

# An Overview of Diseases Related to Homosexuality People

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## Abstract

Homosexual individuals face significantly higher rates of mental health issues and suicidal tendencies than their heterosexual counterparts. Homosexual individuals face a greater risk of developing cancers, contracting sexually transmitted infections (STIs), acquiring Human immunodeficiency virus (HIV), as well as experiencing mental health disorders when compared to their heterosexual counterparts. Early detection and treatment of anal sexually transmitted infections in homosexual men can greatly enhance HIV prevention efforts and ultimately save lives. This result emphasizes the critical importance of routine STI testing for HIV-positive men to safeguard their health and considerably lower the risk of ongoing HIV transmission. Homosexual men often engage in high-risk sexual behaviors and injection practices, significantly increasing their vulnerability to contracting and spreading HIV and other infectious diseases. Recognizing and addressing these risks is crucial to promote public health and safety. Homosexual individuals are at higher risk of mental disorders than heterosexual individuals. This study highlights vital avenues for future research and underscores the significant implications for public policy.

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## Introduction

Homosexual individuals face significantly higher rates of mental health issues and suicidal tendencies than their heterosexual counterparts <sup>1-3</sup>. This disparity is often rooted in systemic discrimination, societal pressures, and the painful experience of social alienation, including rejection from loved ones. Challenges can lead to risky behaviors, including substance abuse, which further escalate the risk of severe physical and mental health problems, including suicide attempts. It is crucial to address these issues and create a supportive environment for all individuals, regardless of their sexual orientation <sup>2-3</sup>.

The current understanding of the mental health of homosexual individuals remains inconclusive, mainly due to significant challenges in defining and recruiting samples that accurately represent all non-heterosexual people <sup>4</sup>. Multiple methodological issues contribute to this uncertainty. These include inconsistent definitions of sexual orientation, mental health disorders, and mental illness; difficulties in achieving random sampling; an overreliance on participants' recollections; and the reluctance of many to disclose their sexual orientation <sup>2-3</sup>.

Additionally, there is a lack of information about the sexual orientation of suicide victims in psychological post-mortem studies, and complexities arise in selecting suitable comparison groups. Furthermore, there is often poor or nonexistent adjustment for confounding influences, such as substance use and personality factors. Addressing these issues is crucial for gaining a clearer understanding of the mental health experiences of homosexual individuals <sup>1</sup>.

Research is increasingly revealing the mechanisms behind the mental health disparities experienced by individuals based on their sexual orientation <sup>5</sup>. Two influential theories shed light on the heightened risk of psychological disorders in homosexual individuals: minority stress theory and the psychological mediation framework. At the heart of minority stress theory is the assertion that homosexual individuals endure significant stress due to their marginalized social status, which profoundly impacts their mental well-being. Understanding these factors is crucial for addressing and alleviating these disparities <sup>6-7</sup>.

Numerous studies have identified critical stressors that uniquely impact homosexual individuals, such as discrimination, the internalization of society's negative attitudes toward nonheterosexual attractions, behaviors, and identities, as well as the anticipation of future rejection due to one's sexual orientation <sup>8</sup>. By extending minority stress theory, researchers have shed light on specific mechanisms that link discrimination to adverse mental health outcomes. These mechanisms include both general psychological processes and, notably, those unique to the experiences of homosexual individuals. For instance, direct experiences of discrimination can foster detrimental feelings about one's sexual orientation. This internalized homonegativity often culminates in significant mental health challenges. The overwhelming consensus among researchers is that minority stress poses severe threats to mental well-being, clearly demonstrating a strong relationship between various forms of discrimination and adverse mental health consequences <sup>9-10</sup>.

