Primary health care project on HIV and depression

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Main conclusions

- Homosexually active men are at high risk of major depression. The high rates of major depression found in our survey among both HIV-positive and HIV-negative gay men are likely to be related to the marginalisation and discrimination experienced by gay men, described in many of our qualitative interviews as ‘not fitting in’.

- HIV-positive men have the highest rates of major depression in our survey. However, HIV-status is not independently associated with major depression after controlling for key social, psychological and behavioural factors. Rather, socio-economic hardship, interpersonal isolation and personal withdrawal are most significantly and independently associated with major depression in this population of gay men.

- GPs working in high HIV-caseload general practice services in Australia have a heightened awareness for detecting depression in gay men – both HIV negative and HIV positive – which is demonstrated in a high level of concordance between GP assessments and patient screening for depression.

- While many GPs are actively involved in the management of depression in their gay male patients, the capacity of GPs to provide ideal levels of clinical support is compromised by an increasing number of complicating factors affecting this essential component of the health workforce, such as increasing responsibilities and time pressures, intensive continuing medical education requirements, and co-morbid drug use in their patients.

Study description

Commencing in April 2006, this three-year project adopted a comprehensive and multi-method approach to investigate the prevalence, nature, clinical management and self-management of depression among men, particularly homosexually active men, attending high HIV-caseload general practice clinics. The study aimed to: 1) describe, measure and compare depression among HIV-positive and HIV-negative gay men; 2) describe the ways in which depression is managed by general practitioners (GPs) and gay men themselves; and 3) develop the research capacity and skills of GPs to assess and manage depression among gay men. Extensive data were collected through interviews and surveys involving over 30 general practitioners and more than 700 men seeking services from seven high HIV-caseload general practices in Sydney, Adelaide and a rural-coastal town in New South Wales.

GP interviews

Semi-structured interviews were conducted with sixteen s100 prescriber GPs (14 male and two female) between August and December 2006. The GPs in the five urban practice sites each had a high caseload of gay and other homosexually active men, including men living with HIV. The GPs in the two rural practice sites provided the majority of care to the small number of gay men and HIV-positive men living in that area. The sample represents a significant proportion of the GP workforce currently providing care to gay men and HIV-positive men living in that area. The sample represents a significant proportion of the GP workforce currently providing care to gay men and HIV-positive men in the three localities covered by this study. Interviews were conducted in an open-ended, non-judgmental and conversational style, lasting around one hour each. Participants were asked to focus on their clinical experiences in the diagnosis and management of depression in gay men with a specific focus on HIV positive gay men. The number of years each GP had been working in HIV medicine ranged from two to 24.
Patient survey and GP clinical assessments

Patient survey

736 men completed the patient survey while visiting the participating general practices during March and June 2007. As expected of a population of men attending urban general practices treating high numbers of people with HIV, over three-quarters of the men self-identified as gay or homosexual and over a third reported being HIV-positive. More than 90% of the HIV-positive men identified as homosexual. The average age of participants was 46 with the youngest being 20 years old and the oldest 88 years old. Over a third had completed university education and close to two-thirds reported a weekly income of A$600 or more before tax. Of the 736 men, around 40% were in a same-sex relationship and another 12% in an opposite-sex relationship at the time of the survey. Overall, the use of alcohol and other drugs for recreational purposes was high: in the 12 months prior to the survey, over 40% reported having at least six standard drinks in one occasion on a monthly basis or more frequently; and in the six months prior to the survey, about 70% reported having used a recreational drug other than alcohol or tobacco.

GP clinical assessments

At the same visit when each patient was surveyed, their treating GP also provided a clinical assessment and treatment history of depression. We collected a total of 743 clinical assessments of depression and obtained matching data for 721 men (all identifying information was removed after matching). Most of these 721 men were recruited from the four urban general practices with over three-quarters living in Sydney and most of the remainder in Adelaide. In addition, data on history of clinical assessment, diagnosis and treatment of depression, as well as HIV management history in the six months prior to the patient survey, were extracted from clinical notes for a selected sub-sample of the men. The men were selected if they were experiencing a current episode of depression according to the Patient Health Questionnaire (PHQ-9) self-screening tool in the patient survey, or, if they had reported that they were either depressed, on anti-depressant medication, or HIV-positive at the time of the patient survey. Data extraction was only performed if both the men and their treating GP had provided consent. 411 patient clinical data extraction forms were obtained.

