HIV & Wellness Workshop #16

23RD JUNE 2018

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IRIS EDUCATION
## PROGRAM

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<tr>
<th>Time</th>
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<tr>
<td>10.30 am</td>
<td>Registration &amp; Coffee</td>
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<tr>
<td>11.00am</td>
<td>Welcome &amp; workshop outline</td>
<td>Dr Steve Lambert Iris Education</td>
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<td>11.05am</td>
<td>PLHIV quality of life LPQ study</td>
<td>Mr Bernard Gardiner School of Public Health University of Queensland</td>
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<tr>
<td>12.00am</td>
<td>HIV stigma and mental health</td>
<td>Mr Chris Howard Queensland Positive People</td>
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<tr>
<td>12.45pm</td>
<td>Lunch &amp; Networking</td>
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<tr>
<td>1.30pm</td>
<td>Tobacco harm reduction &amp; HIV</td>
<td>Associate Professor Coral Gartner School of Public Health University of Queensland</td>
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<tr>
<td>2.00pm</td>
<td>PrEP: We know it works; where to from here</td>
<td>Mr David Youds Gladstone Road Medical Centre</td>
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<td>2.45pm</td>
<td>Contemporary ARV treatment</td>
<td>Dr Andrew Redmond Royal Brisbane Women’s Hospital</td>
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<td>3.30pm</td>
<td>Afternoon Tea</td>
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<td>3.45pm</td>
<td>Transgender people - HIV prevention treatment and care</td>
<td>Mr Dylan Barrett Queensland Aids Council</td>
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<td>4.15pm</td>
<td>Evaluation</td>
<td>Dr Steve Lambert Iris Education</td>
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<td>4.20pm</td>
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HIV & Wellness Workshop #16
Saturday 23<sup>rd</sup> June 2018

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This workshop has been made possible by an unrestricted grant from ViiV Healthcare

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## HIV & Wellness Workshop #16
Saturday 23rd June 2018

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PLHIV quality of life LPQ study

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Mr Bernard Gardiner
School of Public Health University of Queensland

Resources
Grit and stigma:
Gay men ageing with HIV in regional QLD
LIVING AND AGING WITH HIV: HOW WELL ARE WE DOING ON THE 4TH 90? FINDINGS FROM THE LPQ STUDY

Bernard Gardiner (with Dr Lisa Fitzgerald)
School of Public Health
University of Queensland

HIV as a chronic condition: The continuum of HIV services

- WHO: Attention to NCDs- mental health, pain management and pall care- and recognise stigma and discrimination as detrimental to wellbeing of PHIV
- Need for holistic person centred approach recognising NCDs and SDH – need a 4th 90 targets for quality of life for PLHIV
HIV and Aging

- ‘Greying’ of PLHIV = modelling estimates PLHIV in Australia over 55 years to 44% in 2020 (Jansson et al. 2012)
- Complex physiological and psychosocial issues
- Accelerated aging?
  - Premature age related comorbidities
- Stigma/discrimination/ Social isolation/Fragile support systems
- Social determinants of health (Catlan et al. 2017)
HIV and Aging

- “double jeopardy of ageism and HIV stigma = social isolation (Emlet et al 2010;)

- Differences between HIV generations in experiences and needs (Owen et al. 2012; Emlet et al 2017); importance of recognising life course perspective (Emlet et al. 2017)


Aging successfully with HIV

- individual characteristics/interpersonal relationships/environmental factors

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“I don’t know what the future holds”
Living Positive in Queensland: a qualitative longitudinal study of aging, place and social isolation (LPQ study)

Lisa Fitzgerald, Kasia Boleswicz, Bernard Gardiner, Chris Howard, Steve Lambert, Shaun Stanton, Andrew Vallely, Kate Hannan, Allyson Mutch, Andrea Whittaker

School of Public Health, The University of Queensland, Australia

The LPQ (2011-2017) study examined:

- Experience of aging
- Living in rural/regional communities
- Social networks and social support/social isolation
- Relationships, sexuality and HIV prevention issues
- Health practices
- Living with comorbidities
- Health care service experience
- Lived experience within a changing policy context (increased biomedicalisation of HIV prevention, funding cuts to psychosocial services)
LPQ study participants

- Diverse cohort of 72 participants interviewed round 1 (5 participants have died)
  - 69 at round 3
  - 58 Men, 11 Women
  - Age range 34 – 75 (48 over 45)
  - Most (55) living on a govt pension
  - Majority renting – or in public housing
  - Most ‘single’
  - Living across Qld in rural, regional and outer urban area

Example of our cohort: Tom

- Late 60s
- PLHIV for over 30 years, life partner died of AIDS
- Social housing, govt pension, lives alone
- Multiple and increasingly complex co-morbidities over the 3 years of interviews

I go down in a bit of depression but I’m up now, only grieve for one day at a time and back on the boat…. I have a career, it’s my health I work at not having negative thoughts... HIV aspect does not bother me at all in comparison with that.
Preliminary findings

• Good HIV citizens – adherent to ARTs, resilient, self care
• Diversity of participants/intersectionality of identities BUT/Resiliency in tension with extreme suffering
• The lived experiences of PLHIV complex with multiple co-morbidities, disability, (past) trauma, limited resources, social stigma= HIV with its well funded clinical care system is often 'the least of worries'  
  • the accumulation of health issues interconnected with the social determinants of health (Recursive cascade)
• Shadow effect/cumulative effect of intersectionality of issues- HIV/sexual identity/ethnicity/gender etc
• Social isolation and loneliness, limited social and interpersonal resources and fragile social networks- reliance of formal networks for social support
Preliminary findings

- **Mental health**, especially depression/anxiety. “Building resilience” and medication the dominant strategies to manage stigma, but how to tackle the entrenched social/self stigma associated with HIV and marginalised identities.

- While some participants are thriving (good social networks/well resourced), a significant proportion are not and are feeling *abandoned due to cuts in support services and ‘loss of community’*,

- There is little knowledge of or optimism the **aged care sector** is ready to respond to the needs of PLHIV over the next decade, and a number of participants express a readiness to end their life rather than endure suffering, or not to be a burden on health system.

Changing discourses of what it is to be an HIV Citizen- focus on biomedicalisation= invisibility?

Now it’s about taking pills. And worse than that, it’s about taking pills to keep the negative population negative. You know, there’s a high degree of altruism required. We’ve been forced to be altruist – no, not forced, we’ve been pressured to be altruistic about it. I’m being pressured into this model and I don’t fit well in there at all.

- ...people don’t see is the true lived experience of years of poverty, years of mental health issues, drug dependency, back like bone structure stuff, deformities in, either strokes or heart attacks or lung issues, cancers; the myriad of cancers that can now be you’re at risk of, dealing with toxicity, they’re not discussing that. And the moment you bring up that conversation you’re closed down, you’re shut down, you can’t do that. Your voice as an older long-term is not acceptable to talk about that lived horrific experience
Biomedicalisation at expense of social determinants of health and community

• One of the things that I think is happening in Queensland with this very medicalised view is that, what for me as a much broader and nuanced view of the way I experience my HIV is no longer being listened to, that it’s being separated from a gay agenda.

• All this biomedical stuff is fabulous for us. It’s making us live longer and it’s preventing transmissions. It’s fabulous. But for those people who are living with HIV, it’s something that isn’t really doing them any real good for their mental health, for their social lives, for their lives in general. So yes, I love the biomedical stuff but it should be hand-in-hand with social support as well.

Conclusions- where are we at with the 4th 90?

Normalising HIV biomedicalisation ... HIV is different now ...

• We may reach “the end of AIDS” but are people living long term with HIV becoming increasingly invisible?
• Outside the clinical setting, precarity, disadvantage, uncertainty, stress, anxiety, depression, increasing comorbidities
• Recursive cascades of chronic illness/social determinants of health - where are the circuit breakers to this cascade?
• Is biomedicalisation and resultant policy/service provision funding tagged to 90 90 90 reinforcing disadvantage?
• How can we facilitate ‘successful aging’ in this current environment?- we need the 4th 90! And what about the 10%?
• Individualisation – what is the role of community?
Acknowledgements

• Participants of LPQ Study
• LPQ research team
• QPP
• QAHC
• Positive Directions
• Queensland Health
• Australian Research Council
Grit and stigma: Gay men ageing with HIV in regional Queensland

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Abstract
The ageing of the first generation of HIV long-term survivors brings into sharp focus the suffering that activism and the clinical management of HIV has not solved, particularly in regional areas. Although HIV is now usually a manageable chronic condition, it also involves navigating unrelenting social stigma. Quality of life beyond viral suppression is not assured. Despite a history of affected communities demanding equal partnership with health-care providers, an increasingly biomedicalized orientation risks neglecting the psycho-social needs of those with a history of trauma, depression and other co-morbidities often more difficult to manage than HIV itself.

Keywords
ageing, HIV, long-term survivors, quality of life, rural

The children’s rhyme is wrong. Just like sticks and stones, words can harm us.

Michael Callen (1990: 52)

Words have always been important in the HIV response. From the early 1980s activists like Callen challenged the defeatism of the label ‘victims’ and insisted on the empowering designation ‘people living with AIDS’, then ‘living with HIV and AIDS’. The advent of effective treatment from 1996, saw patients ‘seemingly rising from the dead’, and the discourse shifted firmly from ‘AIDS as a death sentence’ to ‘HIV as a chronic manageable condition’ (Siegel and Lekas, 2002: S69). Those accessing effective treatment now rarely meet the criteria to be diagnosed with AIDS, and so the acronym PLHIV (people living with HIV) is standard. UNAIDS, the United Nations HIV agency, and others now promote ‘the end of AIDS’ but this rhetoric, to celebrate successes and mobilize political will and resources, risks overshadowing the real-life experiences of those living on with HIV.
Many of the baby boomer generation of Australian gay men did not live long enough to age, and HIV has strongly impacted survivors of the epidemic, despite the country’s reputation for one of the most pro-active responses to HIV in the world, near to universal health-care access and a social security safety net. Most PLHIV now survive for decades and are grateful to still be alive well beyond what one participant in this study wryly referred to as his ‘dead by date’. However, the success of treatment and conceptualizing HIV as a chronic illness has given rise to the impression on the periphery of the epidemic that treatment has solved everything.

Historical context highlights the potential for this generation to have experienced trauma (Moore, 2001). The American psychologist Halkitis (2014: 162) has asserted that trauma is a defining feature of ‘the AIDS Generation - all of us, HIV-positive and negative … as middle-aged men, we are as a group traumatized and fatigued by 30 years of war’. Despite National HIV Strategies acknowledging key affected populations as essential partners in the response, the inclusion of lesbian, gay, bisexual, transgender and intersex (LGBTI) communities in Queensland has not had consistent bipartisan support.

The Queensland government and media response when four babies died after blood transfusions in 1984, the point at which AIDS entered the mass consciousness of the Australian public (Moore, 2001: 176), laid the foundation of the stigma that still underpins much of the social suffering of PLHIV 30 years later. AIDS and homosexuality were inextricably linked and exploited as a political wedge issue, showing how ‘gay identity and HIV identity are forced into connection becoming mutually constitutive’ (Flowers and Davis, 2013: 286). Despite both homosexuality and HIV being recently subject to what Flowers and Davis call a ‘normalisation’ processes, homophobia remains virulent in regional Queensland (Berman and Robinson, 2010: 8) and HIV discrimination still occurs even within the gay community. Stigma is reinforced by the Queensland HIV-specific laws which have not kept pace with scientific advances, and in a recent review of HIV criminalization and public health policy Halkitis and Griffin-Tomas (2017: 4) concluded such laws are ‘outrageous’ and illegitimate.

