

Culture, Health & Sexuality



An International Journal for Research, Intervention and Care

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/tchs20

Developing critical HIV health literacy: insights from interviews with priority migrant communities in Queensland, Australia

Satrio Nindyo Istiko, Simeon Remata, Aimable Ndayizeye, Miguel Eduardo Valencia Moreno, Vanessa Kirunda, Olivia Hollingdrake, Richard Osborne, Jenny Zhengye Hou, Bridget Abell, Amy B. Mullens, Zhihong Gu, Joseph Debattista, Daniel Vujcich, Roanna Lobo, Gianna Parma, Chris Howard & Jo Durham

To cite this article: Satrio Nindyo Istiko, Simeon Remata, Aimable Ndayizeye, Miguel Eduardo Valencia Moreno, Vanessa Kirunda, Olivia Hollingdrake, Richard Osborne, Jenny Zhengye Hou, Bridget Abell, Amy B. Mullens, Zhihong Gu, Joseph Debattista, Daniel Vujcich, Roanna Lobo, Gianna Parma, Chris Howard & Jo Durham (10 Nov 2023): Developing critical HIV health literacy: insights from interviews with priority migrant communities in Queensland, Australia, Culture, Health & Sexuality, DOI: 10.1080/13691058.2023.2265960

To link to this article: https://doi.org/10.1080/13691058.2023.2265960

9	© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
	Published online: 10 Nov 2023.
	Submit your article to this journal 🗷
ılıl	Article views: 642
Q ^L	View related articles 🗷
CrossMark	View Crossmark data ☑



3 OPEN ACCESS



Developing critical HIV health literacy: insights from interviews with priority migrant communities in Queensland, Australia

Satrio Nindyo Istiko^{a,b} , Simeon Remata^{c,d}, Aimable Ndayizeye^a, Miguel Eduardo Valencia Moreno^a, Vanessa Kirunda^a, Olivia Hollingdrake^e , Richard Osborne^f, Jenny Zhengye Hou^g , Bridget Abell^{a,h} , Amy B. Mullensⁱ , Zhihong Gu^j, Joseph Debattista^k, Daniel Vujcich^l , Roanna Lobo^l, Gianna Parma^m, Chris Howard^c and Jo Durham^a ,

^aFaculty of Health, School of Public Health and Social Work, Queensland University of Technology, Brisbane, Queensland, Australia; ^bFaculty of Medicine, School of Public Health, The University of Queensland, Brisbane, Queensland, Australia; ^cQueensland Positive People, Brisbane, Queensland, Australia; ^dACON, Sydney, New South Wales, Australia; ^eSchool of Nursing, Queensland University of Technology, Brisbane, Queensland, Australia; ^fDepartment of Health and Medical Sciences, School of Health Sciences, Swinburne University of Technology, Hawthorn, Victoria, Australia; ^gFaculty of Creative Industries, Education, and Social Justice, School of Communication/Digital Media Research Centre, Queensland University of Technology, Brisbane, Queensland, Australia; haustralia; haustrali

ABSTRACT

In Australia, surveillance data establish that there are higher rates of late HIV diagnoses among heterosexual migrants from Sub-Saharan Africa and new HIV diagnoses among gay and bisexual men (GBM) from Southeast and Northeast Asia and Latin America, Together, these groups are identified as priority migrant communities in current efforts to eliminate HIV transmissions. HIV health literacy is recognised as a key means of improving access to services and health outcomes. This qualitative paper explores critical HIV health literacy among priority migrant communities in Queensland, Australia. To foreground community voices, peer researchers from priority migrant communities participated in the project design, data collection and analysis, with 20 interviews completed. The findings demonstrate how participants' engagement with HIV health information and services is highly relational and situated within the framework of sexual health and wellbeing. Participants strategically selected where to seek information and who they trusted to help them appraise this information. They further demonstrated reflective capacities in identifying the contextual barriers that inhibit the development of their HIV health literacy. The findings highlight the need for HIV health promotion strategies that embrace a sex positive approach, promote cultural change, and involve collaboration with general practitioners (GPs).

