> (Adam, Husbands, 2005)

<sup>33 (</sup>Kaiser Family Foundation, 2008)

<sup>&</sup>lt;sup>34</sup> (Hogarth, Louise, 2004)

Self esteem has been shown to play a role in sexual decision making. "HIV prevention messages implicitly exhort people to act safely now in order to preserve themselves for the future. HIV disease is a relatively slow-moving disorder; even if it is left untreated, a decade may pass before life-threatening symptoms of AIDS appear. To be effective, then, the prevention message calls on an autobiographical narrative that life is worth living and that something done now makes sense because the future is a desirable place to be. However, depression and personal turmoil can pull away the underpinnings of this belief. If life does not seem worth living now and the future appears bleak as well, then self-preserving actions no longer make sense."<sup>35</sup>

Alcohol and drugs have also been shown to affect sexual decision making. One study in the U.S. showed that, "Heavy use of alcohol was correlated with increased casual sex without condoms and with increased number of sexual partners among youth." Another youth study found that, "Twenty-four percent of teens 15–17 years of age say that their alcohol and drug use led them to do more sexually than they had planned." Planned.

Removing impaired judgment and self esteem from the equation, a qualitative study found specific reasons why some individuals did not use condoms: "(1) the 'fit and feel' of condoms; (2) condom brand and size; (3) application problems; (4) availability of condoms and lubricants; and (5) commitment to condom use. Common themes included reasons why men believed condoms would break or slip off during sex. Comfort problems, including tightly fitting condoms and condoms drying out during intercourse, were mentioned frequently. Condom associated erection problems were often described.

<sup>&</sup>lt;sup>35</sup> (Adam, Husbands, 2005)

<sup>&</sup>lt;sup>36</sup> (Stanton, 1999)

<sup>&</sup>lt;sup>37</sup> (CASA, 1999)

Many men also noted that condom use reduced the level of sexual satisfaction for their female partners. Men noted that finding the right kind of condom was not always easy and it became apparent during the interviews that men typically did not acquire lubrication to add to condoms. Despite their expressed problems with using condoms, men were, none the less, typically emphatic that condom use is an important part of their protective behaviour against STIs."<sup>38</sup>

The existing research shows a large array of reasons why people do not use condoms consistently. In my study, I will contribute my own findings on why people use condoms inconsistently. Hopefully my contribution will add more insight into this field of research and assist in finding a more powerful method of HIV prevention.

\_

<sup>&</sup>lt;sup>38</sup> (Crosby, 2004)

#### **METHODOLOGY**

This study will focus on the use of male latex condoms. This includes the many varieties of male latex condoms used for prevention of the Human Immunodeficiency Virus (HIV) and other Sexually Transmitted Diseases (STD) during sexual activity between partners.

I will be discussing the experiences of individuals who both use and do not use condoms and their reactions to the use of condoms. This study will focus on the individual's personal barriers towards the use of condoms.

Male condoms are also made for protection during oral sexual engagement. In this thesis, however, I will be discussing the use of male condoms for penetrative vaginal and anal sex only. The dynamics involved with condoms during oral sex are much different than those involved during vaginal and anal sexual intercourse.

I have been working in the HIV and STD prevention field for more than eight years. During these eight years I have worked as an HIV and STD educator, community outreach organizer, and HIV tester and counselor. To get a broad picture of why people do not use condoms, I will utilize information that I have gathered during the course of my career in the HIV and STD prevention field. These methods include personal interviews with clients during testing, questions and comments during outreach, surveys and questionnaires that I have conducted in the field, documented cases I have encountered and information from interviews I have had with other people in the same field of HIV and STD prevention.

While working at the Pittsburgh AIDS Task Force (PATF), I have personally tested over 1500 people for HIV. During the course of the HIV testing procedure, I

conduct a risk assessment of the client. This risk assessment includes a client's sexual activities from six months prior to their last HIV test to the present. During this risk assessment, I inform the client of their risk for HIV and other STDs according to their described sexual behavior. This serves to bring a client's perceived risk as close to their actual risk as possible. I then discuss options for reducing their HIV/STD risk. When the topic of unprotected intercourse arises (anal or vaginal), I ask the client why they did not use a condom. The answers to this question make up a large portion of my study. Because we perform both confidential and anonymous testing, these responses are not recorded physically in any way. Instead, I listen to each client's story and then make a mental note of dialog. Following the testing sessions, I write down and discuss with my co-worker the individual reasons for having unprotected intercourse. This client information is kept anonymous by removing any and all identifying information. By discussing these cases and recording them, we are able to develop risk reduction plans for others who may have similar situations. We regularly use this information during our education and outreach in the community.

Another source of information for this study is through personal interviews. I have conducted a number of interviews with professionals in the HIV and STD prevention field. Some of these interviews can be seen in my documentary film "Time for Compassionate Change." Other interviews were less formal and occurred during meetings and conferences with peers. My primary source of anecdotal information for this study is my co-worker, Alan Jones. Jones has conducted over 5000 HIV tests in his lifetime. He has been working at the Pittsburgh AIDS Task Force for more than 16 years and has been on the front lines of the HIV epidemic since the early 1990s. Jones has

agreed to share his knowledge and experiences in the HIV field in order to further this research into why people do not use condoms.

In 2004, I conducted a survey for the Pittsburgh AIDS Task Force. This survey (see appendix I) included a questionnaire which assessed sexual risk, HIV knowledge, demographics, and reasons for not using condoms. The survey was anonymous and used by PATF to further target our prevention outreach efforts among gay males and men who have sex with men (MSM). This information is available and I will use the data collected from the open ended question, "If you don't use condoms all the time, what are the biggest reasons why you don't use them?"

All of the participants of the survey were located at one of two local gay clubs in Pittsburgh. The survey was conducted on two consecutive Thursdays at one venue that usually attracts patrons between 18 and 25 yrs of age. The survey was then conducted on two consecutive Saturdays at the second venue, which usually attracts a 25 plus age crowd. Participants were given no incentive to fill out the questionnaire, other than that they would be helping out with the PATF survey. Participants were told not to complete the survey twice.

There are a few problems with this source of information. One is that the original surveys were lost in 2007 during PATF's move from 905 West Street, Wilkinsburg, Pennsylvania to 5913 Penn Avenue Pittsburgh, Pennsylvania. The good news is that the data from the surveys was entered electronically into a database and spreadsheet before its disappearance. Some of the answers to the questions to the condom use question were lumped into general categories during the data entry. Answers such as "condoms don't feel as good" and "can't feel anything" were lumped into "loss of sensation." Another

problem with this survey is that a prior question asks if condoms are used during oral sex. This resulted in many respondents saying that they do not use condoms during oral sex. These answers will be omitted since oral sex does not pertain to this study. Finally, there were only 155 respondents to the survey making it too small a sample to draw major conclusions. Due to these intrinsic flaws to this data set, it will not be used as quantifiable data, but used in a more qualitative way.

One final source of information for this study will come from personal experiences that I have had while in the field of HIV and STD prevention. This will include actions and behaviors that I have witnessed personally and am able to recall and describe with accuracy.

As HIV testers and counselors, Alan Jones and I both hold very high standards with regard to anonymity and confidentiality. While these issues of HIV and STDs are of global importance and significance, HIV and STDs continue to be sensitive topics. That is why all information contained in this research is and will remain anonymous.

#### RESEARCH FINDINGS

Seventy-six of the 155 self-Identified MSM surveyed used condoms consistently for anal or vaginal sex. The results of the anonymous survey showed the following reasons for inconsistent condom use. Twenty-two respondents cited their monogamous relationship as their main reason for not using condoms. Eight respondents had a sensation related complaint toward condoms. Three respondents went without condoms on request of the partner. One respondent each claimed "Forget," "Trusted Partner" (non-monogamous), "Calculated Risk," "Don't Care," "Thrill," "In the Moment," and "Latex Allergy."

The findings of this survey show that there are more than a few reasons for inconsistent condom use. As an HIV prevention counselor at PATF, I have observed a significant portion of clients (35%) who come in for testing, have not used condoms consistently for anal or vaginal sex and are not with one monogamous partner. These individuals would be considered at higher risk for HIV. Another 35% of clients have had unprotected intercourse within the context of a monogamous relationship, putting them at slightly lower risk. The remaining 30% request our HIV testing services for a variety of reasons ranging from visa application requirements, to unprotected oral sex, to "worried well" clients who should have no reason to think they have HIV, yet are sure they may have gotten it.

My research findings have shown that there are many reasons that people have intercourse without condoms. I have found that all of these reasons fall into four major categories or factors that influence a person's decision to use condoms. These four factors are what I call "partner influence," "perception of risk," "desire for health," and

"personal barriers to condoms." Most of these factors overlap and co-exist with other factors during the time of decision making, but they sometimes exist on their own. In appendix II these four factors are defined along with some of the reasons for inconsistent condom use that fall within these four categories.

#### **Partner Influence**

Monogamy: Monogamy is the most common reason for clients to go without a condom. This is usually because the partners "trust each other" or have been tested before the relationship and feel safe. Monogamy is defined as the practice of having a single sexual partner over a period of time. This can be within the context of anything from formal marriage to a budding new relationship. Monogamy can be a risky situation for contracting HIV and other STDs for a number of reasons including serial monogamy, presumed monogamy and the testing "window period."

One woman I tested had been in a monogamous relationship for over a year. This was her fifth monogamous relationship and her first HIV test. She was only getting tested as support for her friend who was coming in for a test. When asked why she did not use condoms, she responded that her previous relationships were all monogamous and with people she knew for a long time. Unfortunately, Jones and I have seen many monogamous relationships end in the transmission of HIV due to this very same thought process.

Aside from serial monogamy, presumed monogamy can complicate condom use.

Many clients come in to get an HIV test after they find out that a presumed monogamous partner has been having intercourse outside of their relationship. The clients in this

scenario often feel betrayed and angry. They often claim that they will never trust a partner again and some vow to use condoms no matter what.

On the other side of that same situation are clients who come in for tests who have "cheated" on their monogamous partner. They often feel very guilty and anxious at the thought of putting their partner at risk for HIV or other STDs. This is compounded with the fear of punishment or worse if they are found out to be cheating. It is our job to encourage these clients to abstain, or at a minimum use condoms with their partners until the window period for HIV has passed to prevent a possible infection. "The monogamy presumption, then, makes it more difficult to introduce condom use inside a relationship, thereby heightening the risk to both members of the couple should an unsafe encounter occur outside the relationship." One client decided to tell his wife that he got stuck by a needle while taking out the trash, rather than tell her about his affair. A non-sexual reason for introducing condoms into a relationship avoids some of this dilemma created by the "monogamy presumption."