Older PLHIV in regional Queensland rarely fit the retiree stereotype of cashed-up white middle-class tree-change/sea-change lifestyle seekers, as living on Disability Support Pension (DSP) for decades and in many respects ageing before their time has rendered most marginal to such social gentrification. Jansson and Wilson (2012: 1) predict that given the impact of improved treatment on survival, by 2020 the population of people living with HIV (PLHIV) in Australia will reach almost 30,000 with significant numbers living outside the capital cities, and the ‘expected proportion of PLHIV over 55 years is estimated to increase from 25.3% in 2010 to 44.2% in 2020’. This trend of ageing of the population of PLHIV has serious implications for the planning of future service delivery to meet the psycho-social needs of PLHIV, particularly in Queensland, which has a more decentralized population than the geographically smaller southern states.

In the current viral suppression era, biomedical narratives tend to put an optimistic spin on living with HIV. Biomedically orientated attempts to ‘normalize’ HIV incorrectly imply this is an easy way to eliminate the stigma underlying decades of fear and social exclusion (Moyer and Hardon, 2014: 267). As acknowledged by Squires (2013: 14) in response to the ‘complicated’ stories of PLHIV, the ‘recognition of HIV’s particularity’ enables exploration of the range of experiences with stigma and the grit involved in living on, and ageing, with HIV.
Method

Thirty-one older gay men were interviewed via two semi-structured annual interviews across the years 2013–15. Interviews were usually conducted in the participants’ home as part of the larger Australian Research Council and Queensland Health Department funded qualitative longitudinal Living Positive in Queensland Study (LPQ). Queensland Positive People (QPP), Positive Directions Anglicare (PD), and the Queensland AIDS Council (QuAC) were the linkage partner organizations of the LPQ Study. The partners were keen to prepare for the projected growth over the next decade of the population of ageing PLHIV in Queensland’s tree-change/sea-change areas.

Participants were at least 50 years of age, except Aboriginal men who were included from 40 years of age to reflect the reduced life expectancy of the Aboriginal population in Australia (Australian Institute of Health and Welfare, 2014: 6). Recruitment via historical contact with PD ensured representation of participants like the ‘almost one-third of respondents to HIV Futures 7 [who] rated their health as fair or poor (28.6%)’ (Grierson et al., 2013: 2), including some who had lost contact with formal support systems. Participants who were coping well, with little or no history of accessing support services beyond routine medical monitoring and treatment, were also recruited via gay community networks. The participants lived in regional centres and hinterland areas of the 1,700-kilometer coastline between Cairns and the Sunshine Coast or in more isolated rural locations. 84% were on Disability Support or Aged Pension, 78% were single and 68% were living alone.

The first round of semi-structured interviews started in 2013 after a newly elected Queensland Government defunded QuAC for gay men’s HIV prevention, seriously reducing capacity to address the social determinants of health in the LGBTI communities. The second round of interviews started in 2014 just as PD was also defunded, leaving PLHIV without that assistance to access services. This timing enabled reactions to the changes to be captured. The 90-minute interviews focused on locality, contexts of life, social supports, sex and relationships, health and well-being, ageing and the future, and, in the second interview, changes during the previous year.

Constructivist Grounded Theory (Charmaz, 1990) guided my interaction in the data collection and interpretations. The longitudinal qualitative method drew attention to ordinary everyday experiences and the ways in which people manage their daily routines and relationships. NVivo software was used to organize key themes arising from this data, enabling comparison within and between the themes, and within and across the two points in time.

Results – key themes

Living out of step

The life course perspective has delineated life phases and socially defined transitions like retirement but also enables exploration of inequality and the ways the experiences of ageing change over time (Riley, 1987). Increased life expectancy and good health beyond 60 or 70 years of age for the baby boomer generation have made possible a ‘third age’, enabling retirement to be a highly creative period before advanced old age, without the usual constraints paid work puts on passion and creativity (Bateson, 2010). However,
facing imminent mortality in early adulthood, and losing partners and entire networks of friends as most participants in this study did, is not the usual life course. The participants had often done remarkable things in their life before their life course was disrupted by AIDS, and often confirmed the finding of Charmaz (1991: 237) that ‘living a constricted life for years makes one seem a little ‘out of step’, if not entirely a relic of the past, even when young’.

I come from the old era … I see the world from that older perspective. I find that everyone sees it from the new age perspective that you just get on with your life. You get diagnosed positive, you take a pill a day and you live a long life … it’s a wonderful outlook. But we are still here and I feel utterly – like I’m invisible in regards to the way I’m spoken to because I remember from 1992 to 1998, it was just death. We lived – I saw a whole generation of people die. I had a partner of 14 years die. I thought I was going to die. There was no hope, then of course medications came in and it changed. But people like myself, are affected by that time, that have lived through and survived. You could call it PTSD [post-traumatic stress syndrome]. We don’t talk about it enough. (50+ yrs, diagnosed 24 yrs)

Illness forced a kind of premature retirement on these participants during the years when most people participate in the workforce and accumulate wealth. The loss of the contribution of regular work to overall well-being of PLHIV was well illustrated by the experience of one participant who, at first interview, had just been made redundant from a part-time job where his team had worked around his periods of sick leave. As well as the loss of intellectual stimulation he lamented the effect of the loss of the routine physical exercise he previously got through commuting. He was volunteering locally and putting time into a seemingly endless project to renovate his home to ultimately finance retirement to a more rural area, but felt he had been reduced to ‘an old man shuffle’ (53 yrs, diagnosed 23 years) around the house.

Participants on DSP had faced the challenge of finding a non-work-related purpose early in life, and this quest tends to intensify with age as questions of legacy arise (Bateson, 2010: 182). Most were proud of their contributions to the HIV response in the first decades, and were even nostalgic about the camaraderie they felt in those years when the community was mobilized and better funded. For example, most of the Sunshine Coast participants referred to the halcyon days of Grimwood House, a once thriving community centre that housed QuAC and QPP in Nambour until 2004. This was a classic ‘enabling place’ (Duff, 2011) where they contributed time and skills, but dwindling government funding and community mobilization now rarely enabled such opportunities in regional areas.

**Premature ageing**

Participants were troubled by reports that long-term survivors (L-TS) face a premature ageing with a disability profile 10–15 years in advance of their HIV negative peers, despite the evidence for this being contested (Rasmussen et al, 2015). Their lived experience suggested to them that their ageing process was at least accentuated. Those with sufficient stamina had resisted the DSP path; for example, a younger participant frustrated by the struggle to find employment feared that living on a pension would
prematurely age him and rejected the potential ‘structured dependency’ of welfare (Townsend, 1981).

I know a lot of HIV positive guys who are on the pension who become ageing, there’s effective ageing earlier than their prime … they’re pensioned off, there’s a surrender that goes on there. (45 yrs, Indigenous, diagnosed 29 yrs)

However, older participants often had little choice:

I was of the generation where you were diagnosed and they organized to put you on the DSP. You were told to cash in your super and if you wanted to go overseas, go overseas now while you could and then you stuffed it all up and stayed alive. (52 yrs, diagnosed 25 yrs)

Most appreciated the breathing space that improved treatment had provided, for example enabling PLHIV who were previously putting considerable energy into staying up to date with the scientific literature, to relax into relying on their HIV doctor to stay on top of the technical side of their HIV care.

I no longer am quite as obsessive about reading everything… I no longer feel the need – it’s not the number one show in my life. (57 yrs, diagnosed 17 yrs)

Little turnover in the state-funded sexual health centres workforce had enabled long-term partnerships to develop between PLHIV and their HIV doctors and nurses. Addressing the range of psycho-social and financial issues intersecting with disability and HIV co-morbidities was often much less straightforward. Care of co-morbidities, including diabetes, neurological decline, cancer, peripheral neuropathy, acquired brain injury and so on, involved many specialists, so most participants took on their own care coordination.

I see that as my primary job. I’m the CEO and my health is the bottom line of my company. (50+ yrs, diagnosed 28 yrs)

Ageing on our own terms

Most participants felt that the complexities of their lived experiences had given them wisdom that could be applied to the process of ageing.

I think the wisest people are perhaps those who have gone off the track a little and they’ve got a broader landscape to choose from. (57 yrs, probably living with HIV 13+ years, diagnosed 5 yrs)

As in the above case, even those diagnosed after effective treatment became available had often grappled with challenging life experiences, including coming out as gay and separation from wife and children, decades of problem drug use, and then life-threatening illnesses such as cancer, and loss of capacity to continue in a very physical occupation.

The need to maintain a positive mental attitude was often asserted, but this included not dwelling on what ageing could mean as it would raise anxiety levels for no tangible benefit.
I knew people who were diagnosed early anyway saying ‘I won’t see my 30th birthday’, so a month before they’re 30 they died. So that’s the power of negative thinking as far as I’m concerned. So it’s not something I dwell upon … (52 yrs, diagnosed 25 yrs)

However, the participants were determined to age on their own terms. Those participants who cared for their ageing parents or other relatives had clear ideas about their own advanced ageing. This produced both pragmatism and insight into getting the best out of the system, and for many a determination to exit before suffering reached unacceptable levels. There was almost universal and adamant rejection of nursing home care as a future option, in part due to not trusting institutions to be LGBTI culturally competent and the fear of abuse arising from homophobia. Federal government efforts to address LGBTI cultural competence in the aged care sector, including recognition of LGBTI elders as a special needs group, had not changed the perceptions of participants.

Having faced mortality very early in life, participants were universally quite matter of fact about death. Having taken control by putting in place a plan to end their life if necessary, they were freed up to manage complex treatment and care routines and make the most of daily life. Those who talked most about suicide or euthanasia were putting enormous effort into a kind of pharmaceutically mediated truce with suffering.

**Financial precarity limits options**

As many of the participants missed the opportunity to accumulate wealth in their early and middle-adult years, they approached ageing acutely aware that their precarious financial circumstances limited their ability to fully utilize the positive aspects of ageing. While participants who were still working all talked of plans to retire early, most participants had been relying on DSP since their HIV diagnosis and cut living expenses by moving from the city. Most participants remained motivated to be actively involved in community and give back, but opportunities were limited by location, fear of discrimination, and lack of finances for transport.

Those who were coping best had found a way to supplement the DSP, and this extra income and social involvement enhanced quality of life. Strategies such as never working two days in a row and working from home with no firm deadlines, made it possible to sustain this very part-time work without causing health problems. However, these kinds of arrangements are unusual and those with them dreaded the possibility it could trigger a DSP eligibility review. A small amount of income above DSP enabled travel to take a break from the pressures inherent in day-to-day life and the location, adding to overall contentment and the maintenance of support networks beyond their immediate locale.

