

Risk Factors for HIV Transmission
among Hispanic Men Who Have
Sex with Men in Atlantaⁱ

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ABSTRACT

This study assessed and compared demographic factors, psychosocial factors, health seeking behavior, and sexual practices of two convenience samples of Hispanic/Latino gay men and men who have sex with men (MSM) in the metropolitan Atlanta region. The aim was to obtain data on emerging HIV/AIDS patterns in this group. Bilingual surveys were conducted in 2000 and 2006 at local gay bars. Discrepancies observed between HIV/AIDS knowledge and sexual behaviors in 2000 were replicated in 2006. Contrary to expected improvements due to enhanced HIV/AIDS education and awareness, risk behavior for HIV/STDs increased significantly between 2000 and 2006. These findings should inform the design and delivery of programs aimed at meeting the HIV/AIDS prevention, education and treatment needs of this growing population.

BACKGROUND

The HIV/AIDS epidemic has been undergoing a transition since it began in the 1980s. Continued HIV transmission is being seen in Injection Drug Users (IDUs) and groups with high risk sexual behaviors. Recent trends indicate a resurgence of HIV among men who have sex with men (MSM) (Karon et al., 2001). An increasing proportion of the disease is occurring in minority populations, especially among African Americans and Hispanics/ Latinos¹ (Hispanics).

In the United States (U.S.) the prevalence rate for AIDS diagnosis among Hispanics increased from 61.8 per 100,000 in 1990 to 244.8 per 100,000 in 1999 (Karon et al., 2001). Hispanics are the only racial/ethnic group that experienced an increase in the number of deaths among persons with AIDS during the period 1999 to 2003 (Kaiser Family Foundation [KFF], 2005). In 2003, Hispanics made up 14% of the overall U.S. population but accounted for 20% of AIDS diagnoses (KFF, 2005). Hispanic men are most likely to become infected with HIV through sexual contact with other men. This risk factor accounts for an estimated 62% of HIV/AIDS diagnoses among Hispanic men (Centers for Disease Control and Prevention [CDC], 2004a).²

Nationwide, the Hispanic population increased from 12.5% in 2000 to 14.2% in 2004. (U.S. Census Bureau, 2003). In the state of Georgia Hispanics accounted for 5.3% of the population in 2000, and 6.7% in 2004 (U.S. Census Bureau, 2003, 2004). There was an overall decline in the number of AIDS diagnoses in Georgia between 1999 and 2003. During this period however, there was a 150% increase in the number of Hispanics diagnosed with AIDS in Georgia. (Georgia Division of Public Health [GA DPH], 2004a). In 2002 the rate of AIDS cases among Hispanic adults and adolescents in Georgia was 14.5 per 100,000, the 2nd highest for the state and three times the rate for Whites (GA DPH, 2004a). From 1998 to 2002 more than 80% of AIDS cases in Hispanics were male. Among those diagnosed with AIDS in 2002, the most reported mode of exposure was MSM (Georgia Department of Human Resources [GA DHR], 2004).

It is estimated that within a one-year period approximately 50% of Hispanic gay men in the U.S. engage in sexual behavior that places them at risk for contracting HIV (Diaz and Ayala, 1999). Studies conducted on Hispanic gay men and MSM have revealed inconsistencies between knowledge and behavior. It is perplexing that high risk behaviors continue to occur in spite of awareness of risk and high levels of knowledge regarding HIV prevention. Observed inconsistencies between knowledge and behavior may be rooted in specific cultural factors such as homophobia, family loyalty, sexual silence, and poverty (Diaz, 1998b). Hispanic men who struggle with safer sex often explain it in terms of contextual and situational factors (Diaz and Ayala, 1999). Thus, it is important to acknowledge the significance of social, interpersonal and cultural factors that shape and determine risky sexual behavior among this population.

HIV prevention programs which target Hispanic MSM will not adequately and effectively address their needs if patterns of risk behavior and the underlying causes of risk behavior are not considered. Hispanic MSM are at a disproportionately high risk for HIV/AIDS because of an interaction between specific elements of Hispanic culture and their current circumstance in the U.S., as a group marginalized on the basis of both race/ethnicity and sexual identity. Hispanics form the largest and fastest growing minority group in the U.S. (KFF, 2005). As this population increases, knowledge of current demographics and risk behavior is needed to determine programmatic needs. The Healthy People 2010 initiative has as one of its goals the elimination of health disparities among different segments of the population by 2010. As the nation works towards this goal, rising rates of HIV/AIDS among Hispanic MSM must be addressed.

