



COVID-19 RESULTS FROM THE FLUX STUDY

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The brief updates Australia's HIV sector on the Flux Study at the Kirby Institute at the University of NSW. Results from these studies provide insight into the impact of COVID-19 ongoing risk of HIV and sexual and mental health among gay and bisexual men (GBM).

A comprehensive understanding of how COVID-19 affected and continues to affect our communities will make us better prepared for future emerging health threats and their potential secondary effects on mental health. The data confirms that GBM are responsible and caring for their community – responding swiftly to COVID-19 and related restrictions with good health-seeking behaviour.

AFAO has developed this brief to summarise four journal articles and their policy implications for the HIV sector.

INTRODUCTION

The Flux Study is a national cohort study on GBM health. Since 2014, the Flux Study has monitored trends in licit and illicit drug use, sexual health, mental health, and engagement with gay community networks over time, through self-completion of online questionnaires. Surveys were completed at six-monthly intervals (2014-2020), weekly (2020-2021), and quarterly (2021-2022).

In 2020, the Flux Study was reoriented to collect weekly data during the COVID-19 pandemic in Australia among GBM. Known as the Flux COVID Diary Study, between 362 and 573 GBM completed weekly online diaries relating to their experience with COVID-19 and its impact on key themes including HIV prevention, mental health, sexual and other risk behaviours, health-seeking practices, and social engagement through multiple stages of the pandemic.

KEY FINDINGS

As a result of the initial COVID-19 and related restrictions during 2020:

- Almost all GBM reported avoiding close physical contact and group events with family and friends. Almost two-thirds had avoided kissing and casual sex during this initial period.
- Nearly half of the participants reported taking pre-exposure prophylaxis (PrEP) before COVID-19 restrictions came into effect. Of these participants, nearly half ceased taking it during the initial restrictions, many of whom only gradually recommenced over the subsequent months. Access to PrEP remained largely unaffected.
- There was a notable initial increase in both depression and anxiety among participants, coinciding with the introduction of COVID-19 related restrictions. Almost one in four participants had reported increased depression, while one in five had increased anxiety during the first periods of these restrictions.
- Participants reported a loss of leisure activities and spaces, and an inability to connect with their communities. The loss of these networks and spaces was felt deeply by some participants, particularly those who were not as connected to gay communities.

Physical Distancing Due to COVID-19 Disrupts Sexual Behaviours Among Gay and Bisexual Men in Australia: Implications for Trends in HIV and Other Sexually Transmissible Infections¹

Physical distancing due to COVID-19 restrictions reduced the opportunity for GBM to engage in sexual and physical intimacy. This article investigated the impact of COVID-19 on sexual behaviour to help determine the potential impact COVID-19 restrictions could have had on HIV and sexually transmissible infections (STIs) in Australia.

1. Hammoud, MA., Maher, L., Holt, M., Degenhardt, L., Jin, F., Murphy, D., Bavinton, B., Grulich, A., Lea, T., Haire, B., Bourne, A., Saxton, P., Vaccher, S., Ellard, J., Mackie, B., Batrouney, C., Bath, N., Prestage, G. (2020). Physical Distancing Due to COVID-19 Disrupts Sexual Behaviors Among Gay and Bisexual Men in Australia: Implications for Trends in HIV and Other Sexually Transmissible Infections. *J Acquir Immune Defic Syndr.* 85(3):309-315. doi: 10.1097/QAI.0000000000002462.



The majority of participants reported they were aware of COVID-19 before the survey was launched, with most becoming concerned about COVID-19 after preliminary restrictions were introduced in March 2020. Of the men who reported sex with partners other than their primary romantic partner before restrictions took effect (68.3% of participants), a small minority (16.4%) continued to do so when restrictions took effect during 2020. An even smaller proportion of participants who reported having had group sex before COVID-19 continued to do so during the initial COVID-19 restrictions. Overall, a strong majority of GBM in Australia dramatically reduced their sexual contact in response to COVID-19 related physical distancing restrictions during 2020.