The defunding of PD had left some participants alarmed about the added costs of accessing services, especially dentistry.

whenever I needed dental work done they [PD] used to fund it in a way and that … now I’ve got to try and get into a hospital … when they folded they sort of sent this letter out saying blah, blah, blah; so that was a bit of a tail spinner. (50+ yrs, diagnosed 30 years)
This participant also had no idea where to turn for advocacy support upon receipt of a letter from the real estate agent denying permission to live with and care for his ailing HIV+ partner. He just put the letter away and hoped to avoid detection.

**Mental health challenges**

The most significant longitudinal finding was that, with cuts to services, the most vulnerable PLHIV in regional areas were feeling abandoned to cope in isolation with the cumulative impacts of the epidemic on their well-being, provoking a strong sense of injustice given they put their bodies and lives on the line for the drug trials that enabled effective treatments to be found. Some participants had moved out of the city to lessen inputs by constricting activities and withdrawing from social contact, consistent with Charmaz (1991: 95), who found people with chronic illness ‘pull in to manage their illness’. The sense of being overwhelmed by events was exacerbated by depression and HIV-related neurological decline affecting response times and memory.

Every day was just an Everest in a way and so the less there was, the better. Then I could manage it. And that’s what it’s been like … the only way to manage was to do this, a very circumscribed life. (50+ yrs, diagnosed 19 yrs)

For some the isolation was so complete that meaningful conversation was rare.

Just the psychiatrist. I don’t talk to anyone about anything … they don’t want to hear, they don’t care … all they want is to talk about the weather and the grandkids. (60+ yrs, diagnosed 30+ yrs)

The impact of the QuAC Community Visitor’s Scheme was dramatic between interviews one and two for the oldest participant in the study, as he rediscovered the art of conversation at 76 years of age.

Trauma was common in the life experience of the participants and most were on anti-depressants long term, but did not have a mental health plan beyond the exercise programme that PD helped them set up in the past. Their complex circumstances included acquired brain injury and other disabilities, homophobic and race violence and minority stress, self-harm and eating disorders, sexual abuse in childhood, post-traumatic stress disorder, episodes of homelessness, and problem alcohol and drug use and gambling.

Trauma was strongly connected with place for some participants, motivating them to relocate and make a new start so they are not constantly pulled back into the past.

Which is one of the hard things now because I don’t like being in [regional town] because, I talk to my partner about it all the time that … I don’t like being here because … I know the spot that it all happened … and I hate going past … (40 yrs, Indigenous, diagnosed 14 yrs)

Relocation was one of the few opportunities available to reset circumstances, and the participants were highly mobile with diffuse support networks. Relocation enabled regaining control over who knew their HIV status to avoid the stress of being treated by
everyone as ‘the person with HIV’. Those with local ties had usually lived elsewhere to come out as gay and develop a career, and had mixed feelings about ‘going back’ as an expression of the way HIV curtailed their life trajectory.

Many participants were improving their home environment as a refuge. Moran and Skeggs (2004: 86) concluded that for gay men it is common that ‘home is comfort as a located experience of safety and security’, a response to the outside world as threatening. Thus place can ameliorate or exacerbate uncertainty and fear.

I do worry about the future, yeah…. Where will I end up? … Well I’d hate to lose this apartment…. You never know what’s around the corner do we? You never know what’s around the corner. But I’d flip out completely if I wasn’t here. (50+ yrs, disabled by a gay hate crime, diagnosed 10 yrs)

The early ‘death sentence’ HIV diagnosis had also permanently altered attitudes to time, even as the language had shifted to living with a ‘condition’ rather than an ‘illness’, possibly offering some psychological relief (Corbin, 2003: 257). Most participants were still living very much in the present with little planning for the future, a mode adopted when they were given a short time to live. This mode was also evident in those participants diagnosed after the ‘death sentence’ narrative was replaced by the ‘chronic illness’ discourse (Siegel and Lekas, 2002).

I don’t really have any [plans]. No. That’s another thing about my life is I tend to just live day by day…. But yeah I don’t really have any plans for the year, and that’s – that can sometimes be a bit de-motivating. But if I make a plan I get anxious about it. (67 yrs, diagnosed 14 yrs)

While mental health issues including stigma are commonly associated with living with chronic illnesses, the combination of HIV stigma and homophobia were experienced as exceptionally corrosive on well-being across the decades, despite attempts to ‘normalize’ HIV as ‘like any other’ condition (Moyer and Hardon, 2014: 263).

I frame myself, I get up in the morning and I look at myself in the mirror and I just see AIDS infected poofter, that’s the three words. (45 yrs, Indigenous, living with HIV 29 yrs)

**Discussion**

The early response to HIV involved an impressive community mobilization (Power, 2011: 27), but this solidarity has waned since more effective treatment became available from 1996 and government funding was targeted elsewhere. For the first study of L-TS Callen (1990: 241), resisted ‘the temptation to exaggerate the good news or to censor the grim realities’ and that approach is still necessary, despite the recent successes of the medicalized response to HIV. Likewise, Settersten and Gunhild (2015: 45) cautioned that the unbalanced emphasis in gerontology on successful and active ageing has neglected ‘an obligation to make visible the full spectrum of aging experiences’. The PLHIV empowerment movement has always cultivated the resilience necessary to live with HIV, but ageing brings into sharp focus the suffering that activism and the clinical management of HIV has not solved.
A lot has changed since Callen (1990: 22) defined L-TS as surviving ‘twice the current median survival time’, which in 1987 was just three years. Although Halkitis (2014) asserts that a whole generation of gay men has been traumatized by AIDS regardless of class or HIV status, in the literature the term ‘long-term survivor’ is usually reserved for those diagnosed pre-1996, but time and ageing are probably rendering this cut-off less relevant, particularly for those diagnosed after 1996 who delayed treatment. Despite the biomedical progress, uncertainty was still impinging on the daily lives of the long-term survivors in this study, plus those diagnosed more recently who were also experiencing a cumulative impact of many years living at the heart of the epidemic, an extended period of untreated HIV, co-morbidities, treatment side-effects and now ageing.

The participants were still coming to terms with ageing and often did not want to dwell on the implications. The need to ‘keep optimism alive’ was still the foundation of the ‘grit’ Callen (1990: 183) identified as a key characteristic of survival. Although dealing with more health issues than most people their age, consistent with Atchley’s (1999) Continuity Theory of Ageing, most approached ageing as a continuation of their current circumstance of managing a chronic illness and co-morbidities. They were learning to live within the body’s limitations (Corbin, 2003: 257) but anticipating that over time ageing would just mean more complications to deal with than HIV negative peers would face, at least until advanced old age. Claiming a right to euthanasia was the common response when participants anticipated lack of support or opportunities to contribute socially, and multiple co-morbidities, amounting to ‘no good days any more’.

The youth-orientation of the commercialized gay culture reinforces assumptions that ageing brings only negatives, but this generation of gay men has achieved significant reform of their social standing during their lifetimes, and will likely approach ageing in creative ways that disrupt heteronormative assumptions. The complexity of living with multiple co-morbidities highlighted the limitations of neoliberal notions of individual responsibility (Squires, 2013: 152), particularly when participants struggled with logistics due to depression and cognitive decline. The defunding of PD particularly impacted these participants. GPs are formally supposed to take on care coordination but receive little remuneration for the dedication involved, and most participants missed the support of a well-informed PD worker to occasionally discuss their situation and support necessary advocacy.

Funded support services for L-TS in Queensland are now narrowly focused on maintaining treatment adherence to meet the United Nations 90-90-90 target (State of Queensland, 2016: Outcome 4), but with ageing, psycho-social needs will be accentuated. Montaigner and his British Columbia team have also observed a ‘compression’ of illness towards the end of life for PLHIV and that ‘it remains imperative to address the challenges this population faces in achieving a healthy state to improve quality of life over the life course’ (Hogg et al., 2017: e275).

For some, moving away from the city meant leaving behind a PLHIV identity; a distancing to live beside rather than within HIV, but stigma and discrimination persisted even though most PLHIV now on treatment have an undetectable viral load. Despite the evidence that ‘undetectable = uninfected’ (U= U) (Prevention Access Campaign, 2017), a key mental health challenge remained overcoming internalized stigma and residual fear of passing on the virus. Most participants reacted to HIV stigma and homophobia by adopting a low profile to remain socially undetectable, which limited their
ability to build mutually supportive social networks. Campaigns displaying role models of successfully living with HIV and successful ageing were insufficient to address existing mental health needs, nor were they a replacement for actual social solidarity. Isolated individuals will continue to struggle, so collective advocacy is essential to deal with the range of issues involved in ageing with HIV. This requires a more sustained solidarity than the synthetic community of anti-stigma advertising and social media campaigns.

The literature on long-term survival with HIV commonly engages with notions of resilience (Lyons and Heywood, 2016), and the defunded programmes of PD and QuAC did build resilience. However, such resilience remains vulnerable to erosion by social isolation and unrelenting HIV stigma and homophobia in regional Queensland. Overly optimistic biomedical and normalisation narratives can effectively silence the suffering of L-TS, subtly aided by the empowerment approach that has otherwise served PLHIV so well. A similar dilemma has been critiqued by Stringer (2014) in relation to survivors of abuse and rape. She argued that feminist empowerment has dovetailed with neoliberal individual responsibility so that suffering is only conceptualized as victimhood. That critique could inform re-authoring L-TS’ empowerment narratives to better reveal ‘how social and psychological factors synergistically interact with physical health’ (Mendenhall, 2012: 22).

Conclusions

In this study the L-TS, and those diagnosed after 1996 who were advised to delay starting treatment, have evidenced considerable grit to not succumb to a daunting array of physical, financial, psychological and social challenges. They were living with the legacy of the first 30 years of the epidemic and had mixed feelings about an exclusively positive spin on living with HIV, particularly as they faced ageing with an increased burden of morbidity and no discernible decrease in social stigma. Ideally stigma will reduce as more people become aware that ‘HIV is different now’ (QPP Alive, 2013), but this is unlikely while Queensland’s out-of-date HIV-specific laws imply that stigma is justified.

The lived experiences of those participants in this study who struggled with the social determinants of health before HIV was even acquired, challenge the emerging biomedical narrative that in the future HIV will have minimal impact on life trajectory and identity as early treatment will enable PLHIV to remain in good health and work. The call of Stephenson and Kippax (2016) for ‘socialising the biomedical turn in prevention’ is also applicable to treatment and care as PLHIV age.

Improved access to flexible part-time work for PLHIV could enable those with the necessary stamina to escape isolation and maintain social connections. It would also alleviate financial precarity, create options, and ameliorate the uncertainty around ageing. For most, flexible access to DSP would need to continue, so the workers can remain responsive to signals of fatigue, and not join the ranks of the working poor with no health-care benefits card.

Mental health plans and services, and social solidarity, are essential to address poor quality of life beyond viral suppression. To assure the voices of PLHIV are heard, a quality of life target (Lazarus et al., 2016) needs to be incorporated into Australia’s next National HIV Strategy.
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Author biography

Bernard Gardiner has been involved in the HIV response for over 30 years. He is the past Global HIV Programme Manager of the International Federation of Red Cross and Red Crescent Societies, and has served as a volunteer, governing board member and staff member of both the Queensland and Victorian AIDS Councils.
HIV stigma and mental health

Presenters
Mr Chris Howard
Queensland Positive People
Presentation Overview

- About QPP & the services we provide
- Mental Health & HIV
- HIV diagnosis and Suicide
- HIV Stigma & Mental Health
- HIV, Ageing and Mental Health
- HIV Associated Neurocognitive Disorder (HAND)
OUR VISION

We seek to create a safe supportive environment where people living with HIV (PLHIV) are well informed, and empowered to lead healthy lives free from stigma and discrimination.