The final problem with monogamy is the window period. By three months 99% of people infected with the HIV virus will test positive. By six months that number is 100%. Unfortunately, not every couple abstains from unprotected sex for three to six months before getting tested for HIV, resulting in unintentional infection of a monogamous partner.

One couple had been tested HIV negative by their doctors two weeks into their relationship. They began having unprotected intercourse following these negative results. The following year they came in to PATF for an HIV test, because one partner found out that a previous partner of his was HIV positive. Unfortunately, his doctor gave him the

<sup>&</sup>lt;sup>39</sup> (Adam, Husbands, 2005)

HIV test only three weeks following this encounter. When I conducted the test, he came up HIV positive. Luckily, his partner has so far tested negative. This window period scenario is so common, that Alan Jones and I make it a regular part of our outreach education.

While monogamy is the most frequent reason we see for inconsistent condom use, it still remains risky. Outside of monogamous relationships, condom use also remains inconsistent with many people.

There are many factors that influence a person's decision not to use condoms during a non-monogamous encounter. In my research, I have found four major factors that influence sexual decision making with regard to condoms. These factors are also present between monogamous partners, but the interactions become much more complex when discussing non-monogamous encounters. The four factors that influence condom use are "partner influence," "personal barriers to condom use," "perceived risk", and "desire for health."

Monogamous non-condom users by comparison, usually fall into the "partner influence" reason for not using condoms. Monogamous couples generally feel that they trust each other and perceive each other as no risk for HIV or STDs, especially if they both have been tested for HIV outside the window period. Factors such as personal barriers to condoms, perceived risk and lack of desire for health, can influence a monogamous couple's desire to go without condoms, but partner influence is almost exclusively the main factor. In non-monogamous couples, partner trust is much more variable.

Trust of partner between non-monogamous partners takes on many different forms. One of these forms of partner trust includes the disclosure of HIV and STD status. One merely has to look at the online sex hookup sites to see how this situation can unfold. A person looking for casual sex will state that they are disease free and only pursue partners who also claim to be disease free. Naturally, there are several ways this can go wrong.

The most common scenario is that of two partners or friends meeting for causal sex who both perceive themselves to be HIV negative. The partners disclose their HIV status as negative and trust each other enough to engage in unprotected intercourse.

While both partners may have tested negative, their last tests can sometimes be months or even years prior to the encounter. Meanwhile, many partners have come and gone during that time period. This situation is very frequent and leads to a large number of HIV positive tests that we get each year. I personally have tested a number of people who became HIV positive from this very situation, and many more who have had close calls with this situation.

Status disclosure can be risky enough when both people are being honest. It gets even more risky when deception is involved. One client came in to get tested following the discovery of partner deception. The client met someone for casual sex who listed himself as HIV negative on his online profile. Only after meeting the person and engaging in unprotected oral sex, did the person reveal that he was HIV positive. Did the HIV positive person lie about his status on his internet profile? Did the HIV positive person merely forget to update his online profile? These answers will never be known,

because the client left the hotel room of this casual partner after becoming aware of the deception.

Some people simply lie about their HIV status. One client asked advice on what he should do about an HIV positive person who is having unprotected sex. He knows that this person is lying about his HIV status to have unprotected sex. Unfortunately, this is putting many people at risk for HIV. Cases of outright deception and abuse of partner trust exist and are probably the most disturbing of non-monogamous unprotected sex situations.

Trust of partner can be risky even when HIV or STD status is discussed. When HIV or STD status is not discussed, the level of risk is even greater. One client claimed that he could tell if someone is HIV positive by the way he looks. Another client claimed that he only had unprotected intercourse with innocent types, who do not have lots of partners, making them unlikely to have HIV. In either case, these clients trust their partner to be HIV negative, due to their own under informed perception of the situation.

Another situation that I have heard from HIV positive and HIV negative clients during testing and in the field is what I call the "unprotected sex assumption." This scenario is between two non-monogamous partners who are engaging in casual unprotected intercourse. Neither partner discloses their HIV status and neither make a move to put on a condom. The HIV positive person assumes that the other person must also be HIV positive or they would use a condom. The HIV negative person assumes that the other person must also be HIV negative or they would use a condom. In this situation, both partners trust the other to be responsible. They unfortunately assume the

status of the other to be the same as their own. I have heard this exact scenario described by at least 10 separate people in justification of unprotected sex.

Status disclosure or not, many people are not even aware of their HIV status. One client asked a partner if he was HIV positive, and the person just said that they did not know. It is for these reasons that unprotected intercourse with a non-monogamous partner is so risky.

#### **Perception of Risk**

The second factor that influences condom use is an individual's perception of risk. If an individual does not feel at risk for HIV, then they can be less consistent with their condom use. Perception of risk can take many forms from the denial of HIV existence, to overly optimistic belief in modern medicine's ability to fix everything. HIV knowledge is the main factor behind perception of risk. Generally, if a person has more accurate HIV and STD knowledge, they will assess their own risk more accurately. Most clients who perceive their risk properly use condoms consistently with non-monogamous partners. Clients, who perceive their risk incorrectly, fall into two major categories. One category includes those at risk and the other category includes the overly concerned.

The category including those at risk does not use condoms consistently with non-monogamous partners.

Perception of risk also can be related to partner influence, and the perception of whether a partner has HIV. This is different than the previous findings under the partner influence heading. In this case, the perception of risk is due to the perceiving individual's own misconceptions, rather than the partner's actions or statements. The

following are some instances where a person's perception of their partner's HIV risk has led them to have intercourse without condoms.

One client described his partners as low risk for HIV, since they were not promiscuous and very innocent types. He realized that this perception was not the reality after getting gonorrhea from one of them. Another client incorrectly assessed his risk as low, since his partners were all less than 25 years old. A number of male clients perceive themselves at low risk for HIV as long as they are just having sex with women. This incorrect perception was due to his belief that HIV is a "gay disease." As HIV continues to spread rapidly throughout the heterosexual population, this misconception is on the wane. Other clients have stated that they avoid having sex with people who have "the look" of HIV. While some long term HIV survivors can develop the characteristic lipodistrophic appearance, many show no symptoms, making this selection process for unprotected sex a very risky one. Alan Jones has had a few clients who have looked in a person's medicine cabinet to see if they have HIV medicines, before hooking up with them.<sup>40</sup> One woman came in for an HIV test after a condom broke during intercourse with a man from Nigeria. Before that, she never had a test, even though she had unprotected sex with seven American males prior to that encounter. There are many other cases that I have seen where a person's perception of risk is based on some superficial characteristics of their partner and nothing else.

Perception of risk goes far beyond partner characteristics. Some people perceive their risk based on the sexual action that they engage in. I have had a few clients who perceived themselves to be at little or no risk for HIV, since they were on the inserting end, rather than the receiving end of unprotected intercourse. Another person thought

<sup>&</sup>lt;sup>40</sup> (Jones, 2007)

that since he only had anal sex instead of vaginal sex with females he was not at risk for HIV. Some people believe that pulling out before ejaculation will prevent HIV, not realizing that pre-cum can carry the HIV virus. One woman felt safe from HIV, because she used a diaphragm during intercourse. All of these beliefs are based on a misunderstanding of how HIV is transmitted, resulting in inconsistent condom use.

Other misconceptions surrounding HIV can lead to a skewed perception of risk. "AIDS Optimism" is a very common one today. A few clients have described a possible HIV positive result as something like having diabetes where "you just take a few pills." One merely has to site the 17,011 reported AIDS deaths in 2005<sup>41</sup> and the \$618,900 dollars of treatment<sup>42</sup> costs to see that HIV is a crippling and deadly ailment, not to mention all of the side effects of the medications and the social stigma attached. One client decided to go without condoms because he had "good insurance" that would pay for the medications. Unfortunately, insurance companies often deny people coverage once they discover their client's HIV positive status. Another client believed that you could "cure" HIV, citing Magic Johnson as an example, and was disregarding condoms altogether.

A couple of clients were not using condoms with their HIV positive partners. The reason they felt safe was that their partners were taking medications and had "undetectable" viral loads. Unfortunately, a person's viral load can spike unexpectedly and even "undetectable" viral counts can sometimes deliver an infectious dose of fluid during unprotected intercourse. The San Francisco AIDS Foundation has run into this misconception enough to state on their website, "Some people believe that taking

<sup>&</sup>lt;sup>41</sup> (CDC, 2007) <sup>42</sup> (DeNoon, 2006)

antiretrovirals or having an 'undetectable viral load' means that they can't transmit HIV to their sexual partners. That is *not* true. A person who takes HIV treatments--even those who have 'undetectable' viral load counts--can still transmit HIV."<sup>43</sup>

Another misconception that leads to inconsistent condom use among HIV positive people, is the belief that once infected with HIV, you do not have to worry about getting it again. This is not the case. There are many different strains of HIV and someone who has one type of HIV can become co-infected with another version of HIV.

Accurate perception of risk usually results in consistent condom use by people engaging in non-monogamous intercourse. This is not always true. Sometimes people do not even care about their own health enough to use condoms. "HIV prevention messages implicitly exhort people to act safely now in order to preserve themselves for the future. HIV disease is a relatively slow-moving disorder; even if it is left untreated, a decade may pass before life-threatening symptoms of AIDS appear. To be effective, then, the prevention message calls on an autobiographical narrative that life is worth living and that something done now makes sense because the future is a desirable place to be. However, depression and personal turmoil can pull away the underpinnings of this belief. If life does not seem worth living now and the future appears bleak as well, then selfpreserving actions no longer make sense."44

#### **Desire for Health**

In my own research I have found that an individual's desire for health or self preservation is a very important factor in consistent condom use. If a person has no regard for his or her own well being, they are more likely to engage in risky behavior.

<sup>&</sup>lt;sup>43</sup> (SF AIDS Foundation, 2008)

<sup>44 (</sup>Adam, Husbands, 2005)

"Here is a masters level educated, intelligent, articulate and attractive man in his early 40's who became HIV positive even after years of working in the field of HIV prevention. When I asked him how it happened he stated. 'When you're black and gay in a world where you're constantly told you're going to hell, and surrounded by homophobia, not to mention facing difficulties of being a racial minority, you don't think of what can I do to save my life, you think is my life even worth saving."<sup>45</sup>

It is very difficult to convince someone to prevent HIV and STDs when they feel they have nothing to live for. One person in his late 60's who I test regularly, does not use condoms because he feels that he will probably die soon anyway. One common thread among people who have no regard for health is a feeling of low self esteem or a sense of having nothing to lose. These individuals with no regard for their own health are frequently self destructive, actively bringing more harm to themselves and others, usually in the pursuit of an impulse or addiction fueled behavior such as drugs or sex. These are a few examples I have observed where disregard to health is the main factor in inconsistent condom use. Their situations are very real and often times very desperate.