The significant rise in sexually transmitted infections among homosexual individuals over the past decade is not just alarming; it requires immediate and comprehensive action. There is a critical requirement to evaluate the risks of mental disorders, sexually transmitted infections, and prostate and colorectal cancers among homosexual individuals <sup>11</sup>. Understanding the aspects contributing to these issues and evaluating the effectiveness of prevention efforts is crucial. Additionally, it is essential to examine the quality of the existing evidence. To address this, we conducted a review of global literature regarding the risks of mental disorders, sexually transmitted infections, and prostate and colorectal cancers within the homosexual population. These factors represent the main focus of the literature and provide a comprehensive overview.

### **Sexual orientation**

Sexual orientation, a deep-seated and lasting pattern of emotional, romantic, and sexual attraction to men, women, or both genders, is a fascinating aspect of human diversity. It's intriguing to note that more than 90% of men are naturally drawn to women, and the opposite holds true. This attraction is shaped by complex mechanisms, leading to unique traits—whether behavioral, physiological, or morphological—that distinguish heterosexual and homosexual populations. Understanding these traits is not just crucial, but also enlightening, as it fosters acceptance and appreciation of the rich diversity in human sexuality <sup>12-14</sup>.

Environmental factors profoundly influence sexual feelings and behaviors, often presenting differently in males and females. These expressions of attraction reflect

an individual's moral or religious beliefs, which can vary significantly across cultures. It is vital to embrace the identity labels that describe these attractions to promote understanding and acceptance. Recognizing terms like "lesbian" for women attracted to women, "gay" for men attracted to men, and "bisexual" for those attracted to both sexes is essential for appreciating the rich tapestry of human experiences. By embracing these identities, we foster inclusivity and celebrate the diverse spectrum of love and attraction that enriches our societies <sup>12, 15</sup>.

Many individuals assume that men are typically attracted to women and women to men, viewing this dynamic as a natural order rooted in biological instincts. However, this perspective is shaped by biology and cultural influences such as education, religion, and the law. Discussions surrounding sexuality, especially those involving same-sex attraction, are crucial as they engage diverse philosophical, scientific, and psychological viewpoints, highlighting the complexity and richness of human relationships <sup>16</sup>.

In this diverse community, sexual orientation encompasses three primary categories: heterosexual, bisexual, and homosexual. The term "homosexuality" originates from two Latin roots: "homo," meaning identical, and "sexus," referring to sex. It was first coined by the German psychologist Karoly Maria Benkert in the late 19th century <sup>17</sup>. Homosexual behavior is not a modern phenomenon; it has been a part of human history across almost every culture. This breadth of homosexual experience is documented through cross-cultural and historical studies. At the same time, medical research—especially from the contemporary west—provides insight into the depth and complexity of these experiences. Understanding and acknowledging this rich history is not just important, but crucial for fostering acceptance and equality within our society, enlightening us and opening our minds to the diversity of human experience <sup>12</sup>.

### **Sexually transmitted infections (STIs)**

In recent years, alarming increases in STIs and HIV risk behavior have emerged among homosexual men in developed nations, including Australia <sup>1-4</sup>. Research indicates that HIV-positive men often engage in higher levels of sexual risk behavior, with clinic-based studies showing significantly elevated rates of STIs <sup>5</sup>. This situation raises critical questions about the broader implications of these clinical findings for HIV-positive homosexual men as a whole. It is essential to address this issue to ensure effective prevention and intervention strategies are implemented <sup>6-7</sup>.

The community of homosexual men faces a significant challenge regarding the risk of acquiring HIV, HBV, and

HCV. In the United States, approximately 19% of homosexual men are living with HIV, and they account for a staggering 63% of new infections. This alarming statistic highlights the urgent need for action. Equally concerning is the fact that 44% of HIV-positive homosexual men are unaware of their status, with over half having not been tested in the past year<sup>25</sup>.

Rising rates of HIV in this community can largely be attributed to a lack of health awareness, along with histories of both physical and mental health struggles. Additionally, high-risk sexual practices and the use of injected drugs exacerbate the situation. To improve health outcomes, it is crucial to tackle these issues head-on, raising awareness and encouraging regular testing. Together, we can create a healthier future for homosexual men and reduce the impact of these infections in our communities.