Queensland Positive People since 1989

HIV services: The journey from AIDS to 90/90/90 & U=U

- Effective HIV treatment
- HAART → declining death rates, improved clinical outcomes

- The Swiss Statement: individuals with an undetectable viral load cannot transmit HIV during sex

- HPTN052 Study: 96% reduction of HIV transmission within the couples assigned to early treatment

- START Study: compelling evidence of clinical benefits of early treatment at high CD4 counts (>500) vs later (<500).

- WHO/UNAIDS recommended that treatment be offered to all PLHIV to reduce HIV transmission

- QPP’s Life+ program funded

Service milestones
Clinical/treatment milestones

Queensland Positive People since 1989
Treatment as Prevention: TasP

The Treatment Revolution

- Antiretroviral (ARV) treatment reduces viral load to undetectable levels preventing or significantly reducing HIV disease progression in people living with HIV (PLHIV).

- Antiretroviral treatment reduces viral load in PLHIV to undetectable levels preventing onward transmission of HIV to sexual partners.

- Antiretroviral treatment taken by an HIV negative person in the form of PEP or PrEP prevents the acquisition of HIV.

Undetectable = Untransmittable: U=U

- Consensus Statement 2016:

  "There is now evidence-based confirmation that the risk of HIV transmission from a person living with HIV (PLHIV), who is on Antiretroviral Therapy (ART) and has achieved an undetectable viral load in their blood for at least 6 months is negligible to non-existent. (Negligible is defined as: so small or unimportant as to be not worth considering; insignificant.)"

  International consensus statement 75 countries 600 organisations
  Endorsements Updated:
  January 2018
  Issued: July 21, 2016

- CDC US – September 2017

  "people who take ART daily as prescribed and achieve and maintain an undetectable viral load have effectively no risk of sexually transmitting the virus to an HIV-negative partner."

  Eugene McCray, MD Director
  National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
  Centers for Disease Control and Prevention United States

  September 27th 2017
**90/90/90: The current discourse in HIV Treatment & Care – TasP phenomenon**

- **90% of all** living with HIV will know their HIV status
- **90% of all** living with HIV will receive antiretroviral therapy
- **90% of all** receiving antiretroviral therapy will have viral suppression

*Seventh National HIV Strategy 2014-2017
HIV action plan Qld 2017-2021

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**Designing models of care aligned with funding priorities**

- **Rapid Clinic**
  - 90% of people living with HIV will know their status.

- **Life+ Program**
  - 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy.
  - 90% of all people receiving antiretroviral therapy will have viral suppression.

*Seventh National HIV Strategy 2014-2017
HIV action plan Qld 2017-2021

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Goals of Life+ Program

- Address barriers to treatment initiation/adherence and retention in care
- Reduce the time between diagnosis and uptake of treatment
- Prevent HIV disease progression in PLHIV
- Reduce the possibility of onward transmission
- Improve self management & HIV health literacy
- Address individual & systemic stigma/discrimination and barriers to treatments access and access to care

Life+ Program: Case Management

- Support to address social determinant barriers that impact early treatment initiation, adherence and retention in care
- Barriers include but are not limited to:
  - Mental health
  - Substance misuse
  - Housing
  - Financial
- Support is tailored to individual need and prioritised to PLHIV presenting with multiple complex issues
- Individual action plans are developed and monitored to ensure goals are achieved within negotiated time-frames
- Support the development of personal skills to effectively self-manage HIV
- HIV Public Health Team – intensive case management support for those who’s behaviour constitutes a public health risk
Life+ : Case Management

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Professionalising the role of peers in the health system – Peer Navigation

- Lived experience has legitimacy and centrality to the HIV response

- We understand what it is to be diagnosed, live with HIV & navigate systems

- Service provision frameworks incorporating peer models allow individuals to receive services in an appropriate and individualised manner

- Peer Navigation in health and community settings becomes part of the clinical/community continuum of care
Peer Navigation – I have HIV, where do I start?

Life+ Program: Peer Navigation

Peer Navigation’s Goals

- Improve health outcomes for people who are newly diagnosed or re-engaging or at risk of falling out of care
- Reduce time between diagnosis and treatment uptake
- Increase HIV health literacy
- Improve ability to self manage HIV
- Build resilience

Peer Navigation

Early and brief intervention model delivered by peers providing HIV information and support.
The model - What do Peer Navigators do?

**Information Provision**

The information component includes 3 core modules and 7 elective modules aimed at increasing health literacy of PLHIV.

- **Core Modules:**
  - HIV 101 – Understanding the virus
  - Navigating the HIV Health System
  - HIV Treatment

- **Elective modules:**
  - Disclosure tips
  - Medicare Ineligibility
  - Mental Health & Resilience
  - Healthy lifestyle
  - Legal rights & responsibilities
  - Alcohol, Tobacco, Drugs & HIV
  - STI’s & HIV

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The model - What do Peer Navigators do?

**Peer Support**

- Provide front-line peer support
- Provide emotional/social support around diagnosis
- Practical support for pathology testing, clinical appointments, pharmacies, other allied health services and support access to antiretroviral medication
- Support to synthesise information
- Onward referral or linkage to local peer support groups and activities
Peer Navigation Team

14 Peer Navigators:
Region:
7 Brisbane
1 Gold Coast
1 Toowoomba/Ipswich
1 Sunshine Coast
1 Bundaberg/Hervey Bay
1 Rockhampton
2 Cairns

- Gender:
  10 males and 4 females (currently no Trans)

- Sexual orientation:
  9 gay men and 5 heterosexuals

- Ethnicity and cultural background:
  9 Caucasian, 4 CALD (3 African and 1 South East Asian), and 1 Aboriginal & Torres Strait Islander

Life+ Program: Stigma and Discrimination

- The Stigma and Discrimination Officer:
- Undertakes case management functions specialising in stigma and discrimination presentations
- Provides information and support on immigration matters and HIV
- Performs high level systems advocacy to address issues of stigma and discrimination
More than half the participants in HIV Futures 8 (51.8%, n=454) indicated they had been diagnosed with a mental health condition at some point in their life.

31.9% (n=277) had taken medication for a mental health condition within the past six months.

Depression and anxiety were the most common conditions reported by participants:
• 42.4% (n=379) had ‘ever’ been diagnosed with depression,
• 28.5% (n=255) had ‘ever’ been diagnosed with anxiety.

Less prevalent conditions were reported by a smaller number of participants: bipolar disorder (4.3%, n=38), post-traumatic stress disorder (7.0%, n=63), psychosis (2.8%, n=25).

Common presentations:
- Denial (non-engagement in care)
- Fear
- Anxiety
- Sadness/depression
- Anger
- Blame of self and/or others

Difference for newly acquired or later diagnosed HIV

Pre existing mental health issues place people at higher risk of HIV acquisition exacerbated by substance misuse.
HIV Diagnosis & Suicide Risk

- Suicide Risk
  - Men Dx in the last year HIV were 5 times higher risk than the general population (UK) (Sara Croxford Public Health England April 2017)
  - Difficulties adapting to Dx
  - Limited support/disclosure
  - Significant mental health issue (SMI)/substance use compounds suicide risk

  - Mandated suicide ASIST training for all QPP staff

HIV Related Stigma intertwined with Mental health

- HIV/ AIDS are associated with death
  - HIV is associated with behaviours that son people disapprove of (such as homosexuality, drug use, sex work or infidelity)
  - HIV is only transmitted through sex, taboo subject in some cultures
  - HIV infection is the result of personal irresponsibility or moral fault (such as infidelity) that deserves to be punished
  - Inaccurate information about how HIV is transmitted, which creates irrational behaviour and misperceptions of personal risk.

http://file///C:/Users/Avert%20Admin/Downloads/unesco_hiv_and_health_education_clearinghouse_-__.pdf
The HIV Foundation survey conducted in Queensland revealed:

- 81 per cent of respondents thought people with HIV were treated as outcasts
- 47 per cent would not welcome someone with HIV into their family
- 46 per cent would not want a person with HIV looking after their children
- 42 per cent would not share a flat with someone with HIV

HIV – Multiple Layers of Stigma

Stigma & Identity

Gender, Class, Drug Use, Sex Work, Trans, Sexuality, Ethnicity, Migration
Mental Health - Marginalised and Vulnerable PLHIV

- Minorities within minorities
  - Heterosexual Men & Women
  - Transmen, Transwomen

- A&TSI
  - Shame
  - Confidentiality within family/community
  - Geographically dispersed

- CALD
  - Refugees/migrants
  - Trauma/violence
  - Confidentiality

HOW STIGMA LEADS TO SICKNESS

Many of the people most vulnerable to HIV face stigma, prejudice and discrimination in their daily lives. This pushes them to the margins of society, where poverty and fear make accessing healthcare and HIV services difficult.
Mental Health & HIV & Stigma

- **Internalised stigma:** refers to the internalisation or absorption of negative attitudes and beliefs.
  - Isolation/self esteem/less worthy/poor choices/AOD/relationships/compensating behaviour/depression/anxiety *significant risk factor for depression*

- **Anticipated stigma:** is the belief that prejudice, discrimination and stereotyping will be directed at them from others in the future based on their HIV status.
  - Disconnection/social isolation/poor health reluctance to engage in care /depression/anxiety/non disclosure fewer networks

- **Experienced stigma or discrimination:** the experience of being treated less favourably than another person on the basis of perceived or actual difference.
  - Significant trauma/depression/SMI
Multi layered stigma across the system

Talking About Stigma - Susan’s Story

Talking About Stigma
Life+ : Ageing, HIV & Mental Health - what we see

- Increase in co-morbidities (multiple) and/or disabilities – HIV/medication/age related
  - BMD, osteoporosis
  - Cardiovascular disease
  - Liver disease
  - Renal disease
  - Cancers
  - HAND/Neuro cognitive impairment - Mild to severe cognitive change

- Increase in PLHIV requiring assistance to remain living independently (U/65 as young as 38)

- Physical impacts lipoatrophy/lipodystrophy impact self esteem

- Significant social isolation and poor mental health & QoL (worse rural/remote/invisibility)
  - Few social networks
  - Services as protective factors

Life+ : Ageing, HIV & Mental Health - what we see

- Significant social isolation and poor mental health & QoL (worse rural/remote/invisibility)
  - Few social networks
  - Services as protective factors

- Compounded grief/past trauma/fatigue/Lazarus syndrome (people are tired)
  - Stigma impacts mental health and social engagement

- Disengagement with HIV treatment and care (social isolation/disconnection)

- Late diagnosed and/or older at diagnosis – more complex

- Financial stress – mostly DSP/poly pharmacy
HIV Associated Neurocognitive Disorder (HAND)

- Approximately 50% of PLHIV will experience some neuropsychological impairment worse in people with SMI (Heaton 2010)
- 30% prevalence amongst HIV positive population with UDVL (Dr Edwina Wright)
- Symptoms can include the following:
  - Forgetfulness
  - Confusion
  - Difficulty paying attention
  - Sudden shifts in behaviour/mood
  - Muscle weakness
  - Clumsiness