In most cases where one's view is self destructive or without regard to health, it is unusual that they will even have the desire to get tested for HIV. Interestingly, we see few people with this nothing to lose mindset come in for testing. In general, my interaction with them is while doing educational outreach deep within the community, through personal connections, or through survivors who have managed to escape this self destructive world view.

A 22 year old gay male who was shunned by his family and friends after coming out, falls directly into this category. Giving him even less hope, he had to stop going to

<sup>&</sup>lt;sup>45</sup> (Jones, 2007)

college, since he could not afford tuition payments. He stated that he was going to kill himself, but decided to go to the gay club one last time before doing so. When it came time to engage in sexual behavior, condoms were not even on his mind, since he felt as though there was nothing to live for anyway. While this person is no longer suicidal, he now faces a drug addiction which itself is a serious cause for concern. When no one cares for you, why care for your self? That can be a hard question to answer. Instead of thinking about long term health this individual is pursuing what ever enjoyment he can get out of life for the moment. Unfortunately, that amounts to more drugs, sex and other impulse pleasures.

Another client who had gone through a series of life crushing blows, including the loss of his job, a new drug addiction and the police filing a warrant for his arrest, decided to go "out with a bang." Unfortunately, during this chain of tragic events he also found out that he had HIV. With nothing to lose, he fled town, and went on a multi-person sex binge with little regard for his own or other's safety. This had nothing to do with his like or dislike of condoms, but rather an impulsive driven attitude of pleasure seeking, self destruction and no regard for others.

One client that I tested was not self destructive, but was of low self esteem. The person who he liked, only performed sex without a condom and was also HIV positive. The client with low self esteem had it set in his mind that it did not matter to him since he would never have a chance with another person that he liked so much. Luckily, while this client has low self esteem, he is also a fairly rational and informed person. I was able to help him realize the illusion of his desire and how a brief adventure no matter how enjoyable, is not worth a life of suffering and regret.

The care for health factor can be a very major underlying factor with regard to condom use.

Even clients who are accurately informed about HIV, are not in a monogamous relationship, and are very health conscious sometimes do not use condoms consistently. In this final section of findings, I will describe the personal barriers that individuals expressed about condom use.

# **Personal Barriers to Condom Use**

**Carelessness:** The most frequent reason given for inconsistent condom use is self reported "stupidity", lack of planning or forethought. Frequently, this is coupled with intoxication or the reason of, "I was drunk at the time."

Clients who report carelessness as a reason for not using condoms usually do use condoms. Many of these clients come in for an HIV test, specifically because such a lapse in consistent condom use occurred. Some of these clients who "forget" to use a condom are in mostly monogamous relationships and forget to use a condom with a random partner outside of their usually monogamous relationship. Among these clients, there is usually a sense of distress and thoughts of, "How could I have been so stupid?" Another common experience is a sense of acute anxiety among these clients. Many clients in this position consider themselves in control of their lives most of the time, and forgetting a condom amounts to potential ruin of all they have worked for.

Alan Jones noted that, "sex is a very powerful thing. Especially when someone is worked up and caught up in the moment, they can forget that it only takes one time without a condom to become infected [with HIV]."

<sup>&</sup>lt;sup>46</sup> (Jones, 2007)

Sometimes people are selectively careless with their condom use. One client who used condoms every time, had sex as a receiving anal sex partner, but forgot a couple times while he was the inserting partner. He was concerned, but also reassured himself that his risk was lower, since he was not receiving without a condom.

While this may reduce relative risk, insertive anal sex still falls within the realm of high risk behavior for HIV.

Other factors increase an individual's susceptibility to this type of lapse in condom use. These factors include the influence of partner, individual's perception of risk and their desire for health.

Loss of Sensation: There are a number of people who do not use condoms because of a self reported loss of sensation. This is the second most frequent reason after "stupidity" or yielding to a partner's decision making. In these cases, the loss of sensation can even result in the inability to maintain an erection or the inability to achieve ejaculation. One client even went so far as to describe the loss of sensation as equivalent to "eating a juicy, mouth-watering cheese steak with a balloon on his tongue."

For a number of people who complain of the loss of sensation with condoms, their experience of intercourse without condoms is quite extensive. "Many people have gone through the 1960's and 1970's never even thinking about using condoms. For some people from that generation, it is a real struggle to get used to them after all those years of sex without condoms."

The main cause for this loss of sensation is that the friction of the penis against the receiving orifice is felt through a layer of latex.

<sup>&</sup>lt;sup>47</sup> (Jones, 2007)

No Condoms Available: This response makes up a portion of inconsistent condom users and could also be called lack of preparation. Usually the person is not near a store or supply of condoms when the sexual engagement begins. Other situations sometimes render a person unable to get condoms at all. In certain places, it is difficult to find condoms due to limited sales and distribution. In other situations condoms are in fact illegal. "Condoms are banned or unavailable in 95 percent of U.S. prisons... The AIDS rate among prisoners is three times the rate in the general public." 48

In fewer situations, the condoms are not immediately available, but as close as a room or two away. Here even the action of getting up and finding them is "too much of a hassle" at the time. This is related to the next frequent answer for not using condoms which is the loss of spontaneity.

Loss of Spontaneity: Some clients reported that using a condom "breaks up the mood" or "takes too much time to open and put on." This is a less frequent reason why one would forgo using condoms, but it is indeed a response colleagues and I have heard from clients. One client described the opening of the condoms with lubed up hands as a "Frantic struggle against time that throws off my game." Often times the sexual encounter is not premeditated enough to determine the location of the event. Another client stated, "I always keep a supply of condoms at home, which left me unprepared for the back seat romance that we had at the end of the date."

**Foreskin:** A major shortcoming of condoms is the relative difficulty of use for uncircumcised males. When applying a condom, the foreskin can produce multiple undesirable effects. According to condom instructions, a male must pull the foreskin back and then apply the condom. This, however, can cause the condom to bunch up at

<sup>&</sup>lt;sup>48</sup> (Reuters, 2006)

and around the head when the foreskin retracts, making the condom either rub against itself, not cover the whole penis to the base, slide off during intercourse or a combination of the three. Putting the condom on without pulling back the foreskin also creates the problem of reduced sensation, or in extreme cases, having a greater likelihood of breaking as the foreskin retracts and over stretches the tip of the condom.

The combined limitations of the condom for the uncircumcised male can make condom use a less than enjoyable experience.

Latex Allergy: "It is difficult to determine just how widespread a problem latex allergy may be. Less than 1 percent of the general population is reported to have a reaction to latex. Despite this, more than 1,700 cases of latex allergy have been reported to the U.S. Food and Drug Administration (FDA) since 1988. Many more cases probably go unreported." In the case of a latex allergy, it is definitely advised not to use latex condoms unless no other option is available. There are alternative materials and devices available for these individuals such as the polyurethane condoms and other options which I will explore in the discussion portion of the thesis.

Condoms are too tight: A few people experience extreme restriction and squeezing when wearing a condom. There are a number of different sized condoms from small or "snugger fit" to large and extra large. Almost everyone is able to be accommodated with one of those sizes. Once fitted with the proper size, there are few who still dislike using the condoms for this reason.

**Less Intimacy:** Sometimes people feel less intimate with their partner if they feel a physical barrier is between them. This results in less satisfying love making for some

٠

<sup>&</sup>lt;sup>49</sup> (NY Dept. of Health, 2006)

individuals. It is not so much the sensation, but the mental thought of having a barrier between lovers that ruins the condom experience for these individuals.

**Fetishism:** In more rare, but well noted cases, there are people who have managed to develop a fetish for unprotected sex. Fetish is defined as "excessive or irrational devotion to some activity." In the case of these individuals, their fetish is unprotected sex. The creation of a fetish is ultimately mysterious and unknown, but for whatever reason, the person has managed to eroticize unprotected intercourse to a point where they actively engage in it despite the known dangers and risks.

**Thrill:** There are only two clients whom I have interviewed where thrill was their reason for having unprotected sex. When asked about thrill, it was specifically referred to as the "thrill of taking a hot viral load" that gives the one person the "excitement they need." Does this person seriously want HIV? "No, but the thrill of life and death" is what was making him seek out this behavior.

My recommendation was that of finding alternative thrilling behaviors that did not include the risk of becoming HIV positive. To this, the person gave some serious thought as he truly did not want to become HIV positive and was actually disturbed by his own thrill seeking method of risky sexual engagement.

The other case of thrill seeking that I encountered, included the unprotected sex fetish, and loss of sensation, making that person's case much more complex.

"Bug Chasing" and "Gift Giving": There is finally a small "micro culture" of people who actively pursue HIV infection and actively pursue infecting other people with HIV. This is a very rare phenomena but it is real. Some cases of this include people who think they may be HIV positive and do not want to worry about it anymore so they

<sup>&</sup>lt;sup>50</sup> (The Free Dictionary, 2003)

actively become HIV positive so they know. Other "bug chasers" who are looking to become infected are looking for a community that they can belong to such as a community of guys who are HIV positive. <sup>51</sup> While these cases exist, I have not interviewed any clients who fall exclusively into this category. I have encountered one client case, however, which comes close. This client has two HIV positive partners with whom he engages regularly in unprotected sex. Because of a number of the above mentioned reasons, he does not like condoms, never uses them and would rather be HIV positive than worry about his status all the time.

### Other Barriers to Condom Use

The above mentioned personal barriers to condom use make up one of the four main factors of the decision making process with regard to risky sexual engagement. Personal barriers to risk reduction can be overcome or exacerbated when the three non-personal factors of partner influence, perception of risk and value of health are added into the decision making equation. These four variables are fluid, overlapping and play off of each other in many different ways. What they have in common is their psychological influence in the decision making process.

There are two other scenarios that I did not cover in the research findings. This includes involuntary sexual encounters such as rape and purely economic sexual encounters such as prostitution. In the case of rape, decision making analysis is not valid since the victim has no control over the decision on whether to use condoms or not. In the case of intercourse for financial gain, the four main factors are very relevant, and are reflected during the negotiation for price per sexual activity.

<sup>&</sup>lt;sup>51</sup> (Hogarth, Louise, 2004)

### DISCUSSION OF RESULTS

When it comes to the health of oneself and others, there are many reasons to use condoms. HIV can be prevented with consistent condom use. It puzzles HIV prevention experts why some people still resist using condoms. From the research, resistance to condom use is a combination of variables that creates a complex problem that has no single answer.

As an HIV and STD prevention specialist, I work with individuals to lower their risk during sexual activity. Since each client enters the session with a different combination of variables, I must tailor the sexual risk reduction plan to their specific needs. In the field of public health, HIV and STD counseling, this method of intervention is known as "risk reduction."

Risk reduction has two goals. The first goal is to give accurate information.

Accurate information helps clients bring their perceived risk congruent to actual risk as much as possible. Once the client perceives their risk accurately, we help them to achieve the second goal, which is reducing that risk as close to zero as possible.