Eric et al. (2016) highlighted alarming statistics regarding homosexual men and their vulnerability to HIV and other infectious diseases. The study revealed that a striking 10 percent of homosexual men had used anabolic-androgenic steroids at some point in their lives. Additionally, these men engage in high-risk sexual behaviors, having nearly four times as many sexual partners as heterosexual men. They were also more than 14 times more likely to participate in unprotected intercourse with known HIV-positive individuals. Furthermore, one in four homosexual men who inject drugs admitted to sharing syringes or needles, significantly increasing their risk of spreading infections. These findings underscore the urgent need for targeted interventions to promote safer practices within this community<sup>4</sup>.

HCV is primarily transmitted through the sharing of injecting equipment among individuals who use drugs<sup>26</sup>. It's important to note that while sexual transmission is generally viewed as uncommon in the broader population, recent evidence indicates a different scenario for specific groups<sup>27-28</sup>. Since the 1990s, it has been concluded that sexual transmission of HCV is rare among HIV-negative homosexual men. However, clusters of acute HCV infections have emerged in HIV-positive homosexual men, underscoring the possibility of sexual transmission within this community<sup>29-31</sup>. This underscores the need for increased awareness and prevention measures targeting at-risk populations while also maintaining a sense of perspective about the overall rarity of sexual transmission<sup>32</sup>.

Jin et al. (2015) demonstrated that HIV-positive homosexual men face a staggering prevalence of HCV, nearly ten times greater than those who are HIV-negative. While new HCV infections are uncommon in both

demographics, there are concerning instances of non-intravenous drug use (non-IDU) transmission, often linked to sexual contact with HIV-positive individuals. This underscores a critical opportunity: We must implement targeted prevention strategies for this high-risk group to curb the escalating threat of HCV transmission effectively<sup>33</sup>.

Research demonstrates that the prevalence of HCV is notably elevated in HIV-positive homosexual men compared to those who are HIV-negative. For example, a pivotal clinic-based study in Sydney during the 1980s revealed HCV rates of 4.0% among HIV-negative men, contrasted with an alarming 11.9% among HIV-positive men. Likewise, a community-based study in Amsterdam found HCV prevalence at just 0.8% in HIV-negative men, whereas it surged to 2.6% in HIV-positive individuals. This apparent disparity underscores the critical need for targeted interventions, specific strategies designed to address the unique needs of this vulnerable population, and increased awareness<sup>34-35</sup>.

In the UK cohort, we recorded a troubling incidence rate of HCV at 1.18 cases per 100 person-years among HIV-positive participants, based on a thorough follow-up of 1,361 person-years. Both UK and Swiss studies have drawn attention to a significant rise in HCV incidence among HIV-positive men<sup>36</sup>. In the Swiss cohort, the data revealed a clear link between unprotected sex and increased HCV incidence among men who did not report injecting drug use (IDU). Notably, the incidence rate was just 0.2 cases per 100 person-years for those who practiced safe sex, compared to an alarming 0.7 cases per 100 person-years for those who did not between 1988 and 2004<sup>37</sup>.

Moreover, while our research did not find any HCV seroconversions within the HIV-positive cohort, a recent extensive study funded by the National Institutes of Health in Australia unveiled that 56% of the 27 acute HCV infections in HIV-infected patients were transmitted sexually. This starkly contrasts with only 8% of 76 acute HCV infections in HIV-negative patients being linked to sexual contact. Given this critical information, it is imperative to follow the Australian guidelines recommending annual serological testing for HCV in HIV-positive homosexual men. This proactive step is essential for curbing the spread of this virus and safeguarding the health of individuals at risk<sup>33</sup>.

There has been a troubling rise in sexually transmitted infections among homosexual men around the world over the past decade. Alarming, surveillance data and cohort studies reveal that the transmission of HIV through homosexual contact is on the rise in Australia, Europe, North America, and several developing countries. We

must address this growing public health concern to protect the well-being of these communities <sup>33</sup>.

