Journal of Social Service Research
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/wssr20

Reducing Alcohol Abuse in Gay Men: Clinical Recommendations From Conflicting Research

Christopher W. Blackwell [a]
[a] University of Central Florida, College of Nursing, Orlando, FL

Available online: 27 Jun 2011

To cite this article: Christopher W. Blackwell (2011): Reducing Alcohol Abuse in Gay Men: Clinical Recommendations From Conflicting Research, Journal of Social Service Research, DOI:10.1080/01488376.2011.583836

To link to this article: http://dx.doi.org/10.1080/01488376.2011.583836

Journal of Social Service Research, 1–8, 2011

ISSN: 0148-8376 print / 1540-7314 online
DOI: 10.1080/01488376.2011.583836

Routledge
Taylor & Francis Group

Reducing Alcohol Abuse in Gay Men: Clinical Recommendations From Conflicting Research

Christopher W. Blackwell

ABSTRACT. Gay men entering the health care system present with unique needs essential for health care providers to comprehend and address. While data indicate mental health and substance abuse disorders are more prevalent among gay men compared with their heterosexual counterparts, the literature assessing abuse of alcohol by gay men is conflicting. This article explores the conflicting research examining the use and abuse of alcohol by gay men, common findings and themes among studies addressing the issue, the theoretical concepts of internalized homophobia and heterosexism as they relate to alcohol abuse, and clinical strategies providers can implement when encountering this issue among their gay male patients. This comprehensive assessment of the literature will also provide direction for future critical inquiries and outline ways to improve the current methods of inquiry.

KEYWORDS. Alcohol, alcoholism, discrimination, disparity, gay patients, health, homosexual, primary care, wellness

INTRODUCTION

Health and social scientists have identified multiple health disparities in gay men, and a recent editorial in the *Journal of Adolescent Health* has directed the responsibility in improving the health and well-being of this population to clinicians and health researchers (Children's Hospital Boston, 2009). Gay men have higher rates of mental health disorders including depression, suicide attempts, and substance abuse in comparison with heterosexual men (Dahan, Feldman, & Hermoni, 2007). Yet despite the persistence of these disparities within that population, data indicate healthcare needs of gay men go largely ignored (Dahan et al., 2007). Very little study has been dedicated to assessing the overall efficacy of health care providers in treating gay patients, and the etiology for the perpetuation of health disparities in gay men is vague. The limited research that exists suggests a significant lack of concentration on sexual orientation issues in the education of health care professionals (Dahan et al., 2007), and often, cultural aspects are not properly addressed in the intervention process.

Research conducted on nursing students indicated very low knowledge levels about the health needs of gay patients (Rondahl, 2009). This has also been found in medical students (Kelley, Chou, Dibble, & Robertson, 2008). To address this need in education, some interventions have been identified as beneficial. Strengthening the gay-related content in the medical curriculum yielded increased knowledge levels among 2nd-year medical students at the University of California at San Francisco (Kelley et al., 2008).

Christopher W. Blackwell, PhD, ARNP, ANP-BC, CNE, is an Assistant Professor at the University of Central Florida, College of Nursing, Orlando, FL.

Address correspondence to: Christopher W. Blackwell, PhD, ARNP, ANP-BC, CNE, University of Central Florida, College of Nursing, PO Box 162210, Orlando, FL 32816-2210 (E-mail: cwblackw@mail.ucf.edu).

Data also indicate students with increased exposure to patients with nonheterosexual orientations during clinical experiences tend to perform more comprehensive health histories, hold more positive attitudes toward nonheterosexual patients, and possess greater knowledge of the health care concerns of nonheterosexual patients compared with their counterparts who had not had exposures to nonheterosexual patients during their education (Sanchez, Rabatin, Sanchez, Hubbard, & Kalet, 2006).