Clients who have an incorrect perception of risk are relatively easy to cure of their risky sexual behavior if that is their only factor for inconsistent condom use. It really comes down to explaining which bodily fluids carry the HIV virus and how to keep those infected fluids from entering the body. Once a person knows about the risks associated with different actions and behavior, the client can then develop a plan of action which avoids future risk. This could include remaining abstinent, finding an HIV and STD free monogamous partner, or using techniques and tools such as condoms to maintain an HIV and STD negative status.

If a person takes this new information and still has difficulty avoiding risky sexual behavior, then they most likely have some other issue besides lack of information. This could include a personal barrier to using condoms, a partner problem or lack of will to prevent HIV and STDs.

Personal barriers to condom use are very varied, but generally come down to one or two specific things like allergies, spontaneity, sensation or size. Luckily, there is a variety of HIV and STD prevention technologies beyond the male latex condom. There are female condoms, polyurethane condoms, cock sheaths, and new condom designs that have not even been produced yet. A full discussion of these alternatives and their applications are contained in appendix III. These alternatives to the condom eliminate the problems of allergies, spontaneity, sensation, and size. Development of alternatives to condoms is a very promising field, which is currently on the cutting edge of HIV and STD prevention.

In lieu of these improved prevention devices, abstinence from penetrative sex is another alternative course of action for someone who does not like to use condoms. At first suggestion, this is often treated with skepticism from the client whom I may be testing. Upon further explanation, however, it is something that can be quite fulfilling and healthy for the individual. Just as the one individual has managed to eroticize unprotected sex, one can also eroticize other sexual activities that are not risky for HIV and STD. There are an infinite number of sexual activities that people enjoy that do not even deal with penetration. Anything from sexual toys to fetish clothing, erotic massage, bondage, and role-playing are just a few examples. The one individual, who stated that thrill was his reason for enjoying unprotected sex, took to these possibilities as a way to

reduce his risk. I suggested that adding another thrill element to his sexual engagement that does not include unprotected sex could give him the excitement that he needs. He never thought of it before, but after a brief discussion and some facilitated brainstorming, he was able to think of a few things that he would find exciting and highly erotic without the risk of unprotected sex.

Many people have not given the universe of sexuality much thought. Only after realizing how normal it is to have a multitude of erotic triggers, which are often fluid and malleable, do people begin to have power over their own sexuality. People have more control over their sexual nature than they often realize. People can eroticize many different things given the proper stimulation and way of thinking about it.

One disturbing trend is the resurgence of "bareback" pornography. "Showing unprotected sex became taboo in gay porn after HIV and AIDS emerged in the 1980s. Yet in the last four years there has been an explosion in the production of bareback films. They now make up about 60% of the gay market." With people viewing and eroticizing "bareback" porn, there needs to be something to counter that trend. One suggestion I have made in public health and adult entertainment circles is the creation of "educational porn" where safe sexual activities are demonstrated and eroticized such as non-penetrative play. This will help people to enhance their sex life by making it more enjoyable and most importantly more healthy.

With the problems of sensation, spontaneity and eroticization of condoms addressed, there are still some barriers preventing sexually active individuals from using condoms. This comes down to access. Where does a person get their condoms? In a

<sup>&</sup>lt;sup>52</sup> (Holt, 2008)

world facing the global pandemic of HIV / AIDS one would think all of the global powers would be promoting the use of the prevention technology that is at our disposal. This is not the case. There are various forces in the world blocking access to condoms in places such as prisons and various communities where condom use is discouraged. "Latin America is in danger of having the epidemic of AIDS due to the current policy of Roman Catholic Church that discourages the use of condoms, UN officials reported." 53

In many rural areas it is difficult enough to pay for a condom, let alone face resistance from the community leaders. When I was in Kenya, I taught about HIV and STD prevention at many high schools. One high school I went to was a strict Bohorah Muslim school. Prior to my speaking engagement, the headmaster called four times to make sure that there would be no mention of condoms, or sex outside of marriage. I gladly agreed, since any information on sexual health is better than no information. Following a discussion on health issues that married couples may face, I opened the discussion for questions. The very first question was about condoms from a 14 year old boy, "Can condoms prevent pregnancy and HIV?" Questions about condoms and sexual health continued from there as the discussion opened up. Without this courageous boy's question, the class may have never learned about condoms.

One piece of misinformation that has been used in an attempt to prevent condom usage is the "condom pore" theory. One newspaper columnist wrote, "Over the last few years conservative groups in President Bush's support base have declared war on condoms, in a campaign that is downright weird -- but that, if successful, could lead to millions of deaths from AIDS around the world.

<sup>&</sup>lt;sup>53</sup> (infoniac, 2007)

I first noticed this campaign last year, when I began to get e-mails from Evangelical Christians insisting that condoms have pores about 10 microns in diameter, while the AIDS virus measures only about 0.1 micron."<sup>54</sup>

The condom pore misinformation is often stated similar to this following excerpt.

"Pores or holes 5 microns in diameter have been detected in cross sections of latex gloves. (A micron is one-thou-sandth of a millimeter.) Latex condoms will generally block the human sperm, which is much larger than the HIV virus.

But HIV is only 0.1 micron in diameter. A 5-micron hole is 50 times larger than the HIV virus. A 1-micron hole is 10 times larger. The virus can easily fit through. It's kind of like running a football play with no defense on the field to stop you."<sup>55</sup>

This alarming possibility of pores in latex condoms naturally required further investigation into the actual mechanisms of the condom wall in relation to something as small as an HIV virus. No one in the field of health wants to promote a failed prevention mechanism. A group of researchers put this "condom pore" theory to the test simulating the tiny HIV virus in a fluid filled condom. "In the extreme and highly unlikely scenario of all the fluid being pumped out of the condom, the transfer rate would be about 0.1 mcl after 10 minutes of thrusting after ejaculation filled the condom with semen (i.e., 0.01% of a typical 3 ml ejaculate). Thus proper use of latex condoms would result in exposure reduction from HIV of at least 4 orders of magnitude. These findings demonstrated that use of latex condoms can significantly reduce the risk of HIV transmission, but it does

<sup>&</sup>lt;sup>54</sup> (Kristoff, 2003)

<sup>&</sup>lt;sup>55</sup> (Wright, 1995)

not eliminate that risk."<sup>56</sup> Four orders of magnitude mean 10,000. The conclusion is that there is a 10,000 times greater chance of preventing HIV with a condom than with no condom.

When educating out in the field, I will still run into the occasional "condom pore" questions. Logic can demonstrate the flaw in the pore theory as follows. The "pores" in latex are 5 microns wide while HIV is 0.1 micron wide. This is a space 50 times wider than the HIV virus. Therefore, someone concluded that HIV will pass through the condom like a marble through a hula-hoop.

I then calmly point out the fact that a molecule of oxygen is 0.00021 microns wide, and 17,241 times smaller than the supposed "pores" in latex; therefore, something as small as oxygen or an air molecule should blow through the condom like a grain of sand blowing through the St. Louis Arch. To prove the point, I challenge the person to slide a condom over their head for a few minutes, while they re-ponder their "condom pore" theory. Through the scientific testing of fact, myths and misconceptions about condoms can be dispelled, bringing rational thinking back into condom distribution efforts.

Condoms remain a highly effective barrier against the transmission of HIV and STD, but even the most dedicated use of condoms can be rendered useless as a result of human error. One study conducted between November 2000 and January 2001, investigated the human error when applying or using condoms. "Some of the other basic problems highlighted by the study included not checking the condom for visible damage (74%), not checking the expiration date (61%), and not discussing condom use with their partner before sex (60%). In addition, various technical errors were found, including

<sup>&</sup>lt;sup>56</sup> (Carey, Herman, 1992)

putting on the condom after starting sex (43%), taking off the condom before sex was over (15%), not leaving a space at the tip of the condom (40%), and placing the condom upside down on the penis and then having to flip it over (30%). In addition, 29% of study participants reported condom breakage and 13% reported that the condom slipped off during sex. Crosby stressed that this is not surprising since those who reported slippage or breakage also had significantly higher error scores. 'These problems are likely the result of condom use errors rather than defects in the condom itself, which again highlights the need for better condom education and instruction,' added Crosby."<sup>57</sup>

In a similar type of situation, I have talked to people who have had condoms break on them regularly. Some of these users have been using too little or no lubricant with the condom, others have been using condoms that are applied too tightly without leaving a small reservoir at the tip for semen, and others have used expired condoms. Once condom application is demonstrated or explained, a large majority of these users have realized their mistake and corrected their action. In a less common scenario, there have been individuals using more than one condom at once for "extra protection." This leads to a higher probability of breakage, due to the friction caused from the two condoms rubbing against each other. These facts once again stress the need for education about condom use and prevention technology for people everywhere.

With informed and rational thinking, innovative technology and individually tailored safer sex messages, HIV prevention can go a long way. General awareness of HIV and STD globally still remains a challenge. Broad messages regarding the facts about HIV, STD, partner communication and condom use need to saturate the general media and be regular conversations between people around the globe. Trainers of

<sup>&</sup>lt;sup>57</sup> (Crosby, 2002)

trainers in HIV and STD risk reduction need to be present in every community so that eventually every individual is informed and skilled in the ways of living sexually healthy lives. It is not enough to place passive billboards or public service announcements in random spots. Sexual health educators must work with the leaders of the community to train people on a practical level to become teachers of sexual health.

Help from government and business is always welcome, but they can not be solely relied upon to solve the problems. Public health policy technicians are needed to design systems which will diffuse information in the most effective and efficient way in the context of a given community.

Creating messages that meet individual needs are important and can only be created with the help of the people within the community on the individual level. These messages will communicate the understanding of sexual health to the community in ways in which they will relate and understand.

I have seen the individually tailored risk reduction empowerment approach as highly effective when counseling and testing individuals and while doing educational outreach in the community. The person who grasps the whole concept of risk reduction becomes able to practice and develop new strategies for not only themselves, but for those they interact with sexually. One client, who I have trained in sexual health, has a sheet of safe activities that he shares with his partner before they engage in sexual activity. This opens their communication and dialogue allowing information sharing and the introduction of condoms or other prevention devices before any sexual risk presents itself.

A second client not only has reduced his risky behavior to nil after risk reduction coaching, but also has learned how to intervene when he sees others at potential risk, in a way that encourages safer sexual behavior.

Reducing sexual risk to zero takes time and practice for someone who has been engaging in risky behavior for a long time. Practice and positive reinforcement from friends, peers and community leaders goes a long way in helping someone take those steps toward sexual health.