¹ The terms "Hispanic" and "Latino" are used interchangeably. This reflects the terminology in the standards issued by the Office of Management and Budget in 1997 and implemented by January 1, 2003.

² For purposes of comparison, we cite national and state data from the reference period in which the research survey was conducted.

The aim of this research is to investigate changes in demographics and risk factors for HIV/AIDS between 2000 and 2006, among Hispanic gay men and MSM in metropolitan Atlanta, Georgia. Between 2000 and 2006, there have been ongoing HIV prevention interventions in Atlanta which directly target Hispanic MSM. Education and risk reduction programs specifically designed for this population have been offered through the public and private health sectors. It is expected that these measures, if delivered effectively to the target population, would have resulted in increased HIV prevention knowledge and a decrease in risk behaviors which favor HIV transmission. The research therefore seeks to determine if knowledge and risk behaviors for HIV transmission among this target population have changed between 2000 and 2006.

METHODS

Convenience samples of self-identified Hispanic gay men and MSM were obtained in 2000 and 2006. Both surveys were conducted by AID Atlanta, a non-governmental organization (NGO) that provides HIV/AIDS services in Atlanta. The surveys were self funded. In 1999 the agency recognized that while Hispanic MSM were identified as a high risk group for HIV/AIDS, no needs assessment survey had been done of this population in Atlanta. Convenience sampling was chosen because the target population is known to be difficult to access.

The aim of the 2000 survey was to determine the prevention and treatment needs of Hispanic gay men and MSM in Atlanta. A bilingual questionnaire was designed by agency staff to obtain the required information. It contained 71 items and a section for interviewer's comments. Respondents could choose to complete it either in English or Spanish. The survey assessed demographic factors, psychosocial factors, health seeking behavior, and sexual practices. Outreach workers hired by the agency conducted the survey. Surveys were administered at gay bars on "Latino Nights", in the metropolitan Atlanta area. Subjects either completed the questionnaire themselves or with assistance from the outreach workers. The initial survey was conducted in June 2000 and involved 130 participants.

In 2005, AID Atlanta made the decision to conduct another needs assessment survey of the Hispanic gay and MSM population in metropolitan Atlanta. The agency recognized that there is a nationwide lack of research and data specific to Hispanic MSM, in spite of the fact that they continue to be at a disproportionately high risk for HIV/AIDS. Updated data would allow the organization to deliver more targeted services and to better justify funding needs for programs which target the growing Hispanic gay and MSM population in the metropolitan Atlanta region. The survey was administered in early 2006.

A bilingual questionnaire was again designed to assess HIV/AIDS risk, and prevention and treatment needs of the Hispanic gay and MSM population in Atlanta. Questions were taken from AID Atlanta's 2000 needs assessment survey and from surveys conducted nationally. Questions found to be problematic in 2000, if used in the 2006 survey, were improved upon. Additionally, new questions were designed to address specific data needs of AID Atlanta's Latino/Hispanic Outreach Program. The back translation method was used. Questions were written in English, translated into Spanish, and then translated back into English. The completed instrument was reviewed by several native Spanish speakers of varying nationalities. Every attempt was made to retain a standard translation, while allowing for regional and cultural variations in language. Pilot testing was conducted on a limited number of individuals who were bilingual and members of the local Hispanic gay community. The final questionnaire consisted of 60 questions designed to gather data on demographics, psychosocial factors, sexual practices, and health seeking behavior. The 2006 questionnaire also included a section for interviewer's comments.

Interviewers were recruited from the local Hispanic community. They represented diverse origins and all had experience working or volunteering in the field of HIV/AIDS. Compulsory training was conducted and topics covered included interviewing skills and subject recruitment. Interviewers were contracted as outreach workers by AID Atlanta. They were paid \$10 per

completed survey. A convenience sample of self-identified Hispanic gay men and MSM was obtained by a survey administered mostly at gay bars. Sampling was also conducted at local NGOs providing HIV/AIDS services, at private gatherings, by phone (of subjects known to the interviewer), and at a local gay bookstore. Subjects were interviewed and were given the option of completing the survey in English or Spanish. International calling cards were offered as incentives to subjects who completed the questionnaire. Onsite supervision at the bars was conducted by agency staff to ensure consistent procedure and interviewer safety. In 2006, sampling was done over a four week period from February to March. Most of the interviews were completed within the allotted time of 25 minutes. Questionnaires were reviewed upon receipt from the interviewers. Interviewers were debriefed on an ongoing basis in order to identify and address potential problems as they arose. The final sample size of 150 was determined in part, by budgetary limitations.