Furthermore, only a few studies have attempted to define cultural competence and the precise knowledge levels of gay men's health needs and disparities among health care professionals (Crisp, 2006; Eliason & Hughes, 2004). Rather, a greater number of studies have looked at provider attitudes toward providing health care services to these persons and their level of homophobia. Kissinger, Lee, Twitty, and Kisner (2009) explored the attitudes of health care providers in the mental health field toward providing care to gay men. They indicated providers' own family dynamics are significant factors in their attitudes toward gay men.

Specifically, the family dimensions of conflict, intellectual–cultural orientation, and moral–religious emphasis were related to their levels of homophobia. Blackwell (2008) found that belief in the "free choice" model of homosexuality (the belief that gay men consciously choose to be homosexual and participate in a lifestyle conducive to that choice) was the strongest predictor of homophobia in nurses. So, while it is important to consider that personal prejudice by providers might be partly responsible for the perpetuation of health disparities experienced by gay men, it is essential for all providers to understand the specific needs and disparities of this population. As asserted by Rhodes, McCoy, Hergenrather, and Durant (2007):

> Understanding the health behavior disparities between gay and heterosexual men is crucial to identifying associated factors and intervening upon them using appropriate and meaningful tailored strategies to reduce these disparities and improve health outcomes. (p. 15)

Through a comprehensive review of the literature, this article will answer the following questions: 1) What specific conflicting data have been found in various studies assessing alcohol use and abuse in gay men?; 2) what are the common themes and findings within these studies?; and 3) what are the implications of internalized homophobia and heterosexism as possible etiologic factors for increasing the prevalence of alcohol abuse among gay men? Clinical strategies providers can employ when encountering this issue among patients will be suggested along with recommendations for future research.

CONFLICTING DATA: ALCOHOL USE AND ABUSE IN GAY MEN

Studies comparing the prevalence of alcoholism in gay versus heterosexual samples have yielded mixed results. Although regional in design, Stall and Wiley (1988) found an 8% higher rate of alcohol abuse in homosexual versus heterosexual males in their research (11% vs. 19%) in randomized samples recruited in San Francisco. With a moderately sized sample ($n = 207$), Armadio and Chang (2004) predicted 25% of the gay men in their sample had the strong possibility of suffering from alcoholism. But in their comprehensive review of the literature, Paul, Stall, and Bloomfield (1991) found the rate of alcohol abuse in gay men to be much lower at around 8%. Other data indicate alarmingly higher rates of alcohol abuse (Hatzenbuehler, Corbin, & Fromme, 2008; Wong, Kipke, & Weiss, 2008).

A 2008 Los Angeles-based study by Wong et al. found a high level of alcohol use (91%) among gay men ($n = 526$). Perhaps of more concern, 21% of the participants in their study reported binge drinking, while 40% reported frequent binge drinking. Hatzenbuehler et al. (2008) found gay men increased their alcohol use at greater rates than heterosexual men during their initial transition to the college and university setting. Their sample compared responses of 64 gay or bisexual men with 830 heterosexual men. But conclusions made from the research of Trocki, Drabble, and Midanik (2005) suggested

although gay men spend more time socializing in bars and in environments that promote heavy drinking, this does not correlate to heavier drinking in gay men. Their study was based on data collected from the 2000 National Alcohol Survey and compared a sample of 1,179 heterosexual men to 60 men who have sex with men. Findings suggested drinking patterns among gay men do not differ from those of other men (Trocki et al., 2005). Morgenstern et al. (2001) asserted that although gay men do not have higher rates of alcohol dependence, they are less likely to abstain from its use, and they studied the phenomenon in a sample of 89 gay men. In addition, gay men report problems related to drinking nearly twice as often as heterosexual men, and drinking rates do not decrease with age in gay men as quickly as those of heterosexuals (Gruskin & Gordon, 2006; Skinner, 1994).

Some data indicate a correlation between male homosexual orientation and borderline heavy drinking. Gruskin and Gordon (2006) found this in their California-based study of 331 gay men. In addition, heavy drinking also appears to be prevalent among young gay men (Bradford & Ryan, 1987; Gay and Lesbian Medical Association [GLMA], 2001; Skinner, 1994).