## **CONCLUSION**

The most frequent exposure to HIV throughout the world occurs during sexual intercourse without condoms. AIDS service organizations, epidemiological studies and even the Center for Disease Control have spent most of their time studying factors such as age, race and sexual orientation, instead of focusing on why people fail to use condoms. Other studies do focus on reasons for inconsistent condom use, but try to find sociological reasons, such as educational background, trust of partner and self esteem. This thesis directly addresses the individual and personal expressed reasons for inconsistent condom use, including technical difficulties and psychological barriers. By taking a new approach to looking at the HIV pandemic, this thesis has revealed some very relevant realities about inconsistent condom use in the context of a formal study.

The HIV prevention messages have usually included the ABC (abstinence, be faithful, or use condoms) model of risk reduction. As revealed by this study, condoms are not always an option or choice for many people. Reasons can include things from latex allergies to ill fitting condoms, to a fetishism of unprotected intercourse. It is because of this diverse range of problems, that the C of condoms may need to be rethought in new prevention messages.

Knowledge is power. With proper knowledge of HIV, STDs and how they are spread, an individual can develop methods of sexual risk reduction that work for their individual circumstances. The ABC of HIV prevention may be more effective as abstinence, be faithful, or use creativity. This new message empowers the individual to craft their own prevention techniques that work for them.

This thesis also demonstrates how personal the entire experience of HIV and STD prevention is to the individual. There is no monolithic approach to sexual activity.

People learn about and experience sexuality in many ways, leading them to a wide variety of sexual interests and behaviors. Because of this, an individually tailored risk reduction model of sexual health is the only method that would work across the board. By meeting the person where they are, and steering their motivations toward safer and healthier sexual practices, a tailored sexual risk reduction plan is both practical and effective.

This study demonstrates a need to take people seriously when they say they have unprotected sex because "they do not like" using condoms. If abstinence, being faithful and condoms do not work for every one, then the HIV prevention and risk reduction messages must be upgraded to accommodate what is really going on in the world today, by including creativity and safe alternatives to condoms.

#### POLICY RECOMMENDATIONS

The pandemic of HIV and AIDS will soon enter its third decade. The devastation caused by this disease is catastrophic, and will only get worse if not solved soon. A systematic, sustainable and coordinated approach to stop this virus is needed.

Governments have proven unable to fix this problem alone. All levels of society and institutions must be involved in reaching people where they are, with the goals of sexual health education, and sexual risk reduction.

The first goal is to tackle perceptions of risk through education. Accurate facts and knowledge about HIV transmission, and prevention are a crucial step to reducing sexual risk. Currently, there is sex education in many public schools throughout the world. Unfortunately, this is not universal. A global sexual health curriculum should be designed and available for schools around the world to utilize and adapt to their specific realities. The information for each grade would be age appropriate, determined by what the children are exposed to in their lives outside of the classroom. This is similar to the abstinence until marriage education that I have done in high schools in the U.S. and Kenya. The topics will focus on sexual health between a married couple, and during the question and answer portion, the topics will broaden. The students will often bring up the topic of condoms which shows that they are ready for that information. It is important for teachers to be very well educated about sexual health and how to present it in a way that encourages open and respectful discussion.

Many people have grown up without having sexual health education in school.

This is why adults need sexual health education, also. Unfortunately, there is no mandatory adult education program. This is why a multi-prong approach must be in

place using free-market, community based, and government facilitated methods of adult sex education.

The free-market solutions are good because they are economically sustainable. In the United States, HIV is a very costly disease to treat. With a price tag of \$2,100<sup>58</sup> a month to manage, a client with HIV is a health insurance company's nightmare. For this reason, it would be very beneficial for health insurance companies to employ one sexual health educator to educate all of their clients. This could be done at a two hour seminar once a year at each of the companies covered by the insurer in exchange for reduced premiums. Not only will this save money for the insurance company and employer, but the employer will have a much more healthy and productive work force.

Many adults do not have health insurance. Due to this fact, communities also need to be involved in sexual health education. Non-profit organizations and non-government HIV and AIDS service organizations operate in most countries throughout the world. By using these agencies for trainers of trainers, they can educate local community leaders about sexual health. In turn, these leaders can introduce sexual health educators to the community during outreach to various locations and events. These educators can teach about sexual health, including proper condom use and where to get tested for HIV and STDs. At HIV and STD testing sites, trained sexual health counselors will be ready to craft sexual risk reduction plans with the clients.

The media is another place where adults get their information and education.

Currently, television programs, books and radio shows have inconsistent health messages that can leave a person confused as to how HIV and AIDS works, not to mention confusion on many other health issues. By working with the writers and media creators,

<sup>&</sup>lt;sup>58</sup> (DeNoon, 2006)

a team of health advisors can assist in making the content of the selected piece accurate to the latest health information. The piece of media would then get a "Healthy Seal of Approval" and the creators can subtract production costs as a charitable deduction on their taxes.

Besides saturating the community, work place and media with health messages, adults need to be targeted with sexual health information near their access point to sex itself. One of the fastest growing places for people to meet for sexual activity is online. A simple google search can show you thousands of sites designed specifically for meeting other adults for romance or sex. Many of these sites have no sexual health messages involved. If they do, it is usually given a small side bar and is very passive, requiring the user to actually pursue the information themselves. Meanwhile, these sites are profiting off of the facilitation of encounters of a sexual nature. The website owners are not personally liable for user actions, but they can be given incentives such as grant money to take part in their customer's health. One example would be a test which measures the individual's awareness and knowledge of sexual health and sexual risk. If the person passes this five minute test, they can join. If they fail the test, they will be shown a 10 minute video about sexual health including STD and HIV transmission and prevention, proper condom use, pregnancy and other relevant sexual health topics. Following this 10 minute video, the user can retake the test and become a member of the site if they pass.

Educating people about sexual health is crucial in stopping the HIV pandemic.

Getting people to take part in reducing their risk can be another situation all together. For people to reduce their risk, they must be empowered to negotiate with their sexual

partners, desire to take part in maintaining one's own health, and have access to HIV and STD prevention technology such as condoms. Combined with accurate knowledge, these three things will effectively shut down the HIV pandemic.

Empowering people to negotiate effectively with a partner is more difficult than teaching sexual health information. Without some sort of social narrative or script to fall back on during sexual engagement, people are often on their own when negotiating the sexual scene. This can have grave implications for sexual health, since inconsistent condom use could result in a life time of illness or death. How does someone face a partner who refuses to wear a condom? How does someone maneuver an intense sex scene from risky, to safe, without breaking up the mood? These are things that non-monogamous sexually active people need to know.

The solution to this problem requires a talented set of sexual health technicians to mix art, and science. This team of technicians would produce a series of videos which depict different scenarios in which a person may find themselves sexually. These films would portray the main character successfully negotiating a safe sexual scenario in a very realistic way. From these videos, people will be empowered with a series of scripts to use if they encounter similar scenarios in the real world. Top talent would be recruited to make the videos enjoyable, exciting and realistic, so that people would watch the videos for entertainment and not just education.

One way to attract more talent into this field of film informational entertainment or infotainment would be to hold a Public Health film festival. One day of the festival could focus on sexual health and prizes would be given to the top films. Once a series of the films are available, they could be shown on television, the internet, and in other

institutions whose mission is to maintain their member's health. In this way, relatively small amounts of prize money could be used to generate many helpful works.

The key to spreading this knowledge and understanding is to share discoveries and ideas in the field of sexual health. A clearinghouse of information could be set up on the internet which is accessible to most people. This website would have links to all of the latest studies, information, HIV and STD prevention and education and ideas related to sexual health. The site would incorporate all of the latest information, as well as possible counter theories, studies and their refutations. In this way of presenting all of the facts and information, people will be able to get the most up to date and accurate information possible, as well as stimulating scientific inquiry to further understand HIV, STDs and sexual health. There would be information for trainers of trainers, teachers, counselors, doctors, patients, parents and children. Links to videos, brochures and literature would be available. Self risk assessment tests would be available. Risk reduction recommendations would be available that use your answers during an interactive online survey, which would craft a plan of action for you. By providing a source of accurate and up to date information, people will be empowered to take control of their own sexual health once and for all.

Knowing how to keep your self healthy is only half the battle in fighting HIV and STDs. The other half is inspiring the will for people to maintain their health. One merely has to look at American obesity rates to know that some people neglect to care for their own dietary health. The same attitudes are present toward sexual health, also. Teaching the merits of long term planning verses indulgence in impulsive behavior is difficult. Even the most dedicated condom users have a slip up on occasion. The key to

this is to create a situation where the impulse driven and more attractive decision is the healthy one. This is where prevention technology will play a large role.

transmission while delivering even greater pleasure, people will take up the cause of sexual health with renewed enthusiasm. Innovative safer sex designs will make a person desire the safe sexual action even more than the unsafe action. The cock sheath, which can be worn well in advance of a sexual encounter while enhancing pleasure, is merely the tip of the iceberg. By providing non-monogamous inconsistent condom users more access to sexual technology through internet sales, trade shows and events, they will be able to find equipment that they need to best make their next sexual encounter a safe one. Currently, there are many options available to people looking to fulfill their sexual desires or fantasies in a safe way. The HBO series "Real Sex" often features activities of a sexual nature which have little or even zero risk of HIV or STD transmission. By creating exciting sexual options that are risk-free, those who indulge will be replacing unhealthy sexual activity with sexual activity that does not spread HIV or other STDs.

For many people, abstinence, monogamy and condoms will work well in preventing HIV. For the rest, there is sexual technology. By taking an all inclusive approach to HIV prevention, everyone can be reached who wants to live a healthy life. The final hurdle in combating HIV is to address those with no desire for personal health or those who even have self destructive impulses.

Unfortunately, there is no quick policy fix for this situation. Only by surrounding people with care, purpose and hope will this problem be cured once and for all. The world today is a long way off from this utopian goal. In the meantime, concrete policies

as outlined above will give people hope and empowerment in combating HIV.

Eventually, this positive outlook and action will improve lives, and this elevated spirit can catch on, spreading optimism and hope to those who do not seem to care.

One final policy recommendation needs to be made to address a situation where HIV prevention is out of the hands of the individuals involved. This is the current U.S. prison system, which is a fertile ground for the spread of HIV. "The estimated prevalence of human immunodeficiency virus (HIV) infection is nearly five times higher for incarcerated populations (2.0%) (1) than for the general U.S. population (0.43%)."<sup>59</sup>

Rape and sex among prisoners can occur when jail cells house multiple inmates. By incarcerating people on drug charges such as heroine possession or trafficking, populations of intravenous (IV) drug users, who are at high risk for HIV, enter the prison population. During rape and sex, the HIV from IV drug users spreads to non IV drug users. Most prisons do not allow access to condoms, and in the case of rape, condoms are often not even considered.

In effect, the U.S. prison system is facilitating the spread of HIV by holding people in multi-person cells against their will with little protection from rape. The spread is further facilitated by releasing these newly infected people into the general population to bring HIV to their communities.