The small minority of participants who continued having casual sexual encounters during the first rounds of COVID-19 restrictions appear to have reduced the number of partners they were seeing. There were other observable reductions in sexual contact between GBM who lived together, which may be attributed to concerns about the transmission of COVID-19 and decreased sexual desire.

Policy Implication

The data shows that GBM managed the risk of COVID-19 by adhering to physical distancing requirements and practising good health-seeking behaviour to minimise the COVID-19 transmission and to protect their community. At the time, the authors also predicted these restrictions could reduce the number of new HIV and STI diagnoses. Kirby Institute surveillance data from 2020 confirms the lowest number of reported new HIV cases since 1984, but this is also due to reduced testing services throughout multiple stages of the pandemic. With lockdown restrictions removed across the country, it is important that sexually active GBM know their status by resuming regular routine testing.

Substantial Decline in Use of HIV Preexposure Prophylaxis Following Introduction of COVID-19 Physical Distancing Restrictions in Australia: Results From a Prospective Observational Study of Gay and Bisexual Men²

The notable decline in new HIV diagnoses among GBM before the pandemic was strongly attributed to the high uptake of PrEP among HIV-negative GBM. However, the reduction in casual sexual contact due to COVID-19 related restrictions may have obviated the need to continue PrEP for many GBM.

This article investigated the early impact of COVID-19 to determine the impact of PrEP use where historically, uptake has been among the highest globally.

The authors found a substantial reduction in PrEP use among GBM in response to the first rounds of COVID-19 related restrictions in 2020. Before 2020, almost half of the HIV-negative participants in the Flux Study reported using PrEP to alleviate the risk of HIV transmission. During COVID-19 restrictions, the number of participants ceasing to use PrEP was 29%. Among those who continued to use PrEP, the majority reported a notable decline in sexual contact. However, there was also a small proportion of participants who ceased using PrEP but continued seeing casual sexual partners. Access to PrEP was largely unaffected.

Policy Implication

While the decrease in new HIV cases has been partly attributed to a reduction in testing frequency among GBM, the reduction in casual sexual contact could have further contributed to this decline. There have been several lockdowns across the country since these data were collected, which could have caused multiple intermittent disruptions in PrEP use among GBM. As restrictions ease, awareness of PrEP among all those who could benefit from it must be reaching communities. This includes the dissemination of knowledge and large-scale campaigns to ensure GBM at risk of HIV transmission are aware of daily PrEP, on-demand and periodically. While PrEP use has largely returned to pre-pandemic levels, a better understanding of the reasons some GBM have not resumed taking PrEP, and the varying methods that some men choose to recommence PrEP, will make the HIV sector better prepared for emerging future health threats. The Flux Study continues gathering data to better understand the reasons some GBM have intermittently adhered to PrEP use.

Increase in Depression and Anxiety Among Australian Gay and Bisexual Men During COVID-19 Restrictions: Findings from a Prospective Online Cohort Study³

This article examined changes in the mental health of Australian GBM due to COVID-19 related restrictions in March and April 2020. It also aimed to identify the factors associated with increased symptoms of depression and anxiety in a population that already generally experiences higher levels of mental distress.

2. Hammoud, MA., Grulich, A., Holt, M., Maher, L., Murphy, D., Jin, F., Bavinton, B., Haire, B., Ellard, J., Vaccher, S., Saxton, P., Bourne, A., Degenhardt, L., Storer, D., Prestage, G. (2021) Substantial Decline in Use of HIV Preexposure Prophylaxis Following Introduction of COVID-19 Physical Distancing Restrictions in Australia: Results From a Prospective Observational Study of Gay and Bisexual Men. *J Acquir Immune Defic Syndr.* 86(1):22-30. doi: 10.1097/QAI.0000000000002514.
3. Bavinton, BR., Chan, C., Hammoud, MA., Maher, L., Haire, B., Degenhardt, L., Holt, M., Lea, T., Bath, N., Storer, D., Jin, F., Grulich, AE., Bourne, A., Saxton, P., Prestage, GP. (2022). Increase in Depression and Anxiety Among Australian Gay and Bisexual Men During COVID-19 Restrictions: Findings from a Prospective Online Cohort Study. *Arch Sex Behav.* 51(1):355-364. doi: 10.1007/s10508-021-02276-2.