ARTICLE HISTORY

Received 13 March 2023 Accepted 28 September 2023

KEYWORDS

HIV; migrants; HIV health literacy; critical health literacy; Australias

Introduction

Australia's public health response to human immunodeficiency virus (HIV) has been widely lauded (Marukutira et al. 2018). Effective as Australia's response has been, there are significant inequities in access across the HIV care continuum. In 2021, Australian notification rates for newly acquired HIV were higher among people from Latin America (6.1 per 100,000), Northeast Asia (1.8 per 100,000), and Southeast Asia (8.3 per 100,000) (Kirby Institute 2022). This trend was driven by HIV transmission among gay, bisexual, and other men who have sex with men (GBM) (Blackshaw et al. 2019; Gunaratnam et al. 2019). Meanwhile, higher rates of late diagnoses from 2017 to 2021 have been identified among heterosexual people (n=796 men and 304 women) of Sub-Saharan African background (67 men and 60 women) (Kirby Institute 2022). Due to this trend of late diagnosis, they are more likely to have delayed viral suppression (Marukutira et al. 2020), with negative implications for health outcomes and onward transmission.

In Queensland, surveillance data demonstrate that among the newly diagnosed HIV cases between 2014 and 2018 (n = 206.5), 6% were born in Southeast Asia while 2.9% were born in Sub-Saharan Africa (Communicable Diseases Branch 2019). Unfortunately, recent HIV surveillance reports do not include region of birth information (see Communicable Diseases Branch (2023) as an example), creating a gap in the understanding of current HIV epidemiological trends in this state. However, based on the existing surveillance data at the national and Queensland levels, GBM from Asian and Latin American backgrounds and heterosexual Sub-Saharan African people are recognised as priority migrant communities in the *Eighth National HIV Strategy*, 2018–2022.

Inequities in access to HIV services are rooted in the social determinants of HIV that shape the distribution of power and resources, such as migration policies (Vearey 2012), socio-cultural and religious norms (Gray et al. 2021; Mullens et al. 2018), and HIV health literacy (National Association of People with HIV Australia 2022). Health literacy is a midstream determinant of health and while there are various definitions of health literacy (see Sørensen (2019) for a list of definitions), most contemporary definitions recognise that health literacy is '...the combination of personal competencies and situational resources needed for people to access, understand, appraise and use information and services to make decisions about health' (p. 79) (Bröder et al. 2018). The development of health literacy is influenced by the context in which people are required to use their health literacy skills (Pitt et al. 2019). Even where migrants have a high-level of health literacy, they may experience challenges in applying these skills in an unfamiliar environment or health system (Osborne et al. 2022).

Across the priority migrant communities in Australia, HIV health literacy skills are diverse and dynamic. Overseas born GBM tend to have the skills to gain knowledge about HIV and how to access sexual health services (Murray et al. 2020; Phillips et al. 2022; Walia et al. 2020), but they often face financial barriers in accessing biomedical prevention methods, such as pre-exposure prophylaxis (PrEP), due to their ineligibility to access Medicare – the national health insurance – that subsidises the cost of PrEP (Cornelisse et al. 2022; Phillips et al. 2022; Sudarto et al. 2022). Besides this, social practices among migrants that simultaneously maintain the ties with their home countries while integrating into the host countries (otherwise known as transnationalism)

can contribute to the maintenance of socio-cultural norms at family and ethnic communities levels (Villa-Torres et al. 2017). Some of these norms can constrain women and young people's agency to develop sexual health competencies (Gray et al. 2022; McMichael and Gifford 2010).