Multi-person cells facilitate the spread of HIV in prisons. By mandating a one person per cell policy, this problem could be eliminated. Cells could be made smaller to accommodate one instead of two. Currently, there is not enough jail space to give every prisoner their own cell. This is why an entirely new approach to incarceration must be taken at the same time. "Federal prisons were estimated to hold 176,268 sentenced

<sup>&</sup>lt;sup>59</sup> (CDC, 2006)

inmates as of Sept. 30, 2006. Of these, 16,507 were incarcerated for violent offenses, including 2,923 for homicide, 9,645 for robbery, and 3,939 for other violent crimes. In addition, 10,015 inmates were serving time for property crimes, including 519 for burglary, 6,437 for fraud, and 3,059 for other property offenses. A total of 93,751 were incarcerated for drug offenses. Also, 54,336 were incarcerated for public-order offenses, including 19,496 for immigration offenses and 24,298 for weapons offenses."<sup>60</sup>

By eliminating prison sentences for drug offenses, over half of the prison space would be freed up. This would give the space needed to create single occupancy cells within prisons. Not only would it eliminate the opportunity for prison rape and sex, but it would also eliminate much of the IV drug population that brings HIV into the prison population in the first place. With the money saved in feeding and housing the drug offenders, rehabilitation centers could be given much more funding to help tackle the drug related issues in a much more productive way.

Continuing the cycle of incarceration, infection and release in the prison system is a crime against humanity. If nothing else, this issue should be tackled first and foremost since the solution is affordable, effective and beneficial for all.

None of these policy recommendations are a single silver bullet to the HIV pandemic, because it has become such a widespread and multi-faceted problem. Instead, these recommendations demonstrate a method of policy making where the realities of the immediate situation, the resources available and effective systems of execution are all taken into consideration. By pragmatically working with the perceptions and motivations of the individual where they meet HIV, I believe that these policies have the potential to

<sup>&</sup>lt;sup>60</sup> (Sabol, 2007)

promote the goals of HIV prevention and usher in a new era of strategy in combating the HIV pandemic.

## **REFERENCES**

- Adam, Barry D.; Husbands, Winston; Murray, James; Maxwell, John; "AIDS optimism, condom fatigue, or self-esteem? Explaining unsafe sex among gay and bisexual men" Journal of Sex Research, August, 2005. Online:

  <a href="http://www.findarticles.com/p/articles/mi\_m2372/is\_3\_42/ai\_n14924891">http://www.findarticles.com/p/articles/mi\_m2372/is\_3\_42/ai\_n14924891</a> (website visited February 2, 2007)</a>
- American Red Cross, "This Month's HIV / AIDS Facts" November, 2001. Online <a href="http://www.redcross.org/services/hss/tips/condeff.html">http://www.redcross.org/services/hss/tips/condeff.html</a> (website visited Jan. 25, 2008)
- Anderson, Donna "Beware the Sociopath," Online: <a href="http://www.lovefraud.com/">http://www.lovefraud.com/</a> (website visited March 21, 2007)
- Associated Press, "HIV infections hit new high in U.S." Saturday, August 2, 2008, 10:05pm. Online:

  <a href="http://www.nydailynews.com/lifestyle/health/2008/08/02/2008-08-02-hiv infections hit new high in us.html">http://www.nydailynews.com/lifestyle/health/2008/08/02/2008-08-02-hiv infections hit new high in us.html</a> (website visited Sep. 3, 2008)
- Avert, "Introduction to HIV Types, Groups & Subtypes", January 23, 2008 Online <a href="http://www.avert.org/hivtypes.htm">http://www.avert.org/hivtypes.htm</a> (website visited Feb 19, 2008)
- Avert.org "Worldwide HIV & AIDS Statistics Summary," updated January 23, 2007 Online: <a href="http://www.avert.org/worldstats.htm">http://www.avert.org/worldstats.htm</a> (website visited February 20, 2007)
- Bay, E. "Teaching old dogs new tricks: HIV prevention for senior citizens." *Int. Conf AIDS*. 2004 Jul 11-16; 15: abstract no. D12930. Online: <a href="http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102278429.html">http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102278429.html</a> (website visited Aug. 22, 2008)
- BBC News, "Risky Christmas Cocktail of Sex and Alcohol," Sunday, December 6, 1998. Online: <a href="http://news.bbc.co.uk/1/hi/health/228310.stm">http://news.bbc.co.uk/1/hi/health/228310.stm</a> (website visited March 22, 2007)
- BBC News, "Vatican in HIV condom row," Online:

  <a href="http://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982">http://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982</a>
  <a href="https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982">https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982</a>
  <a href="https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982">https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982</a>
  <a href="https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982">https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982</a>
  <a href="https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982">https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982</a>
  <a href="https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982">https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/1/hi/health/3176982</a>
  <a href="https://newsvote.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/news/mpapps/pagetoo...t/news.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/news.bbc.co.uk/mpapps/pagetoo...t/news.bbc.co.uk/mpap
- Benjarattanapron P., Hanenberg R., Mugrditchian D., "The use of sexually transmitted disease (STD) statistics to evaluate Thailand's HIV prevention program." *Int. Conf. AIDS.* 1993 Jun 6-11; 9: 102 (abstract no. WS-C21-4). U.S. National Institutes of Health. Online

- http://gateway.nlm.nih.gov/MeetingAbstracts/102202610.html (website visited Jan. 25, 2008)
- Best of Immunology, "Why there's No HIV Vaccine." March 8, 2004. Medical weblog Online <a href="http://www.grahamazon.com/2004/03/why-theres-no-hiv-vaccine/">http://www.grahamazon.com/2004/03/why-theres-no-hiv-vaccine/</a> (website visited Feb 14, 2008)
- Bhuta, Rajiv and William R. Leonard, PhD "Why Media Must Try Harder to Reach Groups at Risk for HIV/AIDS" <u>American Medical Association Journal of Ethics</u> March, 2007. Online <a href="http://virtualmentor.ama-assn.org/2007/03/pfor2-0703.html">http://virtualmentor.ama-assn.org/2007/03/pfor2-0703.html</a> (website visited September 19, 2007)
- Carey RF, Herman WA, Retta SM, Rinaldi JE, Herman BA, Athey TW. "Effectiveness of latex condoms as a barrier to human immunodeficiency virus-sized particles under conditions of simulated use." Division of Physical Sciences, Center for Devices and Radiological Health, Food and Drug Administration, Rockville, Maryland. 1992 Jul-Aug;19(4):230-4 Online <a href="http://www.ncbi.nlm.nih.gov/pubmed/1411838">http://www.ncbi.nlm.nih.gov/pubmed/1411838</a> (website visited March 4, 2008)
- Center for Disease Control, "HIV/AIDS Surveillance Report: HIV Infection and AIDS in the United States and Dependent Areas, 2005" June 28, 2007. Online <a href="http://www.cdc.gov/hiv/topics/surveillance/basic.htm#ddaids">http://www.cdc.gov/hiv/topics/surveillance/basic.htm#ddaids</a>
- Center for Disease Control, "HIV Transmission Among Male Inmates in a State Prison System --- Georgia, 1992 2005" *MMWR Weekly*. April 21, 2006 / 55(15); 421-426. Online: <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5515a1.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5515a1.htm</a> website visited Oct. 10, 2008.
- Center for Disease Control, "HIV Transmission in the Adult Film Industry --- Los Angeles, California, 2004" September 23, 2005. Online <a href="http://www.cdc.gov/MMWR/preview/mmwrhtml/mm5437a3.htm">http://www.cdc.gov/MMWR/preview/mmwrhtml/mm5437a3.htm</a> (website visited March 3, 2008)
- Centers for Disease Control, "Sexually Transmitted Disease Survelance 2003 Suppliment," Division of STD prevention, November 2004. Online: <a href="http://www.cdc.gov/std/Gonorrhea/arg/default.htm">http://www.cdc.gov/std/Gonorrhea/arg/default.htm</a> (website visited March 21, 2007)
- Center for Disease Control, "Syphilis CDC Fact Sheet," January 4, 2008. Online <a href="http://www.cdc.gov/STD/Syphilis/STDFact-Syphilis.htm">http://www.cdc.gov/STD/Syphilis/STDFact-Syphilis.htm</a> (website visited March 4, 2008)

- Cianelli R, Ferrer LM, Peragallo NP, Rivero RA, "Tapia B, Partner communication, HIV risk perception, and HIV knowledge among Latino women in the United States and its relationship with HIV risk." *Int Conf AIDS*. 2002 Jul 7-12; 14: abstract no. E11654.
- Consumer Reports, "Condoms: Extra Protection," February 2005. Online <a href="http://www.consumerreports.org/cro/health-fitness/health-care/condoms-and-contraception-205/overview/">http://www.consumerreports.org/cro/health-fitness/health-care/condoms-and-contraception-205/overview/</a> (website visited Feb. 19, 2008)
- Crosby, R. A., <u>Sanders, S.A.</u>, <u>Yarber, W. L.</u>, <u>Graham, C.A.</u>& Dodge, B. "Condom Use Errors and Problems in College Men" <u>Sexually Transmitted Diseases</u>, (2002). 29 (9): 552-557.
- Crosby, R.A., Yarber, W.L., Graham, C.A., Sanders, S.A. "If the condom fits, wear it: a qualitative study of African-American men" *Sex Transm Infect* 2004;**80**:306-309.
- Davis, Robyn, Rotblatt, Harlan, "With Teens, Ignorance of STDs Is High and So Is Risk," *Los Angeles Times*, April 13, 1998 S-8
- DeNoon, Daniel J. "Lifetime Cost of Living with HIV," FOXNews.com, Thursday, November 2, 2006. Online:
  <a href="http://www.foxnews.com/story/0,2933,227119,00.html?sPage=fnc.health/aids">http://www.foxnews.com/story/0,2933,227119,00.html?sPage=fnc.health/aids</a> (website visited February 20, 2007)
- Dilley, Jim M.D., DeCarlo, Pamela, "How does Mental Health Affect HIV Prevention?", <u>Center for AIDS Prevention Studies</u>. Compiled September 2001. Online <u>http://www.caps.ucsf.edu/pubs/FS/mentalhealth.php</u> (website visited July 2, 2007)
- Eros-Zine, "Paraphilias," December 10, 2002, Online: <a href="http://www.eros-guide.com/articles/2002-12-10/paraphilias/">http://www.eros-guide.com/articles/2002-12-10/paraphilias/</a> (website visited March 21, 2007)
- FBI Uniform Crime Reporting Program, "Forcible Rape," CRIME in the U.S. 2005, Online: <a href="http://www.fbi.gov/ucr/05cius/offenses/violent\_crime/forcible\_rape.html">http://www.fbi.gov/ucr/05cius/offenses/violent\_crime/forcible\_rape.html</a> (website visited March 21, 2007)
- FDA, "Condoms and Sexually Transmitted Diseases... Especially AIDS", December 1990. Online <a href="http://www.fda.gov/oashi/aids/condom.html">http://www.fda.gov/oashi/aids/condom.html</a> (website visited Feb. 19, 2008)
- Female Health Company, "fc, Female Condom: An Alternative for Women," Leaflet, Chicago IL/London UK, <a href="https://www.femalehealth.com">www.femalehealth.com</a> Leaflet received January, 2008.
- Free Dictionary "Fetish Definition of Fetish," Online: <a href="http://www.thefreedictionary.com/fetish">http://www.thefreedictionary.com/fetish</a> (website visited March 21, 2007)