Jin et al. found that anal gonorrhea and anal warts are independently associated with an increased risk of HIV acquisition. This underscores the critical role of frequent anal screenings in proactively detecting and treating anal sexually transmitted infections in homosexual men. By enhancing screening practices, we can significantly bolster HIV prevention efforts in this vulnerable population <sup>33</sup>.

### **Mental health**

Homosexuality has not been considered a mental illness for over 30 years, marking a significant milestone in our understanding of sexual orientation. Discussions surrounding sexual orientation and mental health must recognize the deep-rooted impact of sexual stigma—the harmful attitudes and beliefs historically associated with same-sex attraction and minority sexual orientations. This stigma has profoundly influenced the perspectives of mental health professionals regarding homosexual behavior and those identifying as part of minority sexual orientations. Despite its expression through various cultural institutions such as law and religion, the stigma has thrived mainly on the misconception of homosexuality as a psychopathology. Acknowledging and addressing this stigma is crucial for fostering a more inclusive and understanding environment for all individuals, regardless of their sexual orientation <sup>40</sup>.

A cohort study highlighting the alarming issue of mental health in youth found a cumulative incidence of suicide attempts over two years among 2,924 Norwegian school students. Remarkably, the study revealed an odds ratio of 4.69 for LB girls after adjustments, underscoring the urgent need for targeted intervention. In contrast, no significant difference was found for BG boys, suggesting a pressing need for a nuanced understanding of these disparities <sup>41</sup>.

Meta-analyses of cross-sectional studies reveal a concerning trend: individuals in non-heterosexual groups face a significantly higher risk of lifetime suicide attempts when compared to heterosexuals. Notably, while considerable variability exists in the findings for both sexes and men alone, the data underscores this heightened vulnerability. In particular, the analysis focusing on women highlights a striking 1.82-fold increase in the risk of lifetime suicide attempts for lesbians and bisexuals compared to their heterosexual counterparts, with the results showing remarkable consistency. This underscores an urgent need for targeted support and intervention <sup>42</sup>. Another meta-analysis research showed that homosexual individuals are at higher risk of mental disorders than

heterosexual individuals. Epidemiological investigations revealed that compared with heterosexual individuals, homosexual individuals are at raised risk for mental disorders, including anxiety, depression, and externalizing diseases <sup>43-45</sup>.

At the heart of the minority stress approach lies the crucial understanding that LGB individuals endure significant stress stemming from their marginalized social status, a phenomenon known as minority stress. This unique form of stress is a crucial factor contributing to the heightened risk of psychological disorders within this community. A study highlights several specific stressors that resonate deeply with LGB individuals. These include direct discrimination, the painful internalization of negative societal views on nonheterosexual attractions and identities—termed internalized homonegativity—and the apprehension of future rejection based on one's sexual orientation. Recognizing and addressing these stressors is essential for supporting the mental well-being of LGB individuals <sup>46</sup>.

Hatzenbuehler (2009) provides a compelling extension of minority stress theory by identifying fundamental mechanisms that clarify how discrimination leads to adverse mental health outcomes. It highlights general psychological processes, such as deficits in emotional regulation, and LGB-specific processes, including internalized homonegativity. For instance, experiencing discrimination can foster negative feelings about one's sexual orientation. This internalized homonegativity can subsequently result in significant mental health challenges. A robust body of research supports the idea that minority stress has profoundly detrimental effects on well-being, consistently linking various types of discrimination to adverse mental health outcomes <sup>47</sup>.