There was a notable increase in both depression and anxiety among participants, coinciding with the introduction of COVID-19 related restrictions in 2020. Almost one in four participants had reported increased depression, while one in five had increased anxiety. The increase in depression and anxiety was attributed to several factors including concerns about job security, reduction in social and sexual connections or opportunities, and concerns relating to COVID-19 acquisition and transmission and the impact on the health system.

Policy Implication

While increased depression and anxiety were not limited to GBM, access to affirming and culturally appropriate support services were likely limited throughout multiple stages of the pandemic. These effects could have been heightened for socially engaged GBM, GBM who live alone, or those who are more reliant on the gay community for support services. These findings support increased accessibility of appropriate services for GBM whose mental health was worsened due to the pandemic or for GBM finding it difficult to readjust to life after COVID-19 related restrictions have been eased. Although this cohort included men living with HIV, findings from [HIV Futures 10](#), the largest survey of people with HIV in Australia, will be of particular importance to the sector to better understand how COVID-19 has affected the health and wellbeing of people with HIV.

Qualitative Findings on the Impact of COVID-19 Restrictions on Australian Gay and Bisexual Men: Community Belonging and Mental Well-being⁴

Many GBM have a web of social, intimate, and sexual networks that reflect socio-cultural norms within the gay community. These networks are crucial for GBM to express themselves sexually, but they also act to facilitate the circulation of important health information. Early in the pandemic, COVID-19 restrictions were identified as a threat to the capability of GBM to connect with others through these networks. This paper reported on qualitative free-text responses on how restrictions incited feelings of isolation, reduced sense of belonging, and decreased mental well-being.

While an increase in depression and anxiety due to COVID-19 was reflected in the wider population, this paper identified several themes specific to GBM health and wellbeing that were impacted due to restrictions. Many participants reported a loss of leisure activities and spaces, and not being

able to connect with their communities. The loss of these networks and spaces was felt deeply by some participants, particularly those who lived in regional areas or whose family members were not accepting of their sexualities. In this sense, poorer health outcomes could have been exacerbated in GBM who were unable to maintain social connections due to COVID-19 and, in turn, connection to health services. Likewise, there appear to be some disparities between GBM who were able to access resources in helping them navigate COVID-19 restrictions. These participants, mainly white and middle class, spoke about their relative privilege to others in the community of lower socioeconomic status. This is supported by other research suggesting COVID-19 intensified social and health divides for people with multi-layered disadvantages.

Policy Implication

Even though COVID-19 restrictions continue to ease, not all services and spaces for GBM are returning to full capacity. Continued support for these services is needed, particularly GBM who face multiple disadvantages. In the same way gay and bisexual community spaces became a cornerstone at the onset of the HIV epidemic, these spaces are crucial for the delivery of health promotion as we continue learning about the long-term health impacts of COVID-19 among the communities we work with. Likewise, fully resourcing these services in collaboration with the government will ensure we are best positioned to address future health threats as they emerge. Increased and permanent support for telehealth was welcomed by members of our community to expand the reach of appropriate primary health care. As more services embrace virtual or hybrid delivery models, community-controlled organisations must be engaged to ensure they can benefit, and be accessible to, the entire population through MBS billing.

4. Philpot, SP., Holt, M., Murphy, D., Haire, B., Prestage, G., Maher, L., Bavinton, BR, Hammoud, MA, Jin, F., Bourne, A. (2021) Qualitative Findings on the Impact of COVID-19 Restrictions on Australian Gay and Bisexual Men: Community Belonging and Mental Well-being. *Qual Health Res*. 31(13):2414-2425. doi: 10.1177/10497323211039204.