Among the resources and competencies that constitute health literacy, Nutbeam's concept of critical health literacy is increasingly recognised as central to maintaining health and preventing disease (Abel and Benkert 2022; Nutbeam and Lloyd 2021). Moving away from individual 'deficits', such as lack of knowledge and 'risk behaviours' (Kippax et al. 2013), critical health literacy refers to competency in reflecting and acting upon the ways power, socio-cultural norms, and societal inequalities influence their engagement with health information (Abel and Benkert 2022; Samerski 2019; WHO 2022). In this sense, critical health literacy may be understood as a resource embedded within social networks, constituted through social practices, and influenced by structural constraints (Samerski 2019). In the case of people from non-Western migrant backgrounds, this perspective is aligned with predominantly collectivist culture(s) (WHO 2022), providing useful knowledge for developing for culturally responsive interventions (Osborne et al. 2022). Drawing on the concept of critical health literacy, this paper examines how critical HIV health literacy is created and used in the everyday lives of priority migrant communities in Queensland, Australia.

Methods

This study was conducted as part of The Building HIV Health Literacy in Priority Migrant Populations project, implemented through a Consortium of diverse partners - universities, community organisations, and consumers – all with experience in HIV research and/or health literacy and a commitment to social justice. The approach drew on principles of decolonial epistemology in participatory research. Central to this epistemology was critical reflexivity, reciprocity and ensuring community voices and diverse ways of knowing were integrated throughout the research process (Gough et al. 2023; Osborne et al. 2022). The theoretical framework was based on ideas of health literacy as a multidimensional concept that includes social and cultural knowledge, practices and contexts (Nutbeam and Lloyd 2021; WHO 2022). Context here can include countries of origin and destination, culture, language, political influences, and health systems that influence the ways in which health literacy develops (Osborne et al. 2022).

To conduct this study, a project manager (SNI), a doctoral candidate, and four peer researchers (AN, VK, SR and MEVM) from the priority communities were recruited. Collaborative meetings helped facilitate co-learning and reflexivity. Of the four peer researchers, two identified as men, one as a woman, and one as non-binary. Their ages ranged from 30 to 46 years old. Three had experience of working in health and community services, and one in finance and hospitality. All were remunerated based on standard university rates and conditions.

Participant recruitment

Participants were recruited from peer researchers' networks through phone calls and e-mails. To reduce volunteer bias and maximise opportunities for a diverse sample, a combination of purposive, snowball sampling and a chain referral approach was used (Power 1994). The inclusion criteria reflected those of the priority communities and were: (a) aged 20 to 49 years old, and; (b) self-identifying as being an Asian-born and/or Latin American-born GBM, or a Sub-Saharan African born heterosexual.

All participants were living in Southeast Queensland. The sample size (N=20) was pre-determined based on pragmatic considerations of resource availability and experience, rather than stopping on reaching data saturation (Braun and Clarke 2021a). While most interviewers and participants were matched on gender, sexuality, and region of birth to minimise power imbalance, three intercultural interviews were also conducted with informed consent. AN, an African-Australian, man interviewed two women from Sub-Saharan African backgrounds. In these intercultural interviews, participants were recruited through interviewers' existing contacts with people from migrant backgrounds, contributing to high level of trust that helped minimise potential imbalances, such as gender power imbalance. Interviews were primarily conducted in the English language, with Spanish being used in some interviews with those from Latin America.

Data collection

Qualitative semi-structured interviews were conducted by peer researchers, based on the five domains of the Conversational Health Literacy Assessment Tool (CHAT) (O'Hara et al. 2018). They included a focus on: (1) supportive professional relationships; (2) supportive personal relationships; (3) health information access and comprehension; (4) current health behaviours; and (5) health promotion barriers and support. The final interview guide was piloted among the peer researchers, with interviews being conducted during July and August 2022.

Peer researchers commenced the interviews by introducing themselves, their backgrounds and role as peer researchers, locating themselves and participants within their community context. Interviews were audio-recorded and completed within 45–90 min. Informed consent was an iterative process with interviewers regularly checking on consent during the interviews. Audio interview recordings were transcribed by a professional transcription service and provided to participants on request to confirm on-going consent. An AUD 40 honorarium was given to participants in recognition of their time and lived expertise.