A meta-analysis of 31 studies involving 5,831 individuals highlights a small to moderate but significant link between internalized homophobia and mental health issues. Interestingly, internalized homophobia has a stronger correlation with depressive symptoms than with anxiety symptoms. This suggests that different aspects of the minority stress process may affect mental health in distinct ways. Although there is a wealth of research on sexual minority stress and its effects on mental health, much of it has focused primarily on isolated aspects of Meyer's model rather than adopting more comprehensive frameworks that consider mediators. In one study that included 1,381 sexual minority women, heightened minority stress was significantly linked to an increase in mental health challenges and substance use. This relationship is partly attributed to a decline in essential social-psychological resources, such as social support and spirituality. These findings emphasize the urgent need for

a more comprehensive understanding of minority stress to address these pressing mental health concerns effectively<sup>42</sup>.

Homosexual people are at higher risk of mental disorders, suicidal behavior, substance misuse, and dependence than heterosexual people. The findings from the meta-analyses reveal a staggering two-fold increase in the risk of suicide attempts in the past year among both men and women, with an alarming four-fold increase for gay and bisexual men over their lifetime. These findings highlight an urgent need for targeted mental health support and intervention to address this critical issue. Research shows that depression, anxiety, alcohol use, and substance misuse are at least 1.5 times more common among homosexual individuals. This trend is observed in both men and women, but lesbian and bisexual women are particularly at risk for developing substance dependence. Additionally, gay and bisexual men face an alarmingly high lifetime risk of suicide attempts, underscoring the urgent need for targeted support and intervention<sup>42</sup>.

Research indicates a significant increase in the lifetime prevalence of drug dependence among both men and women, highlighting a critical public health concern that demands attention.

Research indicates a heightened lifetime risk of alcohol dependence, with women particularly susceptible, whereas men do not show the same level of risk.

Simon et al. (2014) revealed that it has internalized homonegativity, not homosexuality itself that is associated with adverse health outcomes. This underscores the critical need for healthcare providers to promote sexual health actively and to eliminate interventions that may inadvertently reinforce internalized homonegativity<sup>48</sup>.

### **Relationship between mental health and STIs**

Homosexual men are also more likely to have psychiatric conditions and abuse alcohol and drugs than heterosexual men<sup>49</sup>. These psychiatric conditions include major depression, generalized anxiety disorder, panic disorder, alcohol dependence, and drug dependence and are attributed to discrimination as well as day-to-day social stress experienced by homosexual and bisexual individuals<sup>49</sup>. In addition, AAS users are often stigmatized and perceived as neurotic, which may further exacerbate the discrimination experienced by homosexual AAS users. These psychiatric conditions may increase high-risk sexual behaviors and substance abuse. Homosexual men are more likely to use illicit drugs and abuse alcohol, which may increase the risk of infectious disease. Thus, psychiatric conditions along with substance

abuse also play a role in the risk of infectious disease in homosexuals<sup>50</sup>.

There are significant concerns regarding the misuse of AAS among homosexual men in England and Australia as they pursue an ideal body image. Reports indicate that similar patterns are emerging among homosexual men in the United States, which raises alarms. AAS, along with performance-enhancing drugs (PEDs) such as human chorionic gonadotropin (HCG), human growth hormone (HGH), insulin, and insulin-like growth factor-1 (IGF-1), are often administered through injection, increasing the risk of transmitting infectious diseases<sup>51</sup>. Additionally, research shows that homosexual men who use AAS frequently engage in riskier sexual behaviors, such as having multiple partners or engaging in unprotected anal intercourse with individuals whose HIV status is unknown. This behavior creates multiple avenues for the spread of infectious diseases within the community. It is vital to address these issues comprehensively to protect the health and well-being of homosexual men affected by AAS misuse<sup>52</sup>.

Even with high levels of education, increased awareness of STI and HIV screenings, and knowledge about their partners' STI statuses, many homosexual men continue to engage in high-risk sexual behaviors and injection practices<sup>53</sup>. This persistence highlights the need for comprehensive education and prevention strategies. They have nearly four times as many sexual partners and are over 14 times more likely to have unprotected intercourse with someone who is HIV-positive than their heterosexual counterparts. Alarmingly, about 25% of homosexual men who use injectable drugs admit to sharing needles or syringes. This risky behavior undeniably contributes to the disproportionately high prevalence of HIV and STIs among homosexual men compared to heterosexual men. It is crucial to recognize that these high-risk sexual behaviors and injection practices can have serious health consequences<sup>4</sup>.