HAND is the leading cause of dementia in young adults globally

HAND is treatable with ARV’s, majority of patients make a good recovery

HAND may occur in individuals who are taking antiretroviral therapy and requires appropriate referral and investigation

Ageing and cardiovascular risk factors may influence the neurocognitive health of HIV+ people over time

Monitoring overtime by psychologists/counsellors/HCW to identify changes in memory and behavior independent of other MHI

Consider neuropsychological assessment

Courtesy DR Edwina Wright
Mental Health impacts on HIV (not managed)

- Suggested link between stress and depression and lowered immune response
- Increases drug & alcohol use/can lead to SMI
- Depression/anxiety places people at higher risk of non-adherence to ARV’s other medication and disengagement from care.
  - risk to self – disease progression/AIDS
  - risk to others – transmittable HIV
- Poor Quality of Life
- Falling in and out of care and loss to follow up

Mental Health, HIV & Treatment

- Psychological support sits equally beside physical wellbeing UDVL
- Most PLHIV seek out a knowledgeable/experienced mental health practitioner
- No second chance/judgement/ breaches of privacy/curiosity/assumptions safe sex practice/gender/ acquisition
- CBT psychotherapy and medication improves health outcomes and also ARV adherence
- Neuropsychological assessment suggested if symptoms persist independent of other MHI
- Coordinated case management is best practice for PLHIV with SMI
Mental Health & HIV protective factors

- Disclosure – protective and non-protective
- Social/family/relationship networks
- Early intervention following Dx or emergence of MHI
- Linkage to a continuum of care (care providers)
- Peer Network engagement
- Social determinants (recursive cascade –Lisa Fitzgerald)
- Resilience building to address stigma (internalised/anticipated/experienced) tools in the hands of PLHIV

The Fourth 90- Good Health Related Quality of Life

- 90% Diagnosed
- 90% On treatment
- 90% Virologically suppressed
- 90% Good health-related quality-of-life


PLHIV have treatment/care & support needs beyond viral suppression

Managing HIV is a lifelong commitment

Jeffrey Lazarus et al, 2016
Responding to emerging needs:

Social Connection for People Ageing with HIV Project

- The project aims to address social isolation and improve social connection for older people living with HIV (PLHIV) in the local government area of Brisbane through a social visiting scheme utilising trained PLHIV peer volunteers and other interested community members.
  - Grant approved

Peer Led Stigma Reduction Interventions Project (ViiV Healthcare)

- Workshops co-facilitated by Peer Navigators and psychology students (under clinical supervision) aimed at stigma reduction and resilience building – Brisbane and regional
  - Peer Navigation module development ‘stigma reduction and resilience building’ delivered one to one.
  - Grant approved

Peer Support-social connectedness

- Brisbane
  - Women’s Connection Circle – monthly
  - Brisbane Social BBQ – open group for everyone (predominantly gay & MSM)
  - Mature age long term survivors group
  - Heterosexual men’s group

- Sunshine Coast /Wide Bay /Rockhampton/ Cairns

- A key protective factor was access to social support. The type of support, in particular emotional support, was found to be more important than the source of support.

* Funded through donations and fundraising
PozQoL — Valuing quality of life among people with HIV

A quality of life measure for the HIV community, support and healthcare sector

PozQoL – 13 items across 4 domains:

1 Psychological domain
   (incl. mood, coping, hope and fear of the future and self-worth)
2 Social domain
   (incl. personal and social life, belonging, support, and social stigma)
3 Health domain
   (incl. perception of one's health, health-related concerns, energy and HIV management)
4 Functional domain
   (incl. ability to live a 'normal' life, independence, meaningful occupation and satisfactory standard of living).

An implementation trial of the PozQoL scale is being conducted across clinical, community and peer-led programs during 2018.

Responding to emerging needs: Social Isolation

- QPP web portal and/or a mobile app where QPP HIV members can use securely to manage their public profiles, register interest for QPP services, functions and events as well as socialize network and interact with other members.

- A list of predefined activity groups is available for the member to choose to join and try. Activities vary in scope.
  - services (e.g. educational presentation),
  - physical nature (e.g. indoor/outdoor sports),
  - social nature (e.g. knitting, movies)
  - function or events (e.g. BBQ, Planet Positive, fundraiser, etc)

- The aim is to encourage members to group activities and social networking. QPP members via QMAP can search, identify and register to participate in any QPP promoted activities.

*Unfunded - fully developed
How to Refer to Life+

Life+ link
www.qpp.org.au/life+

Call us
1800 636 241 (toll free outside Brisbane)
or 07 3013 5555

Complete an online referral form at
www.qpp.org.au/referral

Or download/email or fax the referral form to
Referrals@qpp.org.au

Or fax to
07 3891 1860

Queensland Positive People
since 1989

15/06/2018
Tobacco harm reduction & HIV

Presenters
Associate Professor Coral Gartner
School of Public Health University of Queensland
CURRENT RESEARCH ON REDUCING SMOKING RELATED HARMS AMONG PLHIV

Associate Professor Coral Gartner
School of Public Health
The University of Queensland

Increasing recognition of importance of addressing smoking among PLHIV to improve quality and quantity of live
Particular issues for PLHIV quitting smoking

- Low quit rates/high relapse rates
- Multiple competing issues e.g. mental health, substance use
- Previous research on smoking cessation interventions among PLHIV:
  - Low interest in oral medications and standard cessation treatments
  - Poor smoking cessation treatment adherence
  - High discontinuation rates
  - Poor long term outcomes/high relapse rates

Harm reduction

- Reducing health risk without requiring abstinence
- Non-tobacco examples:
  - Condoms to prevent STDs
  - Clean needle programs to prevent BBV transmission
  - Seat-belts, air-bags, bicycle helmets etc
- Tobacco cigarettes – most harmful nicotine delivery system
- Cleaner nicotine delivery systems
  - Nicotine replacement therapy (gum, lozenge etc)
  - Low nitrosamine smokeless tobacco (Swedish snus)
  - Vaporised nicotine products (e-cigs, vape pens, vape mods)
  - Heated tobacco products (iQoS)
How could vaping reduce harm for PLHIV?

- Behavioural + nicotine replacement
- Short-term cessation aid (like other NRT)
- Medium or long-term substitute for cigarettes
- Therapeutic context (e.g. methadone maintenance)
- Non-therapeutic context

How safe and effective is vaping?

- Cochrane review 1: “electronic cigarettes may help smokers stop their smoking, and the included studies did not find any serious side effects associated with their use for up to two years.”
- Comprehensive reviews by Public Health England, Royal College of Physicians, Centre for Addictions Research BC, UKCTAS, NASEM 3–4,7
- All conclude **vaping lower risk than smoking**. Two reviews concluded risks unlikely to >5% the risks of smoking
- More research needed

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Purpose

• Open label uncontrolled trial to test use of vaporiser for 12 weeks for smoking cessation
  • Safety
  • Acceptability
  • Quit outcomes

• Funding from HIVFQ
Investigational products

- Innokin Endura T18 kit
- Innokin Endura T22 kit
- Replacement coils
- Ten x 10 mL bottles of Nicophar® 12 mg/mL nicotine e-liquid per 4 weeks

Printed information (Choice of Quit pack or QPP material)

Participants

- N enrolled = 30
- N completed 12 week follow-up (EoT) = 26
- EoT outcomes (ITT):
  - N lost to follow-up/withdrawn = 4 (13%)
  - N quit smoking = 10 (33%)
  - N changed to non-daily smoking = 9 (30%)
  - N reduced daily smoking 50% or more = 2 (7%)
  - N reduced daily smoking but <50% = 3 (10%)
  - N did not reduce smoking at all = 2 (7%)
- No serious adverse events related to product use
- Adverse events were mild and self-limiting (cough, sore throat and headache)
Participant feedback

Most feedback positive, found it easy to use, acceptable taste etc

'after trying nearly everything on the market, this is the only thing that has worked for me'

'And I'm so grateful to be a part of this trial, it's really changed my life for the better. I had no idea I'd get these results so soon.'

'I'm absolutely loving it'

Some participants who reduced by didn't fully quit also indicated that they felt they just needed longer with vaping to fully quit smoking.
Conclusions

• Promising results
  • Good participant acceptability
  • 38% not smoking at 12 and 24 weeks
  • Some participants may need longer than 12 week treatment
• RCT required to test efficacy against other NRT products

Cessation And Relapse Prevention (CARP) Trial

• Chief Investigators: Coral Gartner, Mark Boyd, Billie Bonevski, Charles Gilks, Ron Borland, Ryan Courtney, Linda Cobiac, Hayden McRobbie, Peter Baker, Jochen Mueller
• Clinical Trial Coordinator: Malcolm Brinn
• Study design: Open label, pragmatic, randomised partial crossover trial
• Funding: NHMRC Project Grant
• Target sample size: 810 participants (270 ea of PLHIV, PLHCV, POST)
AIMS

To compare the effectiveness, safety and cost-effectiveness of providing vaporised (inhaled) nicotine products as a nicotine replacement therapy to priority populations living with co-morbidities:

1) Concurrently at commencement of a quit attempt made while receiving standard care for smoking cessation (i.e. as part of first-line therapy); versus

2) Sequential delivery (as second-line therapy) only to those who do not achieve and maintain abstinence from smoking after making a quit attempt with standard care for smoking cessation.

3) To evaluate medium-term smoking and health outcomes (adverse events and quality of life) for those who continue to use a nicotine vapouriser for maintenance therapy (relapse prevention) compared to those who do not.

Treatments provided in each condition

**Standard Care**

- **At baseline: Condition A** receive 84 nicotine patches (15mg/16hr) + Quitline referral
- **At baseline: Condition B** receive combination therapy - 84 nicotine patches (15mg/16hr) + up to 800 4mg/piece NRT Lozenges or gum (max 8 pieces per day) + Quitline referral

**Vapouriser Intervention**

- **At baseline: Condition A** also receive two Innokin Endura T18’s with 20 spare coils + 30 x 10mL bottles of unflavoured nicotine vaping solution supplied at no cost
- First delivery 10x10mL of 18mg/mL – if too strong, participant can request lower strength (6mg/mL) or mixed box of 5 x 6mg + 5 x 18mg (mix together to make 12mg/mL)
- **Between months 6 and 9: Condition B** participants who did not successfully quit may request same vapouriser intervention as Condition A
Condition A modelled on UK’s NCSCT advice for incorporating vaping into stop smoking services

Condition B represents the approach generally endorsed i.e. only offer as second-line therapy

Outcomes – two different sets of comparisons

<table>
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<th>Table 1: Comparison conditions and outcomes at each time point</th>
</tr>
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<tbody>
<tr>
<td><strong>Intervention condition</strong></td>
</tr>
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</table>
| Delivery of vaporiser intervention at the same time as commencing standard care | No vaporiser intervention provided while receiving standard care | • continuous abstinence from weeks 12 to 26*  
• continuous abstinence from weeks 12 to 52  
• continuous abstinence from weeks 12 to 104 |
| Delivery of vaporiser intervention at the same time as commencing standard care | Vaporiser intervention delivered to non-abstinent participants 6-9 months after commencing quit attempt with standard care | • continuous abstinence from weeks 40 to 52  
• continuous abstinence from weeks 92 to 104 |
Maintenance

• At end of the free 12 week supply of nicotine liquid, participants will have the option to purchase more from the research study until end of trial (24 months from baseline) at $7 per bottle (postage included).