Cultural Influences

Hughes (2005) has conducted extensive research studies assessing alcohol use and abuse among homosexuals. Her work, which consisted of a comprehensive literature review of studies published from 1985 to 2004 and listed in Medline, CINAHL, and PsychINFO, suggested gay men are more likely to drink alcohol than heterosexual men as a consequence of cultural and environmental influences associated with being part of a stigmatized and marginalized group. These implications were also suggested in the theoretical works of Cabaj (1999) and Bobbe (2002), who suggested stress associated with accepting oneself as gay plays a key role in the eventual development of alcoholism.

Regional Differences

Perhaps the etiology for some of the conflicting data examining alcohol use and abuse among gay men is partly due to the regional focus of most inquiries. Nationwide epidemiological data collection tools such as the National Household Survey on Drug Abuse and the Monitoring the Future Study do not currently ascertain participants' sexual orientation (GLMA, 2001). Thus, the statistics available are limited to regional or local studies of specific populations (GLMA, 2001). Perhaps the overall consensus of the data suggests that the differences in alcoholism between heterosexuals and homosexuals are not as dramatic as once hypothesized (Bux, 1996). Data do show that differences do exist. For example, the social context of where drinking occurs for heterosexual males (sporting events or other heterosexually attended social settings such as weddings) may differ from that of homosexual males (bar or club settings, which have traditionally served as a major source of socialization for gay men). These differences must be addressed by health care professionals. However, before successful interventions can be employed in the clinical setting, it is important to examine some of the theoretical frameworks that may explain this phenomenon.

THE ROLE OF INTERNALIZED HOMOPHOBIA AND INTERNALIZED HETEROSEXISM

Many authors have examined the relationships between internalized homophobia and internalized heterosexism in gay men and the higher propensity to use and abuse alcohol (Armadio, 2006; Kus, 1988; Rosser, Bockting, Ross, Miner, & Coleman, 2008; Span & Derby, 2009). Internalized homophobia and internalized heterosexism are interchangeable terms, which are operationalized in most contexts to mean "a set of negative attitudes and affects towards homosexuality in other persons and oneself" (Armadio, 2006, p. 1153). The existence of these personal beliefs and attitudes in gay men has long been theorized as strong causative agents in the development of numerous psychopathologic diseases in gay men such as major depression and increased suicidal ideation and suicide attempts (Rosser et al., 2008).

Also, internalized homophobia and heterosexism in gay men have been theoretically linked to higher-risk behaviors (Rosser et al., 2008), and some studies have indicated internalized homophobia/heterosexism as a stronger predictor for alcohol abuse in gay men than other psychiatric illnesses, such as depression (Armadio, 2006; Span & Derby, 2009). A 2006 review of the literature conducted by Armadio found five studies published between 1973 and 2004 assessing the role of internalized homophobia/heterosexism in alcohol use by gay populations; the findings within some of those studies highlighted the significant interactions between these beliefs and attitudes and alcohol abuse.

An older qualitative study by Kus (1988) found all twenty gay males within his sample expressed difficulty in the self-acceptance of their homosexual orientation while drinking abusively. Kus (1988) concluded this overall lack of self-acceptance was the predominant cause of their drinking problems. Armadio's (2006) more recent inquiry with a much larger sample of gay men ($n = 184$) reached different conclusions. Among the gay men in this sample, internalized homophobia/heterosexism did not positively correlate with: a) the number of days using alcohol during the past month and the average number of drinks per occasion during the last month; b) the number of days consuming five or more drinks during the past month; c) binge or heavy drinking; d) the number of days consuming an alcoholic beverage during the past year; e) the number of days being drunk during the past year; and f) alcohol-related problems.