Homosexual men had nearly four times as many sexual partners compared to heterosexual men. They were more than 14 times more likely to engage in unprotected intercourse with someone who is HIV-positive knowingly. Additionally, a quarter of homosexual men who injected drugs admitted to sharing used syringes or needles with others. Therefore, it is not surprising that the prevalence of HIV and the history of sexually transmitted infections among homosexual men is significantly higher than that of heterosexual men. These findings align with previous research indicating that homosexual adolescent boys are also more likely to use anabolic-androgenic steroids compared to their heterosexual peers. Like other studies on the general AAS population, homosexual men

in the current study commonly reported using AAS to increase muscle mass and strength, as well as to improve their appearance and engage in polypharmacy. Although this study did not find a significant difference in the occurrence of body dysmorphic disorder between homosexual and heterosexual males, it has been reported that homosexual men often experience more body image issues and are more significantly affected by body dysmorphia. This may contribute to their desire to use AAS <sup>4</sup>.

A study showed that homosexual males self-reported being seropositive for HIV more significantly than the general people of homosexual males <sup>54</sup>.

Individuals are knowingly engaging in unprotected sex with someone who is HIV-positive, which poses a significant health risk. The current study reveals that the rate of needle sharing among these individuals is far greater than what has been documented for general male users and homosexual male AAS users in existing literature. Moreover, the frequency of sexual encounters with known HIV-positive individuals in this study is staggering—over seven times the rate reported among homosexual AAS users in England. This underscores the need for heightened awareness and intervention in these communities, reinforcing the importance of the study's findings and prompting the reader to consider potential solutions <sup>55</sup>.

Understanding the high rates of needle sharing and risky sexual behavior among homosexual men is crucial, as this issue may indicate a worrying new trend or a specific problem that needs targeted intervention. One plausible explanation for such behaviors is a diminishing fear of HIV, as recent advancements in treatment have transformed the virus into a manageable chronic condition. Furthermore, preventative HIV medications are readily available to significantly lower infection risks. Although two studies suggest that using antiretroviral medications prophylactically does not elevate sexual risk behavior, this particular study reveals worrisome rates of risky actions. Additionally, the phenomenon known as "bug chasing" within some segments of the homosexual male community, where individuals intentionally seek out unprotected intercourse to contract HIV and gain acceptance, must not be overlooked. It's clear that future research is not just important, but crucial, to delve deeper into the motivations behind these high-risk behaviors so we can effectively address and mitigate them <sup>55-56</sup>.

The remarkably high incidence of HIV identified in this study, especially when compared to other research, reveals a concerning correlation with aggressive alcohol use, substance abuse, and anxiety <sup>4</sup>. Although binge drinking—defined as consuming five or more drinks on a

single occasion—was reported to be less prevalent among participants than their heterosexual counterparts, a significant proportion of homosexual men still engaged in binge drinking, surpassing the rates observed in the general adult population and men in their 40s. Heavy alcohol use among homosexual men is significantly higher than in the general adult population and their male peers. This highlights the urgent need to address these risky behaviors, as doing so is crucial for improving health outcomes and well-being, which is a shared professional goal among healthcare professionals, researchers, and public health officials <sup>57</sup>.

Anxiety is a significant factor that predicts substance use and risky sexual behaviors among homosexual men. Research indicates that some individuals may turn to risky sexual encounters as a way to escape their anxiety. Anxiety and high rates of alcohol and substance use among homosexual men are often worsened by discrimination and daily social stresses related to their sexual orientation. The challenges significantly heighten the chances of engaging in high-risk sexual behaviors, ultimately contributing to an increase in HIV and sexually transmitted infections. It must tackle these issues head-on to foster safer behaviors and enhance overall health outcomes for our community <sup>4</sup>.