Following institutional review and approval for the research, the authors obtained the data from AID Atlanta for analysis. A descriptive analysis of obtained data was conducted using SPSS version 12.0. Mean and standard deviation were determined for age. All other variables were categorical and were described using frequencies and percentages. For the 2000 survey, some variables were analyzed by language of response. Results of the 2000 and 2006 surveys were compared. Analyses of differences were conducted for demographic and risk factor data.

RESULTS

An overview of the results of the 2000 and 2006 needs assessment surveys is presented in Tables 1 and 2. Many notable differences exist between the two data sets. Overall the 2006 sample was older than the 2000 sample. In 2006, foreign born subjects accounted for 93.3% of the sample and of these, 31.3% had been in the U.S. for less than three years. In both surveys the majority of subjects self-identified as gay; 68.2% in 2000 and 69.3% in 2006. MSM was selected by 3.9% in 2000 and 9.3% in 2006. This observed increase may be a reflection of increased awareness and understanding of the term MSM, by the 2006 sample. Access to quality healthcare is known to be disproportionately low for the Hispanic population and contributes to existing health disparities. In 2000, 35.7% of subjects reported having a regular doctor or health care provider. This figure declined to 28% in 2006. In 2006, 30% of the sample reported having health insurance.

The level of HIV/AIDS knowledge was investigated. Statements were made about the disease, e.g., "HIV can be transmitted by blood", "HIV can be transmitted by pre-seminal fluid", for which "true", "false" and "don't know" options were provided. For all six statements, more

Table 1: Descriptive Statistics for the 2000 and 2006 Sample Population

	2000	2006
Countries of Origin	16	18
Mean Age (y) [SD]	25.9 [5.1]	29.2 [7.9]
Education beyond High School ^a (%)	48.5	28.7
Surveys completed in Spanish (%)	77	96

Note. SD = standard deviation; ^a Different questions used in 2000 and 2006 surveys.

Table 2: Characteristics of the 2000 and 2006 Sample Population

	2000		2006	
	Frequency	Percent	Frequency	Percent
Sexual Orientation ^a				
Gay	88	68.2	104	69.3
Bisexual	19	14.7	23	15.3
MSM	5	3.9	14	9.3
CSW, in past 12 months ^b	9	7	22	14.7
Regular doctor or health care provider ^c	45	35.7	42	28
Tested for HIV ^d	85	65.9	97	65
HIV-positive	5	4.3	24	24.2
Tested for STDs other than HIV, in past 12 months ^e	66	52	46	30.9

Note. CSW = commercial sex work.

^a n; 2000 = 129, 2006 = 150

^b n; 2000 = 129, 2006 = 150

^c n; 2000 = 129, 2006 = 150

^d n; 2000 = 128, 2006 = 149

^e n; 2000 = 126, 2006 = 149

than half of responders selected the correct response, indicating a high level of HIV/AIDS knowledge. Fatalism, determined by asking the self-perceived likelihood of future HIV infection, was high for both years (see Table 3). In 2000, 34.1% felt that they were likely to become infected in the future. This figure increased to 58.1% in 2006. There is a sense of inevitability regarding HIV among the gay community, which is heightened among Hispanic gay men. This belief impacts safer sex behavior. In 2000, 79.2% reported that the HIV/AIDS epidemic had made it more difficult for them to have sex. A decrease to 58.4% was seen on this variable in 2006.

To determine risk factors for HIV transmission, safer sex behavior was assessed for the 12 month period preceding the surveys. These results are reflected in Table 3. In 2006, only 66.4% of subjects reported that they would inform their partner/s of their HIV status if they were HIV-positive or were to become HIV-positive. Drug and substance abuse were investigated. Data on the sharing of needles and/or syringes over the preceding 12 months was collected using a different question for each survey. In 2000, five subjects reported sharing over the past 12 months, but only one did in 2006. These figures indicate that intravenous drug use is not heavy among the sample populations. Subjects were asked in both surveys to report substance/drug use over the past 12 months. "None" was selected by 54.5% in 2000 and 73.3% in 2006. However, the 2000 question was lacking in clarity and data obtained was of poor quality. Marijuana use was reported by 6.5% in 2000 and 15.3% in 2006, cocaine by 4.9% in 2000 and 15.3% in 2006, ecstasy by 3.3% in 2000 and 2.7% in 2006, and amphetamine use was reported by 0% in 2000 and 2% in 2006.