Patient interviews

Semi-structured interviews were conducted with 40 gay men who measured above 4 on the PHQ-9 on the patient survey and also self-identified as currently experiencing depression. Between February and May 2008, 26 men were interviewed in Sydney and 14 in Adelaide, providing detailed accounts of the history, treatment and self-management of their depression as well as issues related to HIV, gender and sexuality. Of the 40 men, 17 were HIV positive with the majority diagnosed with HIV since 2000. Most were born in Australia and had an Anglo-Celtic background. Over three-quarters self-identified as gay or homosexual and about half were aged in their forties, although ages ranged from 20 to 73. At the time of the interview, around half of were living by themselves and three quarters described themselves as ‘single’. Most were employed full or part-time with a wide range of incomes, however, many received social welfare payments or had very limited incomes (eg. 13 received less than $600 per week).

Key findings

GP interviews

Diagnosing depression: The GPs confirmed that they made active inquiries about depression with all of their patients, building a diagnosis via a ‘constellation of symptoms’. However, many GPs resisted the use of formal tools, preferring to rely on direct questioning and clinical judgement. The long term clinical relationship GPs develop with patients means they have the capacity to proactively inquire about depression, particularly with HIV positive patients whom they see frequently. Several GPs commented that they have developed on-going, long-term relationships with their gay male patients, which means they are well placed to identify any changes over time.

Managing and treating depression: The GPs took a collaborative approach with patients, encouraging an appreciation for both pharmacological and psychotherapeutic modalities. Sexual dysfunction as a side effect of antidepressants was reported to be of great concern to gay men. Many felt confident in providing supportive counselling...
but would refer to psychologists for more intensive counselling and to psychiatrists for assistance with diagnosis and drug therapies. Urban GPs appreciated access to free or subsidised counselling or psychology sessions for HIV positive and gay men.

Well, I guess, the one thing I always say is that it’s a multifaceted approach, you know, and medication is part of it. Counselling is not necessarily all the answer and antidepressants is not necessarily all the answer ... But in combination we’ll get there over time. (Sydney GP)

**HIV and depression**: The GPs had a ‘heightened awareness’ for depression in HIV positive patients, identifying HIV diagnosis and key events in HIV treatment as particular points of vulnerability. Loss was seen as a recurring theme in the lives of positive patients, while some GPs perceived differences between those diagnosed before and after the introduction of effective HIV treatments. GPs were concerned about the ageing of positive people and described social isolation as a problem for those with little support from family and few friends.

I may ask a little more often with positive patients, directly as part of their review, than I would with my ordinary patients. And I guess that partly because I often know positive patients much better. They’ve been coming for years and they come regularly. (Rural-Coastal GP)

**Gender, sexuality and depression**: The GPs suggested that men in general are socialised to suppress their emotions but gay men may be more open about their feelings. However, gay men are also ‘still men’ and may see depression as failure or weakness. The GPs believed that men downplay their symptoms or present late, although they also suggested that gay men may be more willing to seek help and be more amenable to treatment than heterosexual men. GPs felt that ageing can have a significant impact on gay men’s emotional health, as do work stress, unemployment, assuming a gay identity after marriage and social isolation.

A major hurdle is isolation and the ability of men to share how they’re feeling with others, and share their diagnosis. I think men do that less well. And a lot of the people I see are quite isolated. They might only have two or three close friends, if that. (Adelaide GP)

**Drug use and depression**: The GPs suggested that recreational drugs can complicate the diagnosis and treatment of depression by affecting mood, masking symptoms and impacting on medication adherence. Drug use was considered a mostly inner city problem and the Sydney GPs talked about crystal meth as a new and escalating issue. The GPs tried to remain non-judgemental about drug use so that their gay male patients would be honest and upfront about their use. However, this can make it difficult for GPs to know when to move towards intervention if use appears to be becoming problematic.