Perhaps an important consideration is the research conducted among gay male youth, who are often struggling with their own self-acceptance as homosexual (Wright & Perry, 2006). Rosario, Hunter, and Gwadz (1997) assessed the relationship between internalized homophobia/heterosexism in a large sample of gay male youth in New York City and suggested stress and the difficulties associated with growing up gay were most likely the cause of their elevated rates of problematic substance use.

Earlier data from Rotheram-Borus, Junter, and Rosario (1994) found a direct link between gay-related stress on overall emotional distress. A more recent youth-based study conducted by Wright and Perry (2006) specifically examined the role of homophobia in alcohol use and abuse among this population. Their analysis did not find a significant correlation between internalized homophobia and heterosexism and excessive alcohol use; however, this was supported by the assertion that sexual identity distress isolates gay male youth both socially and psychologically from traditional peer groups where these behaviors are likely to occur (Wright & Perry, 2006).

Perhaps one of the most comprehensive analyses of the relationship between internalized homophobia/ heterosexism is found in the work of Brubaker, Garrett, and Dew (2009). In the meta-analysis performed by these researchers, four studies conducted between 1988 and 2008 supported a statistically significant relationship between internalized homophobia/heterosexism and alcohol and/or substance abuse; seven studies indicated partial support; and five studies failed to show support (Brubaker et al., 2009). Although much more research is needed to either strengthen or disprove the theoretical link between internalized homophobia/heterosexism and alcohol abuse, the supportive data do suggest at least partial causality, which clinicians should take into consideration in working with their gay male patients.

The nation's largest gay health advocacy organization, the GLMA, deems it significant to approach this issue as a public health threat and for providers to address alcohol use with gay patients (GLMA, 2008). In addition, researchers have emphasized the need for health care professionals to focus special attention on addressing internalized homophobia because of its potential relationship with psychological distress and psychopathology (Gruskin & Gordon, 2006). Thus, it is important to identify ways to enhance community-oriented strategies to reduce alcohol abuse among this vulnerable population and for providers to be aware of this potential issue among gay male patients and have the skills necessary to assess and address it.

REDUCING ALCOHOL USE AMONG GAY MEN

To assist in the scholarly assessment of provider knowledge related to the disparities of alcohol use by gay men, specific recommendations to reduce this disparity have been supported in the literature. The *Healthy People 2010: Companion Document for Lesbian, Gay, Bisexual, and Transgender (LGBT) Health* (GLMA, 2001) is an exhaustive resource document designed to assist public health efforts in reducing health disparities in the lesbian, gay, bisexual, and transgender population. Specific recommendations include incorporation of sexual orientation-related questions in nationwide epidemiologic surveys, increasing standards for accreditation by requiring inclusion of treatment modalities aimed at gay men, and expanded cultural competence education for current providers as well as those in health care education programs.

Clinical Strategies Providers Need to Implement With Gay Male Patients

These guidelines also provide provider-initiated strategies that can have an immediate impact. Providers should make substance abuse literature available to their gay male clientele, including youth. Providers should also review how consumer data are collected for statistical purposes, program reporting requirements, and funding or reimbursement sources and should discuss with data collection entities how best to collect data on health needs and service usage by gay male consumers (GLMA, 2001). In the clinical setting, screening for alcohol abuse can be easily done through administration of the CAGE questionnaire (Seidel et al., 2010): A patient who reports cutting down on alcohol consumption, aggravation with others criticizing his drinking, guilt for drinking, or consumption of eye openers to reduce hangover effects should be referred for further evaluation for probable alcohol abuse.

If providers diagnose a clinically significant alcohol abuse issue in a patient, he or she needs to be referred to the appropriate resource for treatment. Research conducted in the early 1990s examining substance abuse treatment facilities indicated staff members were not trained in gay-specific treatment and had few or no gay staff members (Hellman, 1991). Research occurring at that same time suggested gay patients were more likely to participate in treatment programs that address gay issues (O'Hanlan, Cabaj, Lock, & Nemrow, 1997; Paul et al., 1991). One resource providers and patients might find especially helpful is the Web site http://gayalcoholics.com, which lists quite a few resources for gay men who are in need of treatment services. The site includes a complete national listing of gay Alcoholics Anonymous meetings and recovery support groups as well as a comprehensive list of treatment centers that focus on gay and lesbian substance abuse (Gay and Lesbian Alcoholics, 2009).