Commercial Sex Work (CSW) is a known risk factor for HIV/STDs due to exposure to multiple partners, who are engaging in risky sexual practices. In 2000, 7% of respondents reported having sex in exchange for money, drugs, food, housing or other benefits, in the past 12 months. This figure increased to 14.7% in 2006. In 2006, data were collected on the number of sexual partners that subjects had over the preceding 12 months. One partner was reported by 17.2%, 45.9% reported two to five, and 11.5% reported more than 10 partners. One-night stands were reported by 48.1% of subjects. The Internet was used to find sexual partners by 31.8% of

Table 3: Sexual Risk Factor Variables for the 2000 and 2006 Sample Population

Variable	2000 (%)	2006 (%)	Absolute Change
Perceives self as knowledgeable about proper condom use	88.3	72.7	(-15.6)
Desires to learn more about proper condom use	80.8	70.5	(-10.3)
Subject is able to get partner/s to use condoms if desired	89.2	83.2	(-6.0)
Trying to use condoms with anal sex, in the past 12 months	77.3	76.5	(-0.8)
Trying to have mostly oral sex, in the past 12 months	32.6	22.7	(-9.9)
Trying to have sex with fewer partners, in the past 12 months	62.2	59.3	(-2.9)
Trying to have sex with one partner, in the past 12 months	80.0	64.7	(-15.3)
Perceives self as likely to become infected with HIV in the future	34.1	58.1	24.0
Never asks the HIV status of partners	30.7	50.3	19.6
Never discloses HIV status	27.0	45.9	18.9
Tested for STDs other than HIV, in the past 12 months	52.0	30.9	(-21.1)

respondents in 2006. Data on condom use were not collected in 2000. In 2006, condom use was reported as “always” by 50.8% and “never” by 10.8%. Receptive anal sex was reported by 79.1% and group sex by 25.4%. Condom use with receptive anal sex was reported as “never” by 11.8% and “always” by 52.9%. Condom use with group sex was reported as “always” by 53.1% and “sometimes” by 46.9%.

In 2000, 4.3% of the sample reported being HIV-positive, while 24.2% did so in 2006. In the 2006 sample population, the mean age of an HIV-positive subject was 33.9 years (SD 6.4 years) and that of an HIV-negative subject 29.6 years (SD 7.9 years). Hispanic gay men and MSM suffer social isolation due to widespread homophobia in their community and racism among the wider gay community. Having a peer support group and helping in the fight against AIDS in the community can decrease social isolation and, consequently, risky behavior. A desire to become involved in the fight against HIV/AIDS/STDs in the community was expressed by 77.7% in 2000, but decreased to 69.4% in 2006. Overall, significant increases in risk factors for HIV transmission were observed between the 2000 and 2006 surveys.

DISCUSSION

This study compared risk factors for HIV/STD transmission among Hispanic gay men and MSM. The 2006 sample was more heterogeneous based on country of origin. In 2000, 23% chose to complete the survey in English, as compared to only 4% in 2006. These figures indicate that the 2006 sample may be a less acculturated, more native-speaking sample. Both of these issues present challenges for service delivery. They indicate a need for programs which are delivered in Spanish and capable of reaching a diverse population. Language and cultural differences among Spanish-speaking countries make it difficult for any one program to effectively serve all Hispanic gay men and MSM.

The majority of both samples reported being sexually active in the previous 12 months; 79.8% in 2000 and 83.2% in 2006. CSW is a known risk factor for HIV/STDs. In 2000, 7% of respondents reported CSW in the past 12 months, while 14.7% did so in 2006. Subjects were asked if they were trying to use condoms with anal sex in the past 12 months. “Yes” was selected by 77.3% in 2000 and 76.5% in 2006, indicating a decrease in condom use intentions with anal sex. Self-perceived knowledge of proper condom use and the desire to learn more about condom use, also decreased between surveys (see Table 3).