I have actually seen stable people who I thought were quite well controlled on their, either their cognitive behavioural therapy or their antidepressant medication, talk to me about suicidal intent coming down off their crystal. (Sydney GP)

**Reflections on practice**: The GPs felt that they were being asked to do more with their limited time in both HIV care and depression management. They were supportive of the free and subsidised services available but felt there were generally not enough support services in relation to mental health. They stressed the importance of the availability of appropriate referral clinicians since many specialists are not skilled in dealing with sexuality or HIV issues. The GPs kept up to date with HIV and depression management in similar ways but felt depression education had to be more self-driven. Regional GPs found it more difficult to keep up to date in HIV medicine, due to their lower caseloads and distance from educational events.

I think in general practice we are encountering an increasing number of people suffering from depression and psychological problems. And our access to psychiatrists is limited and we’re being asked to do more and more in general practice. So it’s a problem, generally. (Adelaide GP)

**Patient survey & GP clinical assessments**

How was major depression measured in our study?

In the patient survey, we used a short self-screening tool, the PHQ-9. Patients were also invited to self-report symptoms including lack of interest, bad mood or sadness, change of appetite, problems with sleep, fatigue, feeling restless or significantly slowing down, reduced concentration, low esteem or sense of guilt, and suicidal thoughts in the two weeks prior to the survey. Based on the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), we classified men into whether they were suffering from major depression at the time of the patient survey according to the range and frequency of the symptoms. In addition, general practitioners were asked to provide the likelihood of a clinical depression diagnosis for each participating patient at the time of the patient survey.

Was the rate of major depression higher among gay men than men in the general population?

Yes. Among men accessing urban general practice services, our survey confirms that overall, gay self-identified men are more likely to suffer from major depression than men in the general population (see NZ and US rates in Figure 1). Nearly one in four gay men who attended the four high HIV-caseload general practices in Sydney and Adelaide and completed the depression screening questionnaire had major depression at the time of the survey. Over 30% of HIV-positive gay men suffered from major depression, significantly higher than that of HIV-negative gay men (about 20%).
How consistent was the general practitioners’ clinical diagnosis of depression with the male patients’ self-report in high HIV-caseload general practices?

Our study shows that there is moderate concordance (over 60%) between clinical diagnosis by a GP and a patient self-screening questionnaire in detecting major depression. This is consistent with the findings of a previous study on people living with HIV in Melbourne (Komiti et al., 2003). HIV s100 GP prescribers in Australia are considered to be well-attuned to diagnosing depression. Most of these GPs screen their patients routinely for co-morbidities such as depression, particularly those with HIV. Our study further demonstrates that a majority of male patients are capable of and willing to acknowledge and disclose depression.

How had the men with depression been treated in high HIV-caseload general practices?

Among the men who ever had a history of depression or were suffering from depression at the time of the survey, we found that over 70% had been prescribed some drug treatment and a similar proportion had been assessed or counselled by their GPs in the six months prior to the survey. We found that a considerable proportion (over 40%) had been treated with both prescription drugs and GP assessment or counselling.

What were the key social factors associated with major depression?

Among the homosexually active, gay self-identified men attending high HIV-caseload, urban general practices in our study, the key social and behavioural factors independently associated with a current episode of major depression, based on the PHQ-9 self-screening tool, included the following: younger age, lower income, recent major adverse life events, adopting denial and isolation as ways to cope with stress, less social support, less gay community involvement, and recent sexual difficulties. HIV-status was not independently associated with major depression, and this finding is consistent with a previous finding from a similar study in Adelaide (Rogers et al., 2003). Our findings highlight the important link between socio-economic hardship, interpersonal isolation, and personal withdrawal with major depression for gay men, regardless of HIV-status. It provides further evidence of health inequity affecting gay men in Australia. Health promotion approaches focusing on reducing homophobia and discrimination, as well as community-engaged primary health care responses, may mitigate this sort of health inequity.