Although data assessing the relationship between internalized homophobia/heterosexism and alcohol abuse in gay men are conflicting, a large body of literature supports a relationship between sexual identity distress and mental health issues and pathology. Consequently, evidence supports screening patients for internalized homophobia/heterosexism and ensuring appropriate referral for those gay males identified as having high levels of sexual identity distress. The Sexual Identity Distress Scale (Table 1) is one such tool that can assist clinicians in identifying gay men with higher levels of internalized homophobia/heterosexism. The validity and reliability of this scale has been extensively supported (Wright & Perry, 2006; see Table 2).

Finally, because gay men have higher rates of HIV transmission, it is important to consider that data assessing the potential correlation

TABLE 1. The CAGE Questionnaire (Ewing, 1984)

1. Have you ever felt you ought to *cut* down on your drinking?	Yes	No
2. Have people *annoyed* you by criticizing your drinking?	Yes	No
3. Have you ever felt bad or *guilty* about your drinking?	Yes	No
4. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (*eye*-opener)?	Yes	No

TABLE 2. Sexual Identity Distress Scale (Wright & Perry, 2006)

1. I have a positive attitude about being gay, lesbian, or bisexual.				
Agree	Mixed Feelings	Disagree	Strongly Disagree	Don't Know
2. I feel uneasy around people who are very open in public about being gay, lesbian, or bisexual.				
Agree	Mixed Feelings	Disagree	Strongly Disagree	Don't Know
3. I often feel ashamed that I am gay, lesbian, or bisexual.				
Agree	Mixed Feelings	Disagree	Strongly Disagree	Don't Know
4. For the most part, I enjoy being gay, lesbian, or bisexual.				
Agree	Mixed Feelings	Disagree	Strongly Disagree	Don't Know
5. I worry a lot about what others think about my being gay, lesbian, or bisexual.				
Agree	Mixed Feelings	Disagree	Strongly Disagree	Don't Know
6. I feel proud that I am gay, lesbian, or bisexual.				
Agree	Mixed Feelings	Disagree	Strongly Disagree	Don't Know
7. I wish I weren't attracted to the same sex.				
Agree	Mixed Feelings	Disagree	Strongly Disagree	Don't Know

Note. Scoring is summed by adding the overall values of the response: "Agree" = 1; "Mixed Feelings" = 2; "Disagree" = 3; "Strongly Disagree" = 4; and "Don't Know" = 5. The level of the overall score indicates a higher level of internalized homophobia.

between alcohol use and unsafe sexual behaviors and transmission of HIV are largely conflicting. Older studies by Perry et al. (1994), Ryan, Huggins, and Beatty (1999), and Weatherburn et al. (1992) did not support a correlation between alcohol use and unsafe sexual practices or transmission of HIV in gay men. These findings conflict with the newer studies from Bimbi et al. (2006), Parsons et al. (2004), Ramirez-Valles, Garcia, Campbell, Diaz, and Heckathorn (2008), and Wilton (2008) that supported that heavy drinking and other substance abuses were correlated to unsafe sexual practices and HIV transmission among gay men. Providers should discuss safer sex practices with their gay male patients, including condom use and refraining from use of substances that might impair judgment during sexual decision making.

CONCLUSION

Although the current body of research lacks consistency, it remains clear that gay men entering the health care system present with unique needs that are essential for health care providers to understand and treat. This article examined the data addressing three specific research questions: 1) What specific conflicting data have been found in various studies assessing alcohol use and abuse in gay men?; 2) what are the common themes and findings within these studies?; and 3) what are the implications of internalized homophobia and heterosexism as possible etiologic factors for increasing the prevalence of alcohol abuse among gay men? This comprehensive review uncovered data that suggested gay men have higher rates of alcohol abuse, yet found others that indicated they do not. However, despite differing statistical conclusions, commonalities were also found. For example, internalized homophobia and heterosexism were implicated as at least partial causal factors by many authors.