- Finer, Lawrence B. PhD. "Trends in Premarital Sex in the United States, 1954 2003," *Public Health Reports*, January – February 2007, Vol. 122, p. 73. Online: <a href="http://www.publichealthreports.org/userfiles/122\_1/12\_PHR122-1\_73-78.pdf">http://www.publichealthreports.org/userfiles/122\_1/12\_PHR122-1\_73-78.pdf</a> (website visited August 22, 2008)
- Kaiser Family Foundation, "AIDS at 25," June 2006, publication (#7525) Online: <a href="https://www.kff.org">www.kff.org</a> (website visited February 2, 2007)
- Henry J. Kaiser Foundation, "The HIV/AIDS Epidemic in Botswana," October, 2005, Online: <a href="http://www.kff.org/hivaids/upload/7353.pdf">http://www.kff.org/hivaids/upload/7353.pdf</a> (website visited March 21, 2007)
- Henry J. Kaiser Foundation, "South African Anti-Rape... Could Reduce Risk of Pregnancy, HIV, STDs," September 2, 2005, Online: <a href="http://www.thebody.com/kaiser/2005/sep2">http://www.thebody.com/kaiser/2005/sep2</a> 05/rape condom.html (website visited March 21, 2007)
- Hogarth, Louise, "The Gift," a documentary film 2004. (Watched Fall of 2004)
- Holt, Madeleine, "HIV scandal in gay porn industry" BBC Two Newsnight, Tuesday March 4, 2008. Online <a href="http://news.bbc.co.uk/2/hi/programmes/newsnight/7277000.stm">http://news.bbc.co.uk/2/hi/programmes/newsnight/7277000.stm</a> (website visited March 4, 2008)
- Huffstutter, P.J. "Senior citizens advised to practice safe sex" *Los Angeles Times* December 15, 2007.
- Hunter-Gault, Charlene, "Infant Rape Crisis Jolts South Africa," Online: <a href="http://archives.cnn.com/2001/WORLD/africa/12/10/infant.rape/">http://archives.cnn.com/2001/WORLD/africa/12/10/infant.rape/</a> (retrieved March 21, 2007)
- HW Chesson, JM Blandford, TL Gift, G Tao, KL Irwin. The estimated direct medical cost of STDs among American youth, 2000. 2004 National STD Prevention Conference. Philadelphia, PA. March 8–11, 2004. Abstract P075.
- Infoniac website "AIDS to Spread Faster with Catholic Condom Ban," Tuesday October 23, 2007. Online <a href="http://www.infoniac.com/health-fitness/aids-spread-faster-catholic-condom-ban.html">http://www.infoniac.com/health-fitness/aids-spread-faster-catholic-condom-ban.html</a> (website visited March 4, 2008)
- Jones, Alan, HIV tester, STD Prevention Specialist and Historian. Pittsburgh AIDS Task Force. Interviewed 2007.

- Kaiser Family Foundation. "AIDS at 21: Media Coverage of the HIV Epidemic 1981-2002" was a supplement to the March/April 2004 issue of the *Columbia Journalism Review*. Page 3 4. Online <a href="http://www.kff.org/kaiserpolls/upload/AIDS-at-21-Media-Coverage-of-the-HIV-Epidemic-1981-2002-Supplement-to-the-March-April-2004-issue-of-CJR.pdf">http://www.kff.org/kaiserpolls/upload/AIDS-at-21-Media-Coverage-of-the-HIV-Epidemic-1981-2002-Supplement-to-the-March-April-2004-issue-of-CJR.pdf</a> (website visited Feb 28, 2008)
- Kaiser Family Foundation, "Global Challenges | New HIV Cases Among MSM Expected To Increase by Almost 75% in Australian State by 2015, Report Finds," Kaiser *Daily HIV/AIDS Report*, March 4, 2008. Online <a href="http://www.kaisernetwork.org/daily\_reports/rep\_index.cfm?DR\_ID=50734">http://www.kaisernetwork.org/daily\_reports/rep\_index.cfm?DR\_ID=50734</a> (website visited March 5, 2008)
- Kann L, Lowry R, Kinchen S, Collins J. "Eight-year trends in HIV risk behaviors among US youth." *Int Conf AIDS*. 1998; 12: 204 (abstract no. 14110).
- Kristof, Nicholas D. "The Secret War on Condoms," *The New York Times*, January 10, 2003.
- Lescano, C.M. *Journal of Adolescent Health*, September 2006; vol: 39 pp. 443e1-443e7. News release, Bradley Hasbro Children's Research Center and Brown Medical School, Providence, R.I.
- Medical News Today, "Illinois Public Schools' Sex Education Offers Incomplete,
  Inaccurate Information, Survey Shows," Online:
  <a href="http://www.medicalnewstoday.com/medicalnews.php?newsid=21389">http://www.medicalnewstoday.com/medicalnews.php?newsid=21389</a> (retrieved March 21, 2007)
- Miller KS et al. "Patterns of condom use among adolescents: the impact of mother-adolescent communication." <u>American Journal of Public Health</u> 1998; 88:1542-44
- National Center on Addiction and Substance Abuse (CASA) at Columbia University, 1999. "Dangerous Liaisons: Substance Abuse and Sex," The National Center on Addiction and Substance Abuse (CASA) at Columbia University, New York.
- New York State Department of Health, "Latex Allergy Information for Health Professionals" August 2006. Online <a href="http://www.health.state.ny.us/environmental/indoors/food\_safety/latex/latex.htm">http://www.health.state.ny.us/environmental/indoors/food\_safety/latex/latex.htm</a> (website visited Feb. 28. 2008)

- Oglesby, Christy, "Survey: Adults Still Skip Condom Use," CNN, April 6, 2004. Online <a href="http://www.cnn.com/2004/HEALTH/04/06/std.awareness/index.html">http://www.cnn.com/2004/HEALTH/04/06/std.awareness/index.html</a> (website visited Feb. 20, 2008)
- Patrick Carnes (1991). Don't call it love: Recovery from sexual addiction, (New York: Bantam, pp. 22-23, 30-34). Also see H. B. Milkman & S. Sunderwirth (1986). Craving for ecstasy: The consciousness and chemistry of escape, (Lexington, MA: Lexington Books).
- Pinel A. "Personal dynamics of women who risk unprotected sex with HIV-infected partners." *Int Conf. on AIDS.* 1996 Jul 7-12; 11: 171 (abstract no. Mo.D.1684).
- Prata, Ndola; Morris, Leo; Mazive, Elizio; Vahidnia, Farnaz; Stehr, Mark. "Relationship Between HIV Risk Perception and Condom Use: Evidence from a Population-Based Survey in Mozambique," <u>International Family Planning Perspectives</u>
  Volume 32, Number 4, December 2006. Online
  <a href="http://www.guttmacher.org/pubs/journals/3219206.html">http://www.guttmacher.org/pubs/journals/3219206.html</a> (website visited Mar. 3, 2008)
- Prison Reform Trust, "Prisons Failing on HIV and Hepatitis C." November 2005.

  Online: <a href="http://www.prisonreformtrust.org.uk/subsection.asp?id=370">http://www.prisonreformtrust.org.uk/subsection.asp?id=370</a> (website visited October 12, 2008)
- Population Services International, "Trust Is Principal Barrier to Condom Use." *Research Brief* No. 1, October, 2002. Online: <a href="http://www.psi.org/resources/pubs/rb-1.pdf">http://www.psi.org/resources/pubs/rb-1.pdf</a> (website visited Aug 22, 2008)
- Reuters, "Condoms urged in prisons to curb AIDS" MSNBC Health, Thursday, Nov. 16, 2006. Online <a href="http://www.msnbc.msn.com/id/15753803/">http://www.msnbc.msn.com/id/15753803/</a> (website visited Mar. 3, 2008)
- Rip n Roll inc. "The History of Condoms," 2008. Online http://www.ripnroll.com/condomhistory.htm (website visited Feb 19, 2008)
- Sabol, William J., PhD, Couture, Heather, and Harrison, Paige M., "Bureau of Justice Statistics, Prisoners in 2006." (Washington, DC: US Department of Justice, December 2007), NCJ219416, p. 26, Appendix Table 13.
- San Francisco AIDS Foundation, "How HIV Is Spread," August 25, 2008. Online <a href="http://www.sfaf.org/aids101/transmission.html#hiv\_drugs">http://www.sfaf.org/aids101/transmission.html#hiv\_drugs</a> (website visited Sept. 9, 2008)

- Scott, Patrick, "Edward Jenner and the Discovery of Vaccination" originally exhibited Thomas Cooper Library, University of South Carolina. Online <a href="http://www.sc.edu/library/spcoll/nathist/jenner.html">http://www.sc.edu/library/spcoll/nathist/jenner.html</a> (website visited Feb. 13, 2008)
- Sowadsky, Rick, "How do you Talk to your Partners about HIV and STDs?" <u>The Body</u>, November 1997. Online <a href="http://www.thebody.com/content/art2299.html">http://www.thebody.com/content/art2299.html</a> (website visited July 2, 2007)
- Star, Carol, Inventor, entrepreneur of Start Technologies. Interviewed January 22, 2008. Online <a href="http://hawaiimeds.org/sit/">http://hawaiimeds.org/sit/</a> (website visited January 21, 2008)
- Staton M, Leukefeld C, Logan T, Zimmerman R, Lynam D, Milich R, Martin C. Risky sex behavior and substance use among youth adults. *Health Soc Work*. 1999;24:147–154.
- T., Chris "Confronting Prison Rape," <u>TalkLeft the politics of crime</u>, Online: <a href="http://www.talkleft.com/story/2005/08/20/310/27130">http://www.talkleft.com/story/2005/08/20/310/27130</a> (website visited March 21, 2007)
- U.S. Department of Health & Human Services, "Scientific Review Panel Confirms Condoms are Effective Against HIV / AIDS", Friday July 20, 2001. Online <a href="http://www.hhs.gov/news/press/2001pres/20010720.html">http://www.hhs.gov/news/press/2001pres/20010720.html</a> (website visited Jan. 25, 2008)
- Water Quality and Health Council, "Drinking Water Chlorination," 2008. Online <a href="http://www.waterandhealth.org/drinkingwater/wp.html#chlo">http://www.waterandhealth.org/drinkingwater/wp.html#chlo</a> (website visited Feb 13, 2008)
- Wright, Rusty, "Best Way to Avoid AIDS: Know Your Partner," *San Bernadino Sun*. December 25, 1995. Online <a href="http://www.probe.org/content/view/15/162/">http://www.probe.org/content/view/15/162/</a> (website visited March 4, 2008)

# APPENDIX I

# **QUESTIONNAIRE**

Please fill out the following survey as accurately as you can and return it to the interviewer. Do not put your name or number anywhere on the survey since it is completely anonymous.