How did depression interact with sexual function?

In this study, we also investigated gay men’s self-report of a number of sexual problems. Erectile dysfunction, lack of sexual desire, and possibly anxiety over sexual performance appear to be the most common concerns among gay men when it comes to sexual function. The findings indicate that the men who reported three or more recent sexual problems were likely to suffer from major depression at the same time (shown in the figure below). About 48% of the HIV-positive gay men in the study reported three or more recent sexual problems, compared with 35% of the HIV-negative gay men. This finding underscores the complex interaction between depression, sexual dysfunction and HIV-status.

References


Concepts and beliefs: Gay men who have experienced depression articulated a wide variety of concepts and beliefs about depression, including how depression affects the self and others, as well as theories about the relationship between gender and depression and sexuality and depression. Common ways of explaining the experience of depression included: hopelessness, or an absence of a sense of future; existential, arising from sense of dislocation or lack of purpose; cyclical and situational, stemming from events or factors outside of control; caused by medication (eg. HIV or epilepsy treatments); or continuous, a normal state of being that is unable to be ameliorated. For many men, depression was seen as something that had recurred off and on throughout their lives since their childhood or teenage years, although some described only a single or temporary occurrence of depression.

For me it manifests as a lack of motivation. Feeling of helplessness, hopelessness, doom, uselessness. And it’s, could be symbolised as a spiral. That one thought leads to another. And it tends to be dwelling on the past and the future, rather than the present, what’s happening now. Things, bad things have happened in the past, bad things will happen in the future. The glass is half empty. (Anthony 43, HIV negative)

Precipitating factors: Multiple factors were described by these men as significant in leading to or creating the conditions for their vulnerability to depression. These included genetic predisposition, conflict with family or within relationships, stress and trauma, illness and disability, work and money, and the long term impact of drug and alcohol use. Of particular interest is a series of stories that can be grouped under the heading of ‘not fitting in’, that is, feeling outside or disconnected from: particular aspects of heterosexual society; the various social networks in which gay men participate; several of the key social norms and expectations typical of local or foreign culture.

The next experience was moving to London, coming out, first sex, all that sort of thing. And trying really hard to be gay. Trying to fit in to being a part of that. And realising that, you know, I was depressed because I was gay. Now that I’m out, the depression should disappear. And it didn’t. And suddenly the issues that I had then were now replaced by a new set of issues of trying to fit in with a new culture, a new lifestyle, if you like. (Ian 40, HIV positive)

Depression management: Many of the experiences these men described in relation to the management of their depression focused on receiving a clinical diagnosis and engaging with GPs and specialists as part of a multidisciplinary approach to depression care. While not a major aspect of their stories, self-management strategies were also identified, including behavioural approaches such as structuring everyday life and cognitive approaches such as thinking positive. For some men, pharmacotherapies played a significant role in their response to depression, while others were reluctant to try them for various reasons. Similarly, some have tried psychotherapeutic interventions or ‘talking’ therapies, expressing a wide range of views regarding their perceived usefulness.

...and at one stage I was seeing him every day. An hour a day. Or fifty minutes a day … He sort of said, “Look, you need more intense care.” Because I had no one else in the world to talk to. (Alan 63, HIV negative)

...You know, I don’t need to hear my own voice. I can do that in my head walking down the street. I don’t need somebody to sit there and listen to it and go, “Yes, yes, no, no. Thank you.” (Brett 34, HIV positive)

Contextual issues: Several issues were identified by participants as closely associated with the experience of depression including: mental and physical co-morbidities (including sexual dysfunction); the support and understanding expressed by friends, family and acquaintances; community awareness, resources and information for both people with depression and their loved ones; and the long term impact of suicidal ideation or attempts. Each of these issues directly shapes the context and experience of depression for these men.