• Each bottle is expected to last about 3 days or more (depending on level of use) [a 10 per day smoker of a budget brand would spend on average about $10 per day on cigarettes]

• Participants can choose how long they wish to vape for (within the trial period).

• The lower strength liquid allows for titration down before stopping.

RECRUITMENT
Participants – Inclusion Criteria

Participants must meet criteria below to be eligible for enrolment into the trial.

1. At least one of the following priority health conditions:
   i. Ever diagnosed as HIV positive, independent of receiving ART;
   ii. Current diagnosis of HCV (HCV Aby+/HCV RNA+ status);
   iii. Receiving anti-HCV direct-acting antiviral therapy in the past 12 months;
   iv. Receiving opiate substitution therapy at the time of enrolment.
2. Aged 18+ years;
3. Currently smoke ≥ 10 cigarettes per day;
4. Capacity to consent, able to understand participant materials and follow study instructions and comply with study procedures (e.g. sufficient English language ability, able to operate the vaporiser device);
5. Willing to make a quit attempt at baseline according to randomised condition.

Participants – Exclusion Criteria

1. Already commenced quit attempt
2. Currently pregnant and/or breast-feeding or an intention to be during trial participation period
3. Cardiac related chest pain, or another cardiovascular event or procedure in the last 30 days;
4. Hospitalised for a mental health condition in the last 30 days;
5. Currently being treated with oxygen therapy;
6. Diagnosed terminal illness (such as cancer) or debilitating condition that will limit ability to fully participate.
1. Brief information about the trial provided to patients by the clinic (emailed/mailed or hard copy provided during visit – e.g. waiting room)

2. If participant is interested in participating in the trial, clinic staff confirm eligibility criteria are met and complete informed consent process (risks and benefits explained, consent confirmed).

3. Clinic staff or participant enter the participant details into the CARP secure website

4. Doctor confirms medical clearance to receive intervention, electronically randomises participant and generates electronic trial prescription

5. Enrolment complete

6. Quitline referral auto-generated

7. UQ Study team receive email confirmation of authorisation to supply investigational medicine

8. Participant receives link to baseline survey (if not completed online within a fortnight will trigger a phone call to participant)

9. Condition A:

10. Condition B

Clinic

Monthly payment to clinic $100 per enrolled participant
9. **Condition A**  
Nicotine 15mg/16hr patch  
Nicotine e-liquid 18mg/mL  
Nicotine vaporiser equipment  
*Initial supply:* 42 patches and 10 bottles of 10mL e-liquid (3.5mL/day)  
Dispensed by UQ

10. **Condition B**  
Nicotine 15mg/16hr patch  
4mg Nicotine Gum/Lozenge (participant choice)  
*Initial supply:* 42 patches and 400 pieces of Gum OR 420 Lozenges  
Dispensed by UQ

11. Participant completes follow-up surveys online or over phone until final follow-up.

12. After 6 month outcome data collected, if Condition B participant is smoking or relapses between 6-9 months post baseline = eligible to receive vaporiser intervention for second quit attempt.

---

**Current progress**

- Obtained ethics approval from The Prince Charles Hospital HREC + Ratification from UQ HREC
- E-liquid has been manufactured by a TGA licensed manufacturer in Australia
- All necessary paperwork and contracts are being finalised (SSA approvals still being completed)
- Have started recruitment

If you would like to be a recruiting clinic please fill in the details in the packs provided or visit the website:  
www.carp.project.uq.edu.au
https://carp.project.uq.edu.au/
Clinician Screen

- Colour coded intuitive screens
- Validation check
- Electronic consent

Electronic Randomisation and script

Informative videos

- Online ordering (intervention)
- Report medical problems and Faults
- FAQ
- Action Panel for outstanding issues
PrEP: We know it works; where to from here

- PrEP for the non-white MSM communities
- PrEP on the PBS
- Discussion

Presenters
Mr David Youds
Gladstone Road Medical Centre
PrEP: We know it works; where to from here
PrEP for the non-white MSM communities
PrEP on the PBS

Mr David Youds
Gladstone Road Medical Centre
Slides by Simon Doyle Adams

QPrEPd

• HIV prevention demonstration project for Queensland
• Will the provision of PrEP reduced new transmissions of HIV in Queensland?
• 2000 participants over four years from 2016
• 1000 temporary extension from November 2017
• 23 sites throughout Queensland (Sexual Health Services & GP (S100))
• One AMS in Toowoomba.
Primary Objective

To assess the feasibility of PrEP provision through sexual health services and general practice services (with S100 prescribers) in Queensland. This will include eligibility screening; counselling about PrEP, condom use and risk reduction; testing for HIV; preventive ARV prescription, and follow-up of PrEP clients.

Secondary Objectives:

To gain more information on the potential uptake and experiences of transgender gay and bisexual men (transsexual MSM) and Aboriginal and Torres Strait Islander MSM using PrEP.
Region of Birth

Region of Birth (N=1429)

Demographic data by entry survey (80% completed)

• 2.94% of the participants who completed an entry survey reported that they identified as Aboriginal and/or Torres Strait Islander.
• All identified as male or Two Spirits, and the majority identified as gay (88%) or bisexual (12%)
• The majority were aged between 20 and 29 years
• The majority of Aboriginal and Torres Strait Islander participants were enrolled in SEQ, in particular the Brisbane metropolitan area through the community GP study site which provides an Aboriginal and Torres Strait Islander LGBTI health promotion program.
Barriers and Enablers to PrEP Uptake for Aboriginal and Torres Strait Islander Peoples

• A number of AHWs commented that they did not know enough about PrEP to start talking to their communities.

• Clinicians and AHWs emphasised that levels of knowledge and awareness of HIV, sexual health are low among Aboriginal and Torres Strait Islander communities and shrouded in taboo, misunderstanding, fear, shame and the belief that HIV and other STIs are not their problem.

• “How are you going to relate as a health worker if your knowledge is not brought up to speed about it [PrEP] as well. Like end of the day they’re going to be doing all the delivery within their communities and doing all that ground work and…. arming them with the right tools would definitely be beneficial”

• Gay-identifying and “metropolitan” Aboriginal and Torres Strait Islander men do talk about HIV. However, there is a need to talk to the broader Aboriginal and Torres Strait Islander community about HIV and PrEP,

• Education and support for Heath workers, clinicians and community is a priority.

QPrEPd – Site Implementation
Current 11-Jun-18

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<th>Work Done to Date Enrolled</th>
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<th>QPrEPd Only Enrolled</th>
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Discussion

• PrEP for the non-white MSM communities
• PrEP on the PBS
## QPrEPd – Site Implementation

**11-Jun-18**

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QPrEPd-X with 3 bottles after 1 April have been removed.
Contemporary ARV treatment

- What’s new and what’s in the pipeline
- Dual combination therapy
- Party drugs & ARV treatment

Presenters
Dr Andrew Redmond,
Royal Brisbane Women’s Hospital
CONTEMPORARY HIV TREATMENT

Andrew Redmond
HIV and Wellness Workshop
Brisbane June 2018

DISCLOSURES

- Metro North HHS employee – Senior Staff Specialist
- QPP – Clinical oversight of RAPID
## OUTLINE

- What’s new and in the pipeline
- Dual combination therapy
- Party drugs and ARV treatment

## THE PIPELINE: CURRENT STATE

<table>
<thead>
<tr>
<th>NRTI</th>
<th>NNRTI</th>
<th>PI</th>
<th>INSTI</th>
<th>“Entry” inhibitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abacavir</td>
<td>Efavirenz</td>
<td>Atazanavir</td>
<td>Raltegravir</td>
<td>Enfuvirtide: fusion inhibitor</td>
</tr>
<tr>
<td>Tenofovir</td>
<td>Nevirapine</td>
<td>Darunavir</td>
<td>Elvitegravir</td>
<td>Maraviroc: CCR5 inhibitor</td>
</tr>
<tr>
<td>Emtricitabine</td>
<td>Rilpivirine</td>
<td>Indinavir</td>
<td>Dolutegravir</td>
<td></td>
</tr>
<tr>
<td>Lamivudine</td>
<td>Etravirine</td>
<td>Lopinavir</td>
<td>Bictegravir</td>
<td></td>
</tr>
<tr>
<td>Stavudine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zidovudine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ritonavir</td>
</tr>
</tbody>
</table>
THE PIPELINE: NEAR FUTURE

- **Bictegravir**
  - FDA-approved – daily, with or without food
  - Active *in vitro* vs InSTI-resistant virus
  - Low predicted potential for DDI
  - 2 RCT of treatment-naïve PLHIV
    - Non-inferiority in both
    - No InSTI resistance in either


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**BIC/FTC/TAF FDA Approved: March 2018**

- Once-daily single-tablet regimen with novel, unboosted INSTI

<table>
<thead>
<tr>
<th>Indications</th>
<th>Key US Label Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>For treatment-naïve patients</td>
<td></td>
</tr>
<tr>
<td>For patients with HIV-1 RNA &lt; 50 copies/mL for ≥ 3 mos, no history of treatment failure, and no resistance to regimen components</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key DDIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraindicated with rifampin, doxetilide</td>
</tr>
<tr>
<td>May increase metformin concentrations</td>
</tr>
<tr>
<td>Polyvalent cation-containing supplements/medications (including antacids) may decrease BIC concentration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special populations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not recommended for patients with estimated CrCl &lt; 30 mL/min</strong></td>
</tr>
</tbody>
</table>

- BIC only available in combination STR; not approved for use with other ARVs


Slide credit: clinicaloptions.com
LESS NEAR FUTURE: CABOTEGRAVIR

- Similar structure to dolutegravir
- Oral form and nanoformulation for IM
- IM T½ = 21-50 days
- LATTE-II study with treatment-naïve
- Oral CAB/KVX vs IM CAB/RPV q4w vs q8w
- Similar outcomes – phase III underway
- PrEP – phase II study – lots of ISR
- Phase 2/3 underway – IM CAB vs TDA

MK-8591

- Reverse transcriptase inhibitor
- Adenosine analogue
- Chain terminator - NRTTI
- Active orally and parenterally
- Active vs HIV 1+2, vs drug R strains
- Single oral dose weekly
- IM dose q 6 months?
- Treatment/prophylaxis

Single oral doses of MK-8591 as low as 0.5 mg lead to HIV-1 suppression in treatment-naïve subjects

- Mutant screening in post-treatment samples negative in all subjects with sufficient VL for testing (1T)
- All dose levels led to robust VL decline after one-time administration
NNRTI: DORAVIRINE (MK-1439)

- Has undergone phase III trials
- Potent at low doses
- Active vs strains with common mutations – 103N, 181C, 190A, 138K
- Metabolized by CYP3A4 but neither inhibits nor induces enzymes
- 2 RCT in treatment-naïve participants vs comparator
  - EFV – both with TDF/FTC