In 2000, 65.9% reported being tested for HIV. A decrease to 65% was seen in 2006. HIV testing was relatively high, at approximately two-thirds of participants for both surveys. More importantly, the rate is unchanged between surveys. In 2003 CDC began its Advancing HIV Prevention initiative in an effort to further reduce HIV incidence. A goal of this initiative was to increase HIV testing. A static testing rate among a high risk group, while this initiative is ongoing, indicates the need for more outreach in the Hispanic community. It appears that Hispanic MSM are not benefiting from the potential reduction in HIV risk that results from increased HIV testing. HIV testing rates must be increased if there is to be any chance of controlling HIV among this high risk, marginalized population. HIV positive status was reported by 5 subjects (4.3%) in 2000 and 24 subjects (24.2%) in 2006. While this represents a large increase, it must be interpreted with caution, since both samples are convenience samples.

Data analysis revealed that STD testing declined between 2000 and 2006 among the subjects sampled (see Table 3). In 2000, 52% of the sample reported being tested for STDs other than HIV in the past 12 months. This figure decreased to 30.9% in 2006. Observational studies have indicated that individuals infected with STDs are at least two to five times more likely than uninfected individuals to become infected after sexual exposure to HIV (CDC, 1998). In addition, HIV infected individuals who have concurrent STDs are more likely to transmit HIV than HIV-positive individuals without STDs (CDC, n.d.). Bacterial STD rates are higher in many large cities and markedly higher in the southeastern U.S. (CDC, 1998). STD rates have been

demonstrated to be disproportionately high among gay men and MSM, and among Hispanics. Therefore, Hispanic MSM are at a heightened risk for multiple STDs. STD testing and treatment should be an important component of local, state and national strategies to prevent and control HIV/AIDS. Linking HIV and STD prevention efforts can serve to better control both epidemics.

Overall, reported drug and alcohol use declined between 2000 and 2006. In 2000, five subjects reported sharing needles and/or syringes over the preceding 12 months (N=130), but only one did in 2006 (N=150). Fatalism, determined by asking the self-perceived likelihood of future HIV infection, was high for both years and showed a marked increase between surveys (Table 3). In 2000, 79.2% reported that the HIV/AIDS epidemic had made it more difficult for them to have sex. A decrease to 58.4% was seen on this variable in 2006. This decrease may be reflective of difficulty sustaining safer sex behaviors over the long term, complacency and increased awareness of HIV/AIDS treatment options.

Risk factors for HIV transmission increased among the sample populations between 2000 and 2006. Various potential explanations for this occurrence exist. Many Hispanics lack access to prevention interventions due to poverty and inadequate health care. Interventions may not be reaching target groups because of the language of delivery and because of where they are being delivered. Sustaining safer sex behavior over the long term maybe difficult. Fatalism increased significantly from 2000 to 2006 and can be viewed as both an indicator and a predictor of risk. The high level of fatalism regarding HIV/AIDS indicated among this population may be reflective of unique aspects of Hispanic culture. HIV status disclosure and the ability to negotiate safer sex are important aspects of prevention. Language and cultural barriers may make this difficult for Hispanics to accomplish.

Many individuals report not using condoms consistently because of their negative effects on intimacy. Prevention programs need to acknowledge and address this factor, since men are not likely to internalize and act on messages that do not consider their personal concerns. On both surveys a high percentage of respondents reported being knowledgeable about proper condom use; 88.3% in 2000 and 72.7% in 2006. However, the desire to learn more about proper condom use was also high; 80.8% in 2000 and 70.5% in 2006. This high level of desire to learn more about condom use may be reflective of subjects recognizing that in spite of knowing the prevention value of condoms and having high intentions for use, that their use is still not optimal. It may be an indirect acknowledgement of personal HIV risk behavior. In the 2006 survey approximately one third of subjects reported seeking sexual partners on the Internet. The Internet may thus serve as an effective means of delivering prevention interventions to this otherwise difficult to access population.

Understanding the sexual behavior of Hispanic gay men and MSM is critically important for public health efforts. Access to this population is limited thereby making traditional probability sampling difficult. This research is limited by several factors. Convenience sampling was conducted and the sample sizes were relatively small; 130 in 2000 and 150 in 2006. Findings can therefore only be cautiously applied to the wider Hispanic gay and MSM population. The majority of interviews were conducted at gay bars and more sites were available to conduct surveys in 2000. Potential limitations of sampling at bars include distractions and inebriation. While bars are not ideal venues for conducting interviews, at this time they provide the most accessible means of sampling this marginalized population. Interviewer bias may have occurred. Interpretation of the questions by the interviewers and the amount of assistance provided may have varied from one subject to another, and between surveys. The potential for self-reporting bias also exists, especially with questions exploring subjective intentions, such as the intent to use condoms with anal sex. Another potential limitation is the use of different questionnaires for each survey. In spite of the limitations, this research is able to provide valuable information about the target population.