In addition, clinical strategies providers can implement when encountering this issue in gay male patients were suggested. Appropriate use of screening tools with strong validity and reliability (such as the CAGE questionnaire) and effective referral to treatment specialists educated and experienced in gay issues were highlighted as beneficial. Future studies assessing the use and abuse of alcohol among gay men and taking into account a national focus are desperately needed. These studies should be of high scientific rigor so more precise clinical conclusions can be derived. For example, methodologies that employ randomization should be favored over

those that use convenience techniques for recruitment. This has been a difficult issue within prior inquiries.

It is also essential to ensure data derived from research are implemented into clinical treatment guidelines that are evidence based. The transition from research to practice should also be implemented more rapidly. Research suggests that effective teamwork and interprofessional collaboration between nurses, physicians, social workers, and other health care professionals is essential to this process (Alanen, Vallmaki, & Kalia, 2009). Numerous interventions can be implemented by providers to effectively reduce this possible health disparity among gay men. Finally, providers need to be educated on these issues to better formulate strategies to reduce health disparities among this population.

REFERENCES

Alanen, S., Vallmaki, M., & Kalia, M. (2009). Nurses' experiences of guideline implementation: A focus group study. *Journal of Clinical Nursing*, *18*(18), 2613–2621.

Armadio, D. M. (2006). Internalized heterosexism, alcohol use, and alcohol-related problems among lesbians and gay men. *Addictive Behaviors*, *31*(7), 1153–1162.

Armadio, D. M., & Chang, B. Y. (2004). Internalized homophobia and substance abuse among lesbian, gay, and bisexual persons. *Journal of Gay & Lesbian Social Services*, *17*(1), 83–101.

Bimbi, D. S., Nanin, J. E., Parsons, J. T., Vicioso, K. J., Missildine, W., & Frost, D. M. (2006). Assessing gay and bisexual men's outcome expectancies for sexual risk under the influence of alcohol or drugs. *Substance Use and Misuse*, *41*(5), 643–652.

Blackwell, C. W. (2008). Belief in the "free choice" model of homosexuality: A correlate of homophobia in registered nurses. *Journal of Lesbian, Gay, Bisexual, and Transgender Health Research*, *3*(3), 31–40.

Bobbe, J. (2002). Treatment with lesbian alcoholics: Healing shame and internalized homophobia for ongoing sobriety. *Health & Social Work*, *27*(3), 218–223.

Bradford, J., & Ryan, C. (1987). *The national health care survey: Final report*. Washington, DC: National Gay & Lesbian Task Force.

Brubaker, M. D., Garrett, M. T., & Dew, B. J. (2009). Examining the relationship between internalized heterosexism and substance abuse among lesbian, gay, and bisexual individuals: A critical review. *Journal of LGBT Issues in Counseling*, *3*(1), 62–89.

Bux, D. (1996). Relapse and recovery in addictions. *Journal of Studies on Alcoholism*, *63*(1), 122–129.

Cabaj, R. (1999). Substance abuse, internalized homophobia, and gay men and lesbians: Psychodynamic issues and clinical implications. *Journal of Gay and Lesbian Psychotherapy*, *3*(3), 1–5.

Children's Hospital Boston. (2009). *Confronting health disparities among lesbian, gay, bisexual, and transgender youth*. Retrieved from Science Daily Web site: http://www.sciencedaily.com/releases/2009/08/090819064029.htm

Crisp, C. (2006). The Gay Affirmative Practice (GAP) Scale: A new measure for assessing cultural competence with gay and lesbian clients. *Social Work*, *51*(2), 115–126.