This friend, I believed with all my heart, was my best friend. He was a severely depressive person and constantly calling me and needing me. And rah-rah-rah. And one day I turned the cards and I needed him, and he just didn’t come to the party. And if I just, I know it’s so cut and dry, but I basically went, “You know what? I’m no longer getting the return I need on this investment. It’s time to sell it.” (Jake 32, HIV positive)

Everyday life: Many stories related to the more everyday aspects of life for these men. The most consistent of these described experiences of family, work, study and money, health and fitness, alcohol and other drugs, religion and spirituality and relationships with GPs. Another significant theme throughout these interviews was the importance of place, including what it means to make a home. Diverse stories emerged of life as a gay man in Australia and overseas, in the country and the city, and in either Sydney or Adelaide.

Well, I think Adelaide would be more that you’ve got to watch that somebody doesn’t know your business. Whereas if you’re in Sydney, say, I mean you could become lost in the crowd. But in Adelaide you may not be lost in the crowd. As somebody somewhere may know, perhaps, what you’re hiding. (Howard 72, HIV positive)

...There’s a real comfort, there’s a real comfort in being in Sydney ... I mean I’m country bred … [And that’s] a very blokey kind of world. Coming into Sydney as a gay man now and okay with being a gay guy, I like being around other people who are gay. (Brad 40, HIV positive)
Gay life: Many of these interviews also focused on aspects of life as a gay man, including some very diverse and poignant experiences of growing up and coming out. Although the older men tended to have had more problems relating to coming out, the younger men still commonly describe quite traumatic memories of coming to terms with their gay identity. More recent stories often focused on relationships and sex, as well as the challenges of engaging with gay culture, including participation in gay ‘community’, alcohol and other drug use, and negotiating appearance. Many participants described the experience of getting older as a gay man.

I’ve been saying to this friend I’ve known for twenty odd years, “There’s one thing I am going to regret in life. And that is I never had the opportunity to marry a gay man.” And he says, “You never know. Life’s not over yet.” And I said, “No. Time is running short.” (Gerald 61, HIV negative)

Oh God, I am not going to die old. There is no way in hell I will end up, a) because I’m gay, I don’t have family. I’ve got a sister and I’ve got two lovely nieces. For fuck’s sake, they’re not wiping my ass! … [And] There’s no way in hell I would go into a rest home. (Gabriel 44, HIV negative)

Positive life: For the HIV positive men who took part in these interviews, several key themes stood out in their stories of positive life, including: seroconversion and diagnosis; disclosure and discrimination; health, treatments and services; the mental and emotional impact of HIV; sex and relationships; work and money; support and community. Negative men also talked about HIV, describing the impact and role that HIV has played in their lives, which ranged from very significant to very minimal, particularly for the younger men.

And then throw HIV into this equation, where people still don’t deal well with it. Or people who’ve had it for a long time haven’t, you know, are still adjusting to what it means and all the noise around it. All the confusion and talk, and one person thinks this, one person doesn’t think this. One person wants you to fuck them dead without anything and the other person is freaking out because they think you have everything under the sun. And it’s like, “What, who do you listen to? And when do you, how do you find the stillness to just sit in your identity and move on from there?” It’s just, to me, a cocktail for craziness at the moment. (Lucian 44, HIV positive)

The relationship between HIV and depression

Both the qualitative and quantitative components of this study provide further evidence of the complexity of the associations and linkages between HIV and depression in gay men:

- The patient study validated previous findings that men with HIV are highly vulnerable to depression. When grouped by patients’ self-reported HIV status, the two DSM-IV-based measures indicated that the HIV-positive men had the highest rates of major depression, at over 30% (compared to 20% for non-HIV-positive gay men).

- HIV-status, however, was not independently associated with major depression after controlling for key social, psychological and behavioural factors. The high rates of major depression among both HIV-positive and HIV-negative gay men are likely to be related to the marginalisation and discrimination experienced by gay men. Socio-economic hardship, interpersonal isolation and personal withdrawal were significantly and independently associated with major depression in this population of gay men.

- The GPs interviewed for this study were very much in touch with the effects of the HIV epidemic on the lives of individuals and on the gay community as a whole. GPs had a keen sense of the added burden that HIV could add to the many layers of exclusion already experienced by gay men.