**Figure 1.** Rates of virologic suppression among treatment-naïve HIV-infected individuals treated with coformulated (indicated with a •) doravirine/tenofovir disoproxil fumarate (TDF)/famvirudine or efavirenz/TDF/emtricitabine in a phase III trial. CI indicates confidence interval. Adapted from Squires et al.14
NNRTI: DORAVIRINE (MK-1439)

- Has undergone phase III trials
- Potent at low doses
- Active vs strains with common mutations – 103N, 181C, 190A, 138K
- Metabolized by CYP3A4 but neither inhibits nor induces enzymes
- 2 RCT in treatment-naive participants vs comparator
  - EFV – both with TDF/FTC
  - DRV/r – both with 2 nRTI
- Non-inferior in both studies
- Drug discontinuation rates similar in both studies

Molina JM et al, Lancet 2018
ENTRY INHIBITORS

CD4-ATTACHMENT INHIBITION: FOSTEMSAVIR

- Prodrug of tenofovir
- Small molecule – binds gp120
- Being evaluated with BD dosing
- Exposure reduced with rifampicin
- Possible DDI with statins
- Not active vs HIV-2
- Mutations in gp120 = reduced activity
- Side effects so far: headache, nausea, vomiting, diarrhoea, fatigue, weakness, lack of energy
- Ongoing phase 3 for salvage
TMB-311: Ibalizumab in Pretreated Patients Infected With Multidrug-Resistant HIV

- **Ibalizumab**: humanized mAb to CD4 receptor that blocks HIV entry into CD4+ T-cells\[1\]
  - FDA approved March 2018 as IV injection for heavily treatment–experienced adults with multidrug-resistant HIV infection and virologic failure
- Single-arm, open-label phase III trial in patients on a failing regimen (N = 40)\[2,3\]

Patients with HIV-1 RNA > 1000 c/mL; on ART ≥ 6 mos, on stable ART ≥ 8 wks; resistant to ≥ 1 ARV from 3 classes, sensitive to ≥ 1 ARV for OBR (N = 40)

**Control Period:** Day 0-7
**Primary Endpoint:** Day 14
**Wk 25**

- Ibalizumab 2000 mg IV Day 7 (loading dose)
  - Continue Failing ART Days 0-14
- Ibalizumab 800 mg IV Day 21, Q2W (maintenance dose)
  - Switch to OBR Day 14


Slide credit: clinicaloptions.com
### TMB-301: Ibalizumab Efficacy at Wk 24

<table>
<thead>
<tr>
<th>Virologic Outcome</th>
<th>Ibalizumab + Optimized Background Regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 1.0 log_{10} HIV-1 RNA decrease, %</td>
<td>55</td>
</tr>
<tr>
<td>≥ 2.0 log_{10} HIV-1 RNA decrease, %</td>
<td>48</td>
</tr>
<tr>
<td>HIV-1 RNA &lt; 50 copies/mL, %</td>
<td>43</td>
</tr>
<tr>
<td>HIV-1 RNA &lt; 200 copies/mL, %</td>
<td>50</td>
</tr>
<tr>
<td>Mean HIV-1 RNA decrease from BL, log_{10}</td>
<td>1.6</td>
</tr>
</tbody>
</table>

- Deaths, n = 4 (all unrelated to study drug); discontinuations due to drug-related AE, n = 1 (IRIS); no infusion-related AEs

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### Pegu et al. CROI 2018 abstract 113LB. Continued

**TRISPECIFIC ANTIBODIES IN ANIMALS WITH ACUTE INFECTION**

*Developed novel trispecific Ab that targets three different epitopes on HIV-1 envelope*

*These trispecific Abs display close to 100% breadth and very high potency (IC50 < 0.1 μg/ml)*

*Trispecific Abs have in vivo PK profile similar to parental bnAbs*

*Trispecific Abs provide complete protection to animals from mixture of SHIVs compared to partial protection provided by single bnAbs*

- Developed in collaboration with Sanofi
- Advancing to phase 1b for safety evaluation

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*Fisher exact test, p = 0.0058*

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SWITCH STUDY – SUPPRESSED PATIENTS TO DRV/CObI/TAF/FTC - STR

Orkin C et al, Lancet 2018

DUAL ART

· Why?
· When?
· What?
WHY?

- Early studies of dual NRTI failed
- Now better drugs, better PK
- Toxicities have been a big problem
  - NRTI-sparing – tenofovir, abacavir
  - PI-sparing – drug interactions, side effects, lipodystrophy
- Cost

WHEN?

1. At initiation
2. In maintenance phase
TREATMENT SIMPLIFICATION

For patients with viral suppression

SWORD 1 & 2: Switch From Suppressive ART to DTG + RPV in Patients With No Previous VF

- Randomized, open-label phase III trials of virologically suppressed patients with no previous virologic failure switched to DTG + RPV or continued baseline ART (N = 1024; 70% to 73% of patients receiving TDF at baseline)


Virologic Efficacy, Wk 48

Treatment Difference (95% CI)

DTG/RPV FDA Approved for Maintenance Therapy: November 2017

- Once-daily single-tablet regimen of DTG/RPV
  - First 2-drug STR approved by FDA for use as a complete regimen in the US

Key US Label Information

| Indication                  | For patients who have been virologically suppressed for ≥ 6 mos
|                            | Patients must have **no history of treatment failure** and no resistance to DTG or RPV
| Administration requirements | Must be taken with a meal
| Key DDIs                   | Separate dose of DTG/RPV and antacid/polyvalent cation–containing medications
|                            | **Avoid PPIs** (eg, omeprazole, pantoprazole)
| Dose adjustments           | None required for patients with mild/moderate renal impairment; in patients with CrCl < 30 mL/min, increase monitoring for AEs
| DHHS                       | Consider when NRTIs not desirable


OLE: STABLE PATIENTS ON LPV/R + 2X NRTI → LPV/R/3TC

- 250 patients – no sig difference in VF
- No increase in low level viraemia

Arribas JR et al, Lancet 2015
**DUAL-GESIDA 8014: Switching to DRV/RTV + 3TC From Triple Therapy**

- Open-label, randomized, noninferiority trial of virologically suppressed patients switched to DRV/RTV + 3TC or continued DRV/RTV + ABC/3TC or FTC/TDF
- DRV/RTV + 3TC noninferior to triple therapy for maintenance of virologic suppression through 48 wks (noninferiority margin: 12%)

<table>
<thead>
<tr>
<th>Outcome at Wk 48</th>
<th>Switch to Dual Therapy (n = 126)</th>
<th>Continue Triple Therapy (n = 123)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV RNA &lt; 50 c/mL (ITT FDA Snapshot), %</td>
<td>89</td>
<td>93</td>
</tr>
<tr>
<td>HIV RNA &lt; 50 c/mL in all study visits, %</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>Genotypic resistance, n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• PI</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>• NRTI</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>D/c due to AEs, %</td>
<td>0.8</td>
<td>1.6</td>
</tr>
</tbody>
</table>

*Treatment difference: -3.8 (95% CI: -11 to 3.4).


**ASPIRE: DTG + 3TC Maintenance Therapy**

- DTG + 3TC as effective as standard 3-drug therapy (blips, n = 1)
  - Virologic failure, n = 1 in each arm
  - No emergence of resistance
- CD4+ cell count gain was similar
- Both regimens well tolerated
  - D/c due to AE: dual therapy, n = 1
  - Similar changes in lipids and CrCl

Fully powered phase III TANGO enrolling

**LATTEN-2: Maintenance Therapy With Cabotegravir IM + RPV IM**

- Multicenter, open-label phase IIb study comparing continuation of oral CAB + ABC/3TC vs switching to IM CAB + RPV Q4W or Q8W (after induction with oral CAB + ABC/3TC)\[1\]

**Virologic Outcomes**

<table>
<thead>
<tr>
<th>HIV-1 RNA &lt; 50 c/mL (%)</th>
<th>Q8W IM CAB + RPV (n = 115)</th>
<th>Q4W IM CAB + RPV (n = 115)</th>
<th>Oral CAB + ABC/3TC (n = 56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virologic Success</td>
<td>94</td>
<td>87</td>
<td>84</td>
</tr>
<tr>
<td>Virologic Nonresponse</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>No Virologic Data</td>
<td>2</td>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>

Fully powered phase III ATLAS, FLAIR (every month)\[2,3\] and ATLAS-2M (every 2 months)\[4\] enrolling

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**RAL/MVC**

- **No nuc No boost**
- Treatment naïve patients (34) started on TDF/FTC/MVC/RAL
- For those suppressed at 24 wks (32), left on MVC/RAL (bd) (88% suppressed)
- **ROCN/RAL**
- Patients with VS and lipodystrophy
- Switch from successful Rx to RAL/MVC
- 7/44 failed – 5 with VF, 2 with SAE (82%)
  - 3/5 developed RAL mutations

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TREATMENT INITIATION

In comparison with treatment-experienced PLHIV

- Less likely to have
  - Mutations
  - Other medical problems
  - Other medications

- Not “trained” in treatment adherence

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**Dual Therapy With Boosted PIs in ART-Naive Patients**

**NEAT: DRV/RTV + RAL vs DRV/RTV + TDF/FTC[^1]**

- Randomized, open-label phase III noninferiority trial (N = 805)

<table>
<thead>
<tr>
<th></th>
<th>DRV/RTV</th>
<th>TDF/FTC + DRV/RTV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>17.8</td>
<td>13.8</td>
</tr>
<tr>
<td>BL HIV-1 RNA &lt; 100,000 c/mL</td>
<td>7.4</td>
<td>7.3</td>
</tr>
<tr>
<td>BL HIV-1 RNA &gt; 100,000 c/mL</td>
<td>36.8</td>
<td>27.3</td>
</tr>
<tr>
<td>CD4+ cell count &lt; 200 cells/mm[^3]</td>
<td>43.2</td>
<td>20.9</td>
</tr>
<tr>
<td>CD4+ cell count ≥ 200 cells/mm[^3]</td>
<td>13.7</td>
<td>12.3</td>
</tr>
</tbody>
</table>

Adjusted Difference in Proportions of Failure at Wk 96, % (95% CI)

- Interaction test $P = .010$

**GARDEL: LPV/RTV + 3TC vs LPV/RTV + 2 NRTIs[^2]**

- Randomized, open-label phase III noninferiority trial (N = 416)

**HIV-1 RNA < 50 copies/mL**

- Difference: 4.6% (95% CI: -2.2% to 11.8%; $P = .171$)

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Slide credit: clinicaloptions.com
**ACTG A5353: Pilot Study of Dolutegravir + Lamivudine in Treatment-Naive Patients**

- Single-arm, 52-wk phase II study (N = 120)[1]
  - HIV-1 RNA ≥ 1000 to < 500,000 c/mL; no PI, INSTI, or reverse transcriptase resistance; no active HBV infection
  - Median age, 30 yrs; male, 87%; median CD4+ cell count, 387 cells/mm³; median HIV-1 RNA, 4.61 log₁₀ copies/mL
- Primary efficacy outcome
  - 90% achieved HIV RNA < 50 copies/mL at Wk 24 (FDA Snapshot)
- No discontinuations due to AEs

**Virologic Outcomes at Wk 24[1]**

<table>
<thead>
<tr>
<th>Outcome, %</th>
<th>BL HIV-1 RNA, c/mL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; 100,000 (N = 37)</td>
</tr>
<tr>
<td>HIV-1 RNA &lt; 50 c/mL</td>
<td>89</td>
</tr>
<tr>
<td>Virologic nonsuccess</td>
<td></td>
</tr>
<tr>
<td>HIV-1 RNA ≥ 50 c/mL</td>
<td>8</td>
</tr>
<tr>
<td>D/c for other reasons while HIV-1 RNA ≥ 50 c/mL</td>
<td>0</td>
</tr>
</tbody>
</table>


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**ALTAS-M: PLHIV WITH VS ON ATV/R+ 2NRTI – RANDOMIZED TO CONTINUE OR ATV/R + 3TC**

[Graph showing outcomes]
SALT: PLHIV WITH VS ON FIRST REGIMEN RANDOMIZED TO ATV/R PLUS 2 NRTI OR 3TC

- 286 patients
- VF: 9 in 2 drug arm, 5 in 3 drug arm (p=0.26)

Perez-Molina JA et al, JAC 2017

PARTY DRUGS AND ART

- Licit and illicit drugs
- Rates of use
- Drug interactions
- Options
LICIT DRUG USE

- Alcohol - 30% report >4 drinks at least weekly (23% monthly, 25% 6 monthly)
- Tobacco – 2-3 x that of the general community
- Prescription drugs – which ones?