Cultural factors play a determining role in the behavior of Hispanic MSM. Therefore, understanding their risk behavior cannot be accomplished in isolation. Risk behavior among this

population is linked to factors such as social oppression, homophobia, poverty and psychological distress (Diaz, 1998b). These contextual and situational variables are important determinants of HIV risk and contribute to the ethnic disparities seen with HIV/AIDS among MSM. Qualitative studies of the Hispanic gay community continue to indicate that sexual risk behavior occur mostly in situations that compromise personal intentions and motivations to practice safer sex. These include alcohol and drug use, using sex to alleviate feelings of isolation and depression, and sexual situations of unequal power (Diaz, Ayala and Bein, 2004). Studies which examine patterns in risk behavior can provide insight into the causes of increased risk for HIV among Hispanic MSM. More studies are needed which seek to determine the underlying causes of high risk sexual behavior among members of this very vulnerable population.

Overall, the results indicate that interventions occurring between 2000 and 2006 appear to have had minimal impact on Hispanic MSM. Individuals sampled were more educated than the overall Hispanic population and demonstrated a high level of HIV prevention knowledge, yet risk behaviors increased between 2000 and 2006. The data points strongly to the need for increased, culturally competent prevention interventions which consider and address the context of risk behavior.

CONCLUSION

Prevention messages appear to be reaching this target population, as the 2006 sample demonstrated a high level of knowledge regarding HIV/AIDS. Yet, risk factors for HIV transmission are increasing. The inconsistency between knowledge and behavior among Hispanic MSM demonstrated by this study is in keeping with current literature. Hispanic MSM in the U.S. experience marginalization due to many factors, including homophobia, racism, immigration status and poverty. It is possible that these factors contribute to the high level of fatalism demonstrated by this research. This high level of belief that HIV is inevitable may be the underlying cause of increasing risky sexual behavior among Hispanic MSM. Further studies are needed to explore how risk knowledge, cultural beliefs and circumstance interplay to ultimately determine risk behavior. Culturally appropriate qualitative studies could improve insight into these behaviors. The results of this study highlight the need for such research and can serve to guide further research.

Peer groups may serve as an important aspect of effective intervention among this population. Peer group involvement among Hispanic MSM has been traditionally low due, at least in part, to the culture of sexual silence and homophobia. In the 2006 survey however, approximately two-thirds of subjects expressed an interest in facilitating the formation of, or being a member of a Hispanic MSM peer group. Research is also needed to guide the development and implementation of HIV prevention programs which can increase prevention knowledge as well as empower Hispanic MSM.

As the HIV/AIDS epidemic continues to grow in the Hispanic population prevention programs must seek to better understand this high risk group. Social and cultural factors which perpetuate this epidemic need to be acknowledged, investigated and addressed. More research is needed on Hispanic MSM to increase understanding of the reasons for increased HIV/AIDS/STD risk and to determine effective ways of serving their prevention and treatment needs. Culturally appropriate service provision must be increased. The results of this study indicate that the HIV prevention needs of the Hispanic gay and MSM population are not being met. Therefore, these findings should inform the design and delivery of programs aimed at meeting the HIV/AIDS prevention, education and treatment needs of this growing, high risk population.