Dahan, R., Feldman, R., & Hermoni, D. (2007). The importance of sexual orientation in the medical consultation. *Harefuah*, *146*(8), 626–630.

Eliason, M. J., & Hughes, T. (2004). Treatment counselor's attitudes about lesbian, gay, bisexual, and transgender clients: Urban vs. rural settings. *Substance Use & Misuse*, *39*(4), 625–644.

Ewing, J. A. (1984). Detecting alcoholism: The CAGE questionnaire. *Journal of the American Medical Association*, *252*(14), 1905–1907.

Gay and Lesbian Alcoholics. (2009). *Alcoholism recovery support*. Retrieved from http://gayalcoholics.com

Gay and Lesbian Medical Association. (2001). *Healthy people 2010: Companion document for lesbian, gay, bisexual, and transgender (LGBT) health*. San Francisco, CA: Author.

Gay and Lesbian Medical Association. (2008). *Top 10 issues to discuss with your health care provider*. Retrieved from http://glma.org/index.cfm?fuseaction=Page.viewPage&pageId=947&grandparentID=534&parentID=938&nodeID=1

Gruskin, E. P., & Gordon, N. (2006). Gay/lesbian sexual orientation increases risk for cigarette smoking and heavy drinking among members of a large Northern California health plan. *BMC Public Health*, *3*(6), 241.

Hatzenbuehler, M. L., Corbin, W. R., & Fromme, K. (2008). Trajectories and determinants of alcohol use among LGB young adults and their heterosexual peers: Results from a prospective study. *Developmental Psychology*, *44*(1), 81–91.

Hellman, R. E. (1991). Treatment of homosexual alcoholics in government-funded agencies: Provider training and attitudes. *Hospital and Community Psychiatry*, *40*(1), 1163–1168.

Hughes, T. L. (2005). Alcohol use and alcohol-related problems among lesbian and gay men. *Annual Review of Nursing Research*, *23*, 283–325.

Kelley, L., Chou, C. L., Dibble, S. L., & Robertson, P. A. (2008). A critical intervention in lesbian, gay, bisexual, and transgender health: Knowledge and attitude outcomes among second-year medical students. *Teaching and Learning in Medicine*, *20*(3), 248–253.

Kissinger, D. B., Lee, S. M., Twitty, L., & Kisner, H. (2009). Impact of family environment on future

mental health professionals' attitudes towards gay men and lesbians. *Journal of Homosexuality*, *56*(7), 894–920.

Kus, R. (1988). Alcoholism and nonacceptance of gay self: The critical link. *Journal of Homosexuality*, *15*(1/2), 25–41.

Morgenstern, J., Irwin, T. W., Wainberg, M. L., Parsons, J. T., Muench, F., Bux, D. A., ... Schulz-Heik, J. A. (2001). A randomized controlled trial of goal choice interventions for alcohol use among men who have sex with men. *Journal of Consulting and Clinical Psychology*, *75*(1), 72–84.

O'Hanlan, K., Cabaj, R. B., Lock, J., & Nemrow, P. A. (1997). A review of the medical consequences of homophobia with suggestions for resolution. *Journal of the Gay and Lesbian Medical Association*, *1*, 25–40.

Parsons, J. T., Vicioso, K., Kutnick, A., Punzalan, J. C., Halkitis, P. N., & Velasquez, M. M. (2004). Alcohol use and stigmatized sexual practices of HIV seropositive gay and bisexual men. *Addictive Behaviors*, *29*(5), 1045–1051.

Paul, J., Stall, R., & Bloomfield, K. (1991). Gay and alcoholic: Epidemiologic and clinical issues. *Alcoholic Health and Research World*, *15*(2), 151–157.

Perry, M. J., Solomon, L. J., Winett, R. A., Kelly, J. A., Roffman, R. A., Desiderato, L. L., ... Stevenson, L. Y. (1994). High-risk sexual behavior and alcohol consumption among bar-going gay men. *AIDS*, *8*, 1321–1324.