- GPs reported that many positive gay men had experienced multiple losses which increased their risk of or the severity of their depression, including loss of relationships and social connectedness, career and earning capacity, or their sense of future and longevity. Key events such as a positive diagnosis, the need to start antiretroviral therapy, treatment failure, an AIDS-defining illness, or a friend’s AIDS-defining illness were identified by GPs as additional triggers that increased their vigilance and awareness of depression. This was especially the case for men who have been living with HIV for a long time.

- Central to the management of depression in HIV positive gay men in general practice settings is maintaining a high frequency of contact with GPs, making use of the specialist multidisciplinary teams who provide additional support services for positive men, and finding ways to ameliorate social isolation. However, having the time and capacity to do this effectively may be particularly difficult for GPs with high caseloads and challenging continuing medical education requirements. GPs based in regional areas can find it particularly difficult to manage their HIV positive clients because of the relative lack of services and support outside of urban areas.

- Crystal meth use by HIV positive gay men was identified by several GPs as creating additional challenges for the clinical management of HIV alongside comorbid depression. Particular issues facing the health workforce included GPs feeling unprepared to cope with problematic levels of crystal meth use in their positive patients.

- A higher proportion of the HIV-positive gay men (48.4%) reported multiple sexual problems than the HIV-negative men (35.1%). Factors independently associated with multiple sexual problems among the HIV-positive gay men were adoption of avoidant strategies to cope with daily life stress, sexual risk-taking in casual encounters, and the use of antidepressants.
**Publications**

**Peer-reviewed journal articles**

The main findings of this study have been presented in article format to provide a detailed picture of the complex interactions between depression, sexuality and HIV infection.

Articles will be continue to be published from this study, and will be made available at: http://nchsr.arts.unsw.edu.au/


**Conference abstracts and posters**


In addition to the above research conferences, members of the project team have also been presenting study findings to community and industry forums not listed here.

**Other outcomes and benefits**

One of the major outcomes of the study is the development of a module for the self-management of depression for gay men hosted on the ClimateGP website. The Clinical Research Unit for Anxiety and Depression (CRUfAD), based at St Vincent’s Hospital in the School of Psychiatry at UNSW, maintains this website for people with anxiety and depression, and the findings of this study were used to inform the development of a new self help module for gay men with depression.

The new module for gay men will be available from March 2009. It comprises six lessons about overcoming depression, and a fact sheet on managing sexual side effects. While no results as to its efficacy are available, the companion module for heterosexual people has been shown in two trials to produce results similar to face to face therapy. GPs can arrange access to the module at www.climategp.tv CRUfAD charges $100 per prescription pad which allows 20 users access to the site, ie. $5 per person.
In addition, the key study findings will be used to inform the development or revision of case studies and other materials used in Australasian Society for HIV Medicine (ASHM) education and training programs for s100 GP prescribers, to ensure that GPs are aware of these most recent data on the identification and management of depression and associated psychological issues amongst gay men, including people living with HIV, in Australia.

Additional benefits of the study include:

1) improved interdisciplinary collaboration. The research team and the expert advisory committee of the project consisted of social researchers, general practitioners, primary care researchers, psychologists, psychiatrists and a number of organisational representatives from study sites across the two states. Through regular contact and expert committee meetings, we have increased our collaborative research capacity and strengthened our team track records. Members of the research team have received further funding from the National Health and Medical Research Council to assess the primary care health professional workforce requirements to meet the future needs of people with HIV in Australia;

2) enhanced capacity of community organisations to advise on and participate in social research. A representative from our partner organisation, the National Association of People Living with HIV/AIDS (NAPWA), completed a six-week internship with the National Centre in HIV Social Research and presented the findings at the Everyday Lives conference in March 2008; and

3) strengthened links between s100 GP prescribers and ASHM. GP prescribers who participated in our study were awarded HIV CME points by ASHM, and we reported the study findings at the annual ASHM conferences to reach a broader audience working in this field.

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