### Prostate and Colorectal Cancers

Numerous studies demonstrate that the utilization of prostate and colorectal cancer testing is significantly influenced by factors such as race/ethnicity, income, education, and other personal characteristics. It is crucial to address these disparities to ensure equitable access to life-saving screenings for all individuals <sup>58-63</sup>.

There is a significant lack of information about the relationship between cancer screening and sexual orientation despite existing research on the topic <sup>64-67</sup>. Numerous studies have found that lesbians are less likely than heterosexual women to receive cancer screenings <sup>64</sup>. However, it is important to note that there has been no quantitative analysis comparing cancer testing rates between gay or bisexual men and heterosexual men <sup>68</sup>. This gap in research needs to be addressed to ensure equitable healthcare for everyone. The gap in research raises significant concerns from both public health and clinical viewpoints, particularly given the high prevalence of HIV among gay and bisexual men. Studies indicate that CRC is not only more frequent in HIV-positive individuals but also tends to emerge at a younger age and is more aggressive compared to individuals without HIV. Public health professionals, researchers, and clinicians must take the lead in addressing this gap to improve the health outcomes of this vulnerable population <sup>69-70</sup>.

While there is no definitive connection between HIV and prostate cancer, it is crucial for clinicians working in the gay community to advocate for earlier PSA testing in HIV-positive men. Initiating testing before the standard age recommendations can help mitigate potential complications related to HIV treatment for advanced cancers, ensuring better health outcomes for this vulnerable population. These screening practices can lead to harmful treatments that jeopardize patient functioning and well-being and fail to enhance outcomes, underscoring the need for more effective approaches. Insight into how sexual orientation relates to CRC and PSA testing is crucial for effectively guiding planners and providers of prevention outreach and clinical services targeting gay and bisexual men. This understanding can enhance health initiatives and improve accessibility to vital screenings <sup>70</sup>.

It is well-documented that significant racial and ethnic disparities exist in both prostate and colorectal cancers, as well as in access to essential healthcare services <sup>71-73</sup>. Addressing these differences is crucial for improving health outcomes and ensuring equitable care for all populations <sup>74-75</sup>. A concerning trend is the inadequate use of prostate cancer screening and treatment among African Americans, who face a higher risk of developing and dying from this disease compared to other populations <sup>76</sup>. Similarly, African Americans and Latinos are less likely to receive essential CRC screenings than their White counterparts despite the stark disparities in disease incidence and outcomes. Addressing these inequalities is crucial to ensure equitable health care for all communities <sup>77</sup>.

An extensive analysis of national Surveillance, Epidemiology, and End Results data from 1992 to 2001 demonstrates a concerning trend. While CRC incidence among males decreased by an average of 1.3% per year for White individuals and 0.8% for Asians and Pacific Islanders, no similar declines were noted for African Americans or Latinos <sup>76</sup>. This inequity is alarming, especially given that race-specific data on cancer incidence for gay and bisexual men remain unavailable. Furthermore, the significant rise in HIV cases among minority gay and bisexual men during this decade highlights a critical reality—these subgroups often lack access to vital preventive services. This calls for immediate action to address these disparities and ensure equitable healthcare for all communities <sup>77</sup>.

Concerns about stigma and the potential risks of disclosing personal health information can significantly discourage gay and bisexual men from seeking crucial health services, such as cancer screenings. This issue is particularly prominent for those still navigating their

sexual orientation. Moreover, for gay and bisexual men who also belong to racial or ethnic minority groups, the challenges are intensified. The intersection of these two marginalized identities can lead to even more significant health disparities. Therefore, it is of utmost importance to address these barriers in order to ensure equitable access to recommended cancer testing for all individuals <sup>78</sup>.

Kevin et al. established that sexual orientation is independently linked to cancer testing among men. Future research must rigorously examine how this association differs by race/ethnicity and living situation <sup>79</sup>.