1. Lee E et al GCPS 2017,

ILLICIT DRUG USE

Table 24: Recreational drug use among all men in the six months prior to the survey

<table>
<thead>
<tr>
<th>Drug Type</th>
<th>2013 n (%)</th>
<th>2014 n (%)</th>
<th>2015 n (%)</th>
<th>2016 n (%)</th>
<th>2017 n (%)</th>
<th>Change from 2016 (p-value)</th>
<th>Trend over time (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis</td>
<td>338 (30.6)</td>
<td>450 (29.7)</td>
<td>523 (28.4)</td>
<td>557 (30.6)</td>
<td>669 (32.2)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Amyl nitrite (poppers)</td>
<td>399 (36.2)</td>
<td>503 (33.2)</td>
<td>614 (33.3)</td>
<td>581 (31.0)</td>
<td>714 (34.2)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>189 (17.1)</td>
<td>197 (13.0)</td>
<td>261 (14.2)</td>
<td>253 (13.9)</td>
<td>313 (15.1)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Amphetamine (speed)</td>
<td>114 (10.3)</td>
<td>131 (8.7)</td>
<td>134 (7.3)</td>
<td>129 (7.1)</td>
<td>124 (6.0)</td>
<td>ns</td>
<td>Decrease &lt;.001</td>
</tr>
<tr>
<td>Crystal methamphetamine</td>
<td>126 (11.4)</td>
<td>153 (10.1)</td>
<td>168 (9.0)</td>
<td>162 (8.9)</td>
<td>173 (8.3)</td>
<td>ns</td>
<td>Decrease &lt;.01</td>
</tr>
<tr>
<td>Viagra</td>
<td>203 (18.4)</td>
<td>262 (17.3)</td>
<td>304 (16.5)</td>
<td>338 (18.6)</td>
<td>382 (18.4)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Cocaine</td>
<td>101 (9.2)</td>
<td>124 (8.2)</td>
<td>184 (10.0)</td>
<td>153 (8.4)</td>
<td>251 (12.1)</td>
<td>Increase &lt;.001</td>
<td>Increase &lt;.01</td>
</tr>
<tr>
<td>Ketamine (special K)</td>
<td>39 (3.5)</td>
<td>38 (2.5)</td>
<td>37 (2.0)</td>
<td>46 (2.5)</td>
<td>75 (3.6)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>GHB</td>
<td>63 (5.7)</td>
<td>65 (4.3)</td>
<td>72 (3.9)</td>
<td>80 (4.4)</td>
<td>109 (5.2)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Heroin</td>
<td>15 (1.4)</td>
<td>10 (0.7)</td>
<td>8 (0.4)</td>
<td>9 (0.5)</td>
<td>12 (0.6)</td>
<td>ns</td>
<td>Decrease &lt;.05</td>
</tr>
<tr>
<td>Steroids</td>
<td>-</td>
<td>31 (2.1)</td>
<td>37 (2.0)</td>
<td>31 (1.7)</td>
<td>37 (1.8)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Other drugs</td>
<td>70 (6.4)</td>
<td>108 (7.1)</td>
<td>124 (6.7)</td>
<td>119 (6.5)</td>
<td>135 (6.5)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Total (not mutually exclusive)</td>
<td>1,103</td>
<td>1,515</td>
<td>1,842</td>
<td>1,819</td>
<td>2,079</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RISKS OF PARTY DRUG USE

- High risk sexual practice
- STI
- Legal consequences
- Social consequences
- Poor adherence to cART – failure of therapy, emergence of resistance
- Drug interactions
- Death
DRUG-DRUG INTERACTIONS

- Most via inhibition or induction of
  - Cytochrome p450 enzymes
  - Phase II enzymes (e.g. glucuronidation)
  - Cellular transporter/extrusion proteins
- Extent of interaction varies with route of admin – IV, rectal, oral, nasal, smoking

CYTOCHROME P450

- Group of enzymes – mostly in liver, also small intestine – involved in drug metabolism
- ~50 in humans
- Main ones:
  - CYP3A4
  - CYP2D6
  - CYP2C9
  - CYP2C19
**Table 1.**
Inhibitory and inducing effects of ritonavir and cobicistat on cytochromes and drug transporters \(^{3A,10-12}\)

<table>
<thead>
<tr>
<th>Cytochrome</th>
<th>ritonavir</th>
<th>cobicistat</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYP1A2</td>
<td>&gt;25</td>
<td>&gt;25</td>
</tr>
<tr>
<td>CYP2B6</td>
<td>2.9</td>
<td>2.8</td>
</tr>
<tr>
<td>CYP2C8</td>
<td>2.8</td>
<td>&gt;25</td>
</tr>
<tr>
<td>CYP2C9</td>
<td>4.4</td>
<td>&gt;25</td>
</tr>
<tr>
<td>CYP2C19</td>
<td>&gt;25</td>
<td>&gt;25</td>
</tr>
<tr>
<td>CYP2D6</td>
<td>2.8</td>
<td>9.2</td>
</tr>
<tr>
<td>CYP3A4</td>
<td>0.11</td>
<td>0.15</td>
</tr>
</tbody>
</table>

**Predominant metaboliser**

<table>
<thead>
<tr>
<th></th>
<th>2D6</th>
<th>3A4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystal meth</td>
<td>Ketamine</td>
<td></td>
</tr>
<tr>
<td>MDMA</td>
<td>Benzodiazepines</td>
<td></td>
</tr>
<tr>
<td>Mephedrone</td>
<td>PDE-i</td>
<td></td>
</tr>
</tbody>
</table>

Marzolini C et al, JAC 2016
EFAVIRENZ

- EFV induces 3A4 – so if switching off EFV – patients used to using high doses of ketamine, benzodiazepines or phosphodiesterase inhibitors should plan to use smaller doses

OPTIONS

- Not using boosters if possible
- Cobi safer than RTV for some recreational drugs (but not all)
WHAT DID WE COVER?

1. Pipeline
2. Dual cART
3. Recreational drugs and cART
Transgender people
HIV prevention treatment and care

Presenters
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Transgender People – HIV Prevention, Treatment & Care

Presented by Dylan Barrett

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Trans 101

- Transgender is an umbrella term where your gender expression/identity isn’t the same as your sex assigned at birth.
- Not all trans people will undergo hormone therapy or have surgery, that doesn’t make someone less trans than someone who does.
- Avoid misgendering and use correct pronouns
Trans HIV Statistics

• Very little data on transgender people.
• HIV prevalence amongst transwomen is higher than transmen, however very little is known about transmen and their HIV vulnerability.
• Transgender people worldwide are 49 times more at risk of living with HIV compared to the general population.

Trans HIV Statistics II

• Up to 4% of HIV positive people within Australia may be trans.
• American statistics state that during 2015, the percentage of trans people who had received a new HIV diagnosis were more than 3 times higher than the national average.
What increases HIV risk amongst Trans people?

- Social & Economic exclusion
- Stigma & discrimination
- Transphobia
- Sex work (Including high risk sex)
- Lack of Trans inclusive services
- Lack of education and safer sex information

HIV Prevention

- Greater education is needed towards the transgender population in regards to HIV prevention.
- Many within the trans community think they aren’t at a high risk of contracting an STI, let alone HIV.
- Transgender people were not listed as a priority population in the last National HIV Strategy.
What Helps With HIV Prevention

• Introduction of PrEP.
• Targeted Transgender health promotion messages.
• Greater transgender visibility within LGBTI health services.

Barriers to HIV Prevention

• Not enough transgender people knowing their HIV status and getting regular checks.
• Transgender men & women haven’t been targeted previously by health promotion messages.
• Lack of inclusive transgender sexual health services.
Treatment

• HIV treatment is the same for transgender people, however extra care needs to be taken around medication interactions. (See University of Liverpool drug interaction checker)
• Inclusive language should always be used when talking to a transgender person about treatment.

Barriers To Treatment

• Social Isolation
• Low income/no income
• Transphobia
• Previous Bad Experiences
• Poor Mental Health
Care

- Inclusive language and terminology should always be used in care.
- A basic understanding of transgender wellbeing and mental health needs, as they often differ from other LGBI people.

Barriers To Care

- The barriers to care are very similar to the barriers of treatment.
- Fear of stigma and discrimination.
- Often have unmet needs as mainstream services aren’t trans inclusive which will lead to poorer health outcomes
Australian Trans HIV Study

Charles Darwin University researchers are seeking transgender Australians living with HIV to share their post-diagnosis psychosocial and medical experiences.

The new study will explore issues including the transgender population’s healthcare access, and investigate if stigma attached to HIV, coupled with being trans, amplifies discrimination.

The study will also explore how a diagnosis affects personal relationships.

Principal investigator Dr Belinda Chaplin said up to four per cent of HIV positive people in Australia may be trans and gender diverse, but information about their experiences was insufficient to guide tailored healthcare or inform wellbeing support services.

“The HIV conversation almost always focuses on gay and bisexual men, injecting drug users, heterosexual contact, or a combination of these things,” Dr Chaplin said.

“There is no reliable information on cases of the disease among the Australian trans population.”

Dr Chaplin, a Nursing Lecturer, said the study would contribute knowledge and raise greater awareness of the social problems faced by trans and gender diverse people.

“The outcomes of this research will be driven by what people want to tell me,” she said. “If someone has something to say, their voice will be heard.”

Dr Chaplin said the most recent study suggested about 1.4 per cent of the global population identified as transgender and gender diverse, had considered undergoing gender transition, or had begun gender transition.

More than 37,000 Australians have been diagnosed with HIV since notifications began in 1984.

For more information or to participate in the study, T: 08 8946 6528 or E: belinda.chaplin@cdu.edu.au

In Conclusion

• Transgender people are at a higher risk of HIV transmission & often don’t know their status.

• Health promotion messages in the past have not been targeted to the transgender community.

• Transgender people should be a priority population.

• Inclusive services are required for ongoing treatment and care.
Thank You

Questions?