Ramirez-Valles, J., Garcia, D., Campbell, R. T., Diaz, R. M., & Heckathorn, D. D. (2008). HIV infection, sexual risk behavior, and substance use among Latino gay and bisexual men and transgender persons. *American Journal of Public Health*, *98*(6), 1036–1042.

Rhodes, S. D., McCoy, T., Hergenrather, K. C., & Durant, R. H. (2007). Exploring the health behavior disparities of gay men in the United States: Comparing gay male university students to their heterosexual peers. *Journal of Lesbian, Gay, Bisexual, and Transgender Health Research*, *3*(1), 15–23.

Rondahl, G. (2009). Students' inadequate knowledge about lesbian, gay, bisexual, and transgender persons. *International Journal of Nursing Education Scholarship*, *6*(1), 1–18.

Rosario, M., Hunter, J., & Gwadz, M. (1997). Exploration of substance use among lesbian, gay, and bisexual youth: Prevalence and correlates. *Journal of Adolescent Research*, *12*(4), 454–476.

Rosser, S. B. R., Bockting, W. O., Ross, M. W., Miner, M. H., & Coleman, E. (2008). The relationship between homosexuality, internalized homonegativity, and mental health in men who have sex with men. *Journal of Homosexuality*, *55*(2), 185–203.

Rotheram-Borus, M. J., Junter, J., & Rosario, M. (1994). Suicidal behavior and gay-related stress among gay and bisexual males. *Journal of Adolescent Research*, *9*(4), 498–508.

Ryan, C. M., Huggins, J., & Beatty, R. (1999). Substance use and the risk of HIV infection in gay men. *Journal of Studies on Alcoholism*, *60*, 70–77.

Sanchez, N. F., Rabatin, J., Sanchez, J. P., Hubbard, S., & Kalet, A. (2006). Medical students' ability to care for lesbian, gay, bisexual, and transgender patients. *Family Medicine*, *38*(1), 21–27.

Seidel, H. M., Ball, J. W., Dains, J. E., Flynn, J. A., Solomon, B. S., & Stewart, R. W. (2010). *Mosby's guide to physical examination* (7th ed.). St. Louis, MO: Mosby.

Skinner, W. F. (1994). The prevalence and demographic predictors of illicit drug use among lesbians and gay men. *American Journal of Public Health*, *84*(8), 1307–1310.

Span, S. A., & Derby, P. L. (2009). Depressive symptoms moderate the relation between internalized homophobia and drinking habits. *Journal of Gay and Lesbian Social Services*, *21*, 1–12.

Stall, R., & Wiley, R. (1988). A comparison of alcohol and drug use patterns of homosexual and heterosexual men: The San Francisco men's health study. *Drug and Alcohol Dependence*, *22*(1/2), 63–73.

Trocki, K. F., Drabble, L., & Midanik, L. (2005). Use of heavier drinking contexts among heterosexuals, homosexuals, and bisexuals: Results from a national household probability survey. *Journal of Studies on Alcohol*, *66*, 105–110.

Weatherburn, P., Davies, P. M., Hickson, F., Hunt, A., McManus, T. J., & Coxon, A. P. M. (1992). No connection between alcohol use and unsafe sex among gay and bisexual men. *AIDS*, *7*(1), 115–119.

Wilton, L. (2008). Correlates of substance abuse in relation to sexual behavior in Black gay and bisexual men: Implications for HIV prevention. *Journal of Black Psychology*, *34*(1), 70–93.

Wong, C. F., Kipke, M. D., & Weiss, G. (2008). Risk factors for alcohol use, frequent use, and binge drinking among young men who have sex with men. *Addictive Behaviors*, *33*(8), 1012–1020.

Wright, E. R., & Perry, T. L. (2006). Sexual identity distress, social support, and the health of gay, lesbian, and bisexual youth. *Journal of Homosexuality*, *51*, 81–110.