REFERENCES

- Blair, J. M., Flemming, P. L., Karon, J. M. (2002). Trends in AIDS Incidence and Survival Among Racial/Ethnic Minority Men Who Have Sex With Men, United States, 1990-1999. *Journal of the Acquired Immune Deficiency Syndrome*, 31(3), 339-347.
- Catania, J., Osmond, D., Stall, R., Pollack, L., et al. (2001). The Continuing HIV Epidemic Among Men Who Have Sex With Men. *American Journal of Public Health*, 91(6), 907-912.
- Centers for Disease Control and Prevention. (1998). *HIV Prevention Through Early Detection and Treatment of Other Sexually Transmitted Disease- United States Recommendations of the Advisory Committee for HIV and STD Prevention*. MMWR 47 (RR12): 1-24.
- Centers for Disease Control and Prevention. (2003). *HIV Testing-United States, 2001*. MMWR 52(23);540-545.
- Centers for Disease Control and Prevention. (2004a, November). *HIV/AIDS among Hispanics*. Retrieved May 16, 2005, from <http://www.cdc.gov/hiv/pubs/facts/hispanic.htm>
- Centers for Disease Control and Prevention. (2004b). *Trends in Reportable Sexually Transmitted Diseases in the United States, 2004*. Retrieved March 22, 2006, from <http://www.cdc.gov/std>
- Centers for Disease Control and Prevention. (2005a). *HIV/AIDS among Men Who Have Sex With Men*. Retrieved March 22, 2006, from <http://www.cdc.gov/hiv/pubs/facts/msm.htm>
- Centers for Disease Control and Prevention. (2005b). *HIV Prevention in the Third Decade: Specific Populations*. Retrieved August 8, 2005, from http://www.cdc.gov/hiv/HIV_3rdDecade/section4.htm
- Centers for Disease Control and Prevention. (2005c). *Trends in HIV/AIDS Diagnoses-33 States, 2001-2004*. MMWR 54(45): 1149-1153
- Centers for Disease Control and Prevention. (n.d.). *The Role of STD Detection and Treatment in HIV Prevention*. Retrieved March 22, 2006, from <http://www.cdc.gov/std/hiv/STFact-STD&HIV.htm>
- Chesney, M., Barrett, D., Stall, R. (1998). Histories of Substance Use and Risk Behavior: Precursors to HIV Seroconversion in Homosexual Men. *American Journal of Public Health*, 88(1), 113-116.
- Corbin, W., Fromme, K. (2002). Alcohol Use and Serial Monogamy as Risks for Sexually Transmitted Diseases in Young Adults. *Health Psychology*, 21(3), 229-236.
- Crosby, M., DeCarlo, P. (2000, December). *What are Men Who Have Sex With Men (MSM)'s HIV Prevention Needs?* Retrieved September 14, 2005, from <http://www.caps.ucsf.edu/MSMrev.html>
- Diaz, R. (1998a). *Hermanos de Lna y Sol: Program Evaluation*. Retrieved September 14, 2005, from <http://www.caps.uscf.edu/casweb/projects/hlprogress.htm>
- Diaz, R. (1998b). *Latino Gay Men and HIV: Culture, Sexuality and Risk Behavior*. N.Y.: Routledge.
- Diaz, R. M., Ayala, G. (1999). Love, Passion and Rebellion: Ideologies of HIV risk mong Latino Gay Men in the USA. *Culture, Health and Sexuality*, 1(3), 277-293.
- Diaz, R., Ayala, George. (2000). *Social Discrimination and Health: The Case of Latino Gay Men and HIV Risk*. Paper presented at the 2000 Western Psychological Association Convention, Portland, Oregon.
- Diaz, R., Ayala, G., Bein, E., Henne, J., et al. (2001). The Impact of Homophobia, Poverty and Racism on the Mental Health of Gay and Bisexual Latino Men: Findings From 3 U.S. Cities. *American Journal of Public Health*, 91(6), 927-932.
- Diaz, R. M., Ayala, G., Bein, E. (2004). Sexual Risk as an Outcome of Social Oppression: Data from a Probability Sample of Latino Gay Men in three U.S. Cities. *Cultural Diversity and Ethnic Minority Psychology*, 10(3), 255-267.