Prevalence data on CRC among sexual minorities are insufficient for making definitive conclusions about incidence and mortality rates. However, it is crucial to recognize that these rates may differ based on sexual orientation. Sexual minorities often face a higher prevalence of risk factors for CRC and encounter significant barriers to accessing healthcare. This disparity can lead to delays in screening, detection, and treatment of CRC, negatively impacting their health outcomes. Addressing these issues is essential for improving the overall health and well-being of sexual minorities in our society. Lifestyle factors significantly contributing to CRC include a diet rich in obesity and red meats, a lack of physical activity, excessive alcohol consumption, smoking, and the presence of type II diabetes. It is crucial to manage these problems to decrease the risk of CRC. There is adequate evidence to conclude that lesbians have more risk characteristics because of their higher rates of smoking, obesity, and heavy alcohol usage <sup>79</sup>.

A population-based study found that gay and bisexual men are more proactive about their health, demonstrating higher screening rates for colorectal cancer compared to their heterosexual counterparts. This highlights the importance of inclusive health initiatives encouraging everyone to prioritize their well-being <sup>80</sup>.

Research has shown that gay men are more proactive in getting screened for health issues, demonstrating a strong commitment to their well-being. In contrast, the study indicates that bisexual men screen at rates comparable to heterosexual men, highlighting a need for increased awareness and encouragement for this group to prioritize their health <sup>80-84</sup>. Research focusing on a predominantly male group of HIV-infected patients reveals a concerning trend. Despite their more significant engagement with healthcare, these individuals were significantly less likely to undergo CRC screening compared to a control group without HIV. This highlights a potential gap in CRC screening among gay men, underscoring the urgent need for targeted interventions to ensure equitable healthcare access, a fundamental right, and promote preventive screenings in this vulnerable

population. Significant barriers to CRC screening compliance—such as understanding the importance of screening, having a regular source of care, receiving strong recommendations from healthcare providers, and distrusting the medical system—have been identified in various underserved populations. However, these critical issues remain unexamined within sexual minority populations. Addressing these gaps is essential for enhancing CRC screening rates and ensuring equitable health outcomes for all communities <sup>81-88</sup>.

Boehmer et al. reveal an important finding: There is a significant positive connection between the increased density of sexual minority men and women and the incidence of colorectal cancer. Additionally, they highlight a concerning trend regarding mortality, where a higher density of sexual minority men is linked to increased colorectal cancer death rates. At the same time, no similar association is found for women <sup>89</sup>.

Previous research has established troubling links between sexual minorities and CRC, particularly highlighting that lesbians may face elevated CRC risk factors while gay men exhibit higher smoking rates <sup>81-88</sup>. It is important to note that earlier studies have revealed a connection between higher CRC rates and HIV-infected populations. Consequently, the increased CRC mortality rates observed in regions with larger populations of sexual minority men may be primarily driven by the prevalence of coexisting HIV infections. A recent study underscores this concern, indicating that sexual minority men experience significantly higher HIV-related mortality rates. Addressing these disparities is essential for improving health outcomes in these communities <sup>80</sup>.

## Conclusion

This result emphasizes the critical importance of routine STI testing for HIV-positive men to safeguard their health and significantly lower the risk of ongoing HIV transmission. Homosexual men often engage in high-risk sexual behaviors and injection practices, significantly increasing their vulnerability to contracting and spreading HIV and other infectious diseases. Recognizing and addressing these risks is crucial to promote public health and safety. Homosexual individuals are at higher risk of mental disorders than heterosexual individuals. This study highlights vital avenues for future research and underscores the significant implications for public policy.

## Highlights

### What Is Already Known?

Homosexual individuals are more likely to experience mental health challenges and certain health conditions, including various types of cancer, STIs, and HIV, compared to heterosexual individuals.

### What Does This Study Add?

This study demonstrated vital avenues for future research and underscores the significant implications for public policy.

## Authors' Contributions

The writing of this paper was accomplished by NV.

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## Conflicts of Interest Disclosures

None

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I consent with publication.

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