Please circle your age:	18	19 Under	20 18	21	22 Over 2	23 25	24	25
Please indicate your race:		2=Bla 3=Cau 4=Lat	ıcasian			ian ddle Eas xed Rac		
Please indicate your sex:			¤ Specify	v)		Male		
Please indicate sexual orienta	ation:		sexual osexual		Bisex	ual	¤	
Coupl	ed but r	not mon	_		•	e g a few j	people	n n
How many different sexual ppast 3 months?  Zero		·				C	ŕ	
How often have you used pro (oral, vaginal or anal) in the Every time	past 3 n	nonths?						
If you don't use condoms all the time, what are the biggest reasons why you don't use them?								
For the following questions please indicate how often you have engaged in the following activities with others over the past 3 months.								
0 = Never 3 = 21 – 49 times	1 = 1	– 5 time		ver 50 ti		– 20 tim	ies	
Over the past 3 months I had Mutual masturbation	ave par	ticipat	ed with	others	<b>in</b> 1	2	3	4

<b>Deep Kissing (tongue in other person's mouth</b> Fingering of the anus or vagina	<b>1) 0</b> 0	<b>1</b> 1	<b>2</b> 2	<b>3</b> 3	<b>4</b> 4	
0 = Never $1 = 1 - 5$ times			5 <b>– 2</b> 0 tir	- 20 times		
3 = 21 - 49  times $4 = Over 50 times$						
Receiving oral sex	0	1	2	3	4	
Giving oral sex	0	1	2	3	4	
Used a protective barrier during oral sex 0 1			2	3	4	
Swallowed semen or vag fluid during oral sex	2	3	4			
Used condoms during anal or vaginal sex	2					
As a top (inserting the penis) 0 1				3	4	
As a bottom (having penis inserted) 0 1				3	4	
Had unprotected anal sex without knowing partr		status,	_			
As a top (inserting the penis)	0	1	2	3	4	
As a bottom (having penis inserted)	0	1	2	3	4	
Shared dildos or vibrators	0	1	2	3	4	
Please indicate whether the following statements	s about HI	Vare	true	or	false:	
<del>_</del>			T		F	
HIV is primarily a sexually transmitted disease in the U.S.  HIV is curable  T  HIV is a bacteria and can be treated with antibiotics  To you can tell who has HIV by looking at them  To you can have HIV and still test negative for HIV  HIV is found in blood, semen and pre-cum  T			F			
HIV is a bacteria and can be treated with antibiotics					F	
You can tell who has HIV by looking at them	T		F			
· · · · · · · · · · · · · · · · · · ·	$\mathbf{T}$		$\mathbf{F}$			
e	T		F			
One in 13 gay males under the age of 21 have HIV						
One in 3 gay males between the ages of 35 and 45 have HIV						
Medication for HIV costs over \$12,000 per year						
10% of all new HIV infections are immune to al	ns T		F			
Condoms are 100% protective against HIV infection T					$\mathbf{F}$	
Sharing needles can transmit HIV					F	
Kissing can transmit HIV					${f F}$	
Sharing a drink with someone can transmit HIV					F	
Oral sex can transmit HIV	$\mathbf{T}$		$\mathbf{F}$			
Bareback (sex without a condom) sex can transm	T		F			
Washing off after bareback sex can prevent HIV infection T					$\mathbf{F}$	
How would you got your gick for contracting	. штуэ					
How would you rate your risk for contracting HIV?					r	
Low (I don't participate in risky behavior so my contracting HIV is unlikely)  Medium (I am not sure if I am safe from HIV or not)					¤	
High (I will probably get HIV soon if I don't alr			¤ ~			
ingh (1 will probably get filv soon if 1 don t alf	cauy nave	π)			¤	
Have you ever been tested for HIV?	Yes	¤		No	¤	
Have you ever tested positive for HIV?	Yes	¤		No	¤	
Do you have friends/relatives who have HIV? Yes ¤				No	¤	

Please add any comments about the survey on the back. Thank you for your time!

# APPENDIX II

Major Factor or Category	Definition	Examples		
Partner Influence	Influence that a partner brings to the sexual encounter.	Partner can't use condoms  Trust of partner		
	Perception of partner.	Partner "seems Clean		
		Partner seems low risk		
	The level of risk attributed to an individual sexual	HIV "not that bad"		
Perception of Risk	encounter.	Behavior not high risk		
		Pull out before shoot		
Care for Health	An individual's desire to live a long and healthy	Nothing to lose mentality		
	life. This can be affected by self esteem.	Extreme risk taking		
		Disregard for health		
		Self destructive behavior		
Personal Barriers to Condoms	Personal problems using condoms	Too tight, loss of sensation, latex allergy, fetishism		

The table above shows the individual reasons for inconsistent condom use on the right. On the left are the categories or "major factors" that influence condom use. In the center are the definitions for the major factors. Notice the line between partner influence and perception of risk. This line is somewhere in between the two because these categories overlap greatly. They

overlap with "perception of partner." This is not given a separate category because there are two main types of perception of partner. One is partner influence, derived from the partner's direct influence or actions. This includes things like partner declaring their HIV status, or claiming fidelity in a monogamous relationship. The second type of "perception of partner," is ascribed by the perceiver and based on their presumptions. Examples would include feeling at low risk because the partner is from a demographic at low risk for HIV, or feeling that their partner is low risk because she works in the health field.

These four main categories are not a major component of the research findings, but serve merely to make discussion of the results easier. More than one factor usually comes into play during the sexual decision making process. The different categories do make it easier to piece together the puzzle of this decision making process in order to get at the root of the problem.

### **APPENDIX III**

## **Discussion of Condom Alternatives**

It is important to look at a few of the alternatives to condoms when considering just how effective prevention technology can be in stopping the spread of HIV and STDs.

Latex allergies are a problem for a number of condom users. For these individuals, male polyurethane condoms are recommended. Not only does the latex sensitive person have the male polyurethane condom, but a polyurethane female condom is another available option.

The female condom also has some benefits beyond serving as an alternative to latex material. Unlike the male condom, the female condom is worn by the female. It is tucked into the female's vagina 2 to 20 minutes before sex, but can be inserted up to 8 hours before sex. This can eliminate the problem of loss of spontaneity in the fact that there is no fumbling for a condom during the engagement of sexual activity. A second important feature is that the male does not have to wear a condom. This eliminates the loss of sensation that the male sometimes experiences when using a male latex condom. Likewise, the female condom eliminates any trouble with the male condom among uncircumcised males.

Female condoms can provide women with a sense of empowerment, to know they are in control, as some females during interviews questioned their partner's ability to use a condom effectively.

As far as effectiveness goes, the female condom compares closely to the male condom. Pregnancy rate among female condom users over twelve months was 5% as

.

<sup>&</sup>lt;sup>61</sup> (The Female Health Company)

compared to the pregnancy rate among females without any protection which was 85%. Male latex condoms resulted in a 3% pregnancy rate over twelve months.<sup>62</sup> While not perfect, the female condom addresses some of the downfalls to the male latex condom.

One shortcoming of the female condom is a slight difficulty in operation. The apparatus needs to be kept in place as the male inserts his penis. A missed application of the penis can result in pregnancy, HIV or STD.

The female condom has also been successfully used by both males and females during anal intercourse. For anal intercourse, however, the interior ring of the female condom must be removed and the device has to be tucked in immediately before intercourse since it will not stay in place without assistance. Slight augmentations can be made to the device to make it more anal friendly.

A third device which is not yet widespread or fully developed is known as the cock sheath. This device is a latex sheath that covers not only the entire penis but also the scrotum of the male. The device grips around the base of the penis and scrotum, encasing all of the genitalia. Unlike the male latex condom, this device can be worn hours before intercourse, eliminating any spontaneity issues. Secondly, the device is textured inside and the cock sheath glides up and down the entire male penile shaft. The result is a device that gives more sensation and stimulation than having no covering at all. Since the cock sheath does not fold around the foreskin, it also does not interfere with any sensation or cause bunching, as can happen with the traditional male latex condom. The latex cock sheath is a pleasure to many who have tried it. It is only available in latex, but everyone else who has tried it has given pleasurable reviews.

\_

<sup>&</sup>lt;sup>62</sup> (The Female Health Company)

Another important benefit to the cock sheath is the extra coverage that it gives to the participants. Syphilis is an STD which is spread through direct contact with a syphilis sore. These sores are usually around the genital area and sometimes the mouth. The syphilis sore is often overlooked since it is painless and can be located in areas not readily visible. Condoms only cover up the majority of the penis potentially leaving the base of the penis exposed where a syphilis sore may be lurking. The cock sheath, however, will cover this up, preventing transmission of syphilis. Besides syphilis, the cock sheath will give more coverage in reducing the risk of HPV and herpes to both of the partners during sexual engagement.

The cock sheath provides additional protection, increased sensation and increased spontaneity over the condom, but there are some downsides to this piece of technology. Unlike condoms which have many sizes, the cock sheath has only two sizes so far. Each size accommodates male dimensions about one inch in either direction, but outside of that, the cock sheath is difficult or impossible to use. A second downfall to the cock sheath is that while it is reusable, eventually it will break down and fail, as do all reusable items. Without knowing when this occurs, the users could be putting themselves at potential risk while thinking they are safe.

A third limitation to the cock sheath is that while it is much thicker latex than condoms, it is not FDA certified as a device for HIV and STD prevention. Some manufacturers claim it is safe and others do not make that claim.

With all of the great advantages of the cock sheath, one would think that someone would already have created a disposable version to replace the condom. In fact, someone already has. Carol Star, of Star Technologies, Hawaii holds the patent to this disposable

<sup>&</sup>lt;sup>63</sup> (CDC, 2008)

version of the cock sheath. Unfortunately, she does not have the \$500,000 needed to get it into the manufacturing phase. Conversations with condom companies proved fruitless as the manufacturers, the developing teams and the marketing departments are very distant in their communications, often times with language barriers that even the condom companies are unable to bridge.<sup>64</sup>

<sup>&</sup>lt;sup>64</sup> (Star, Carol, 2008)