- Diaz, R. M., Heckert, A. L., Sanchez, J. (2005). Reasons for Stimulant Use Among Latino Gay Men in San Francisco: A Comparison between Methamphetamine and Cocaine Users. *Journal of Urban Health*, 82(Suppl 1), 71-78.
- Dolezal, C., Carballo-Diequez, A., Nieves-Rosa, L., Diaz, F. (2000). Substance Use and Sexual Risk Behavior: Understanding their Association among four Ethnic Groups. *Journal of Substance Abuse*, 11(4), 323-336.
- Georgia Department of Human Resources. (2002, October). *HIV/AIDS At A Glance*. Retrieved August 16, 2005, from www.dhr.state.ga.us
- Georgia Department of Human Resources. (2003, June). *AIDS Update*. Retrieved August 16, 2005, from www.dhr.state.ga.us
- Georgia Department of Human Resources. (2004, September). *Methamphetamine Use in Georgia*. Retrieved August 16, 2005, from www.dhr.georgia.gov
- Georgia Department of Human Resources. (2006, January). *HIV/AIDS at a Glance*. Retrieved April 1, 2006 from www.dhr.georgia.gov
- Georgia Division of Public Health. (2004a). *HIV/AIDS among Hispanic/Latinos in Georgia*. Retrieved August 16, 2005, from www.communityhealth.state.ga.us
- Georgia Division of Public Health. (2004b). *HIV/AIDS among Minorities in Georgia*. Retrieved August 16, 2005, from www.communityhealth.state.ga.us
- Gomez, C. (2001, September). *What are U.S. Latinos' HIV Prevention Needs?* Retrieved September 14, 2005, from <http://www.caps.ucsf.edu/Latinorev.html>
- Greenwood, G., White, E., Page-Shafer, K., Bein, E., Osmomd, D, Paul, J. et al. (2000). Correlates of heavy substance use among young gay and bisexual men: The San Francisco Young Men's Health Study. *Drug and Alcohol Dependence*, 61(2001), 105-112.
- Guilamo-Ramos, V., Jaccard, J. (2005). Acculturation-Related Variables, Sexual Initiation and Subsequent Sexual Behavior Among Puerto Rican, Mexican and Cuban Youth. *Health Psychology*, 24(1), 88-95.
- Kaiser Family Foundation, (2004, June). *Kaiser Family Foundation Survey of Americans on HIV/AIDS. Part Two: HIV Testing* (June, 2004). Washington D.C. Retrieved February 18, 2006 from <http://www.kff.org>
- Kaiser Family Foundation, (2005, February). *Latinos and HIV/AIDS*. Retrieved August 22, 2005, from <http://www.kff.org/hiv/aids/upload/Fact-Sheet-Latinos-and-HIV-AIDS-update.pdf>
- Karon, J., Flemming, P., Steketee, R., DeCock, K., et al. (2001). HIV in the United States at the Turn of the Century: An Epidemic in Transition. *American Journal of Public Health*, 91(7), 1060-1068.
- Katz, M., Gerberding, J. (2002). Management of Occupational and Nonoccupational Postexposure HIV Prophylaxis. *Current Science*, 4, 543-549.
- Kelly, J., Kalichman, S. (1998). Reinforcement Value of Unsafe Sex as a Predictor of Condom Use and Continued HIV/AIDS Risk Behavior Among Gay and Bisexual Men. *Health Psychology*, 17(4), 328-335.
- MacKellar, D., Valleroy, L., Secura, G., Behel, S., Bingham, T., Celentano, D., et al. (2005). Unrecognized HIV Infection, Risk Behaviors, and Perceptions of Risk Among Young Men Who Have Sex With Men: Opportunities for Advancing HIV Prevention in the Third Decade of HIV/AIDS. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*, 38(5), 603-614.
- Schroder, K., Carey, M., Vanable, P. (2003). Methodological Challenges in Research on Sexual Risk Behavior: II. Accuracy of Self-Reports. *Annals of Behavioral Medicine*, 26(2), 104-123.
- Spikes, P., Hays, B., Rebchook, G., Kegeles, S. (2001, April, 2001). *What are the Prevention Needs of Young Men Who Have Sex With Men*. Retrieved September 14, 2005, from <http://www.caps.ucsf.edu/revYMSM.html>

- U. S. Census Bureau, (2003, June). *The Hispanic Population in the United States: March 2002*. Retrieved November 5, 05, from <http://www.census.gov/prod/2003pubs/p20-545.pdf>
- U. S. Census Bureau, (2004). *2004 American Community Survey Data Profile Highlights*. Retrieved March 25, 2006, from <http://factfinder.census.gov/>
- U. S. Census Bureau, (n.d.). *Definition: Hispanic or Latino origin*. Retrieved November 30, 2005, from <http://ask.census.gov/>
- Vanable, P., McKirnan, D., Buchbinder, S., Bartholow, B., Douglas, J., Judson, F., et al. (2004). Alcohol Use and High-Risk Sexual Behavior Among Men Who Have Sex With Men: The Effects of Consumption Level and Partner Type. *Health Psychology*, 23(5).
- Young, R., Meyer, I. (2005). The Trouble with "MSM" and "WSW": Erasure of the Sexual-Minority Person in Public Health Disclosure. *American Journal of Public Health*, 95(7), 1144-1149.
- Zea, M. C., Reisen, C. A., Diaz, R. M. (2003). Methodological Issues in research on Sexual Behavior with Latino Gay and Bisexual Men. *American Journal of Community Psychology*, 31(3), 281-291.

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