Data management and analysis

Reflexive thematic analysis, an interpretative approach to qualitative data analysis (Braun and Clarke 2021b), was utilised for analysis. Initially, SNI, JD and the peer researchers familiarised themselves with the data by reading the transcripts several times, highlighting sections of the text, or making notes in the margins. Informed by the five CHAT domains, data were manually coded using a collaborative, recursive and reflexive approach to achieve rich interpretations of meaning, rather than consensus of meaning. To support the manual coding process, mind mapping using the CHAT domains was used to generate semantic and latent coding. To develop themes, a predominantly inductive approach was used, meaning that themes were driven by



the coding of the dataset, while also drawing on health literacy concepts (eg critical health literacy) to make sense of the codes with the intent of respecting the subjectivity of participants' accounts.

Ethical considerations

Ethical approval for the study was received from Queensland University of Technology Human Research Ethics Committee (#5271).

Results

Twenty-one participants were recruited, and one participant was excluded because she was an Asian-born woman. Of the twenty included participants, six identified as heterosexual women from Sub-Saharan African backgrounds, five as Asian-born GBM, five as Latin American GBM, and four as heterosexual men from Sub-Saharan African backgrounds. Participants' ages ranged from 25 to 45 years old. Participants length of stay in Australia ranged from 2 to 17 years. Participants' visa or immigration status varied but was reflective of the priority migrant populations. GBM participants were mostly on temporary visas and those from Sub-Saharan African backgrounds were predominantly permanent residents or Australian citizens. All participants lived in Southeast Queensland.

Key themes identified across the interviews were: (1) contextual and situational engagement with HIV health information; (2) relational strategies to appraise HIV health information, and (3) critical gaps in developing HIV health literacy. Together, these themes indicate the various facets of participants' critical HIV health literacy.

Contextual and situational engagement with HIV health information

Most participants viewed HIV as one component of their overall sexual health and wellbeing. From this perspective, participants predominantly engaged with HIV health information, not from a risk-based perspective, but using a sexual health and wellbeing lens, which included a focus on sexuality, sexual pleasure, safety and intimacy. As Mitchell et al. (2021) note, this perspective is embedded within the social and sexual relationships that form one's sexual life. Participants further spoke about how their sexual life was influenced by socio-cultural contexts. They explained, for example, the role of pharmaceutical advances, such as antiretroviral treatments, in changing the social construction and response to HIV, including decreasing stigma. This knowledge, developed through their lived experiences and broader transnational relationships, influenced their HIV health information seeking practices, as HIV had shifted from being a lethal, stigmatised disease to one that was integrated into their overall care for sexual health and wellbeing. In this way, participants also recognised that developing HIV health literacy was an ongoing process. For example, participants from Sub-Saharan African backgrounds reported HIV was no longer a 'death warrant'.

I grew up in a time where I wanna say the stigma wasn't as bad, but [at] the time I was becoming aware of [HIV]. People were more accepting of it. So, I feel like when I became aware of it, the stigma had sort of shifted because then people would openly talk about ARVs. And the benefits of, you know, living on ARVs and being able to live a, uh – a full life. So yeah, in my particular case [of not discussing HIV with my friends], I wouldn't tie it down to the stigma ... Sort of like [we discuss] more wellbeing, sexual health wellbeing. (V04, woman, born in Kenya)

In the context of sexual health and wellbeing, most participants reported situational engagement with HIV health information and services in Australia. In particular, participants described how their engagement with HIV health information was contingent upon the ebbs and flows of their sexual and intimate relationships. One GBM participant noted that while in a committed, monogamous relationship in his country of origin, he did not seek sexual health information, including for HIV. In Australia, however, his engagement in several sexual partnerships triggered the need to actively seek, process and use sexual health information, which subsequently influenced his HIV health literacy.

Most participants also said they preferred being in monogamous relationships. For Sub-Saharan African heterosexual participants, monogamy was constructed through ideas of faithfulness, religious commitment, reciprocal trust, and respectful sexual communications, including talking about sexual health and wellbeing. This construction of monogamy reflects both traditional and emerging socio-cultural and religious norms among Sub-Saharan African people (Green et al. 2019; Mpofu et al. 2014). One participant articulated that in the event that she or her partner acquire a sexually transmitted infection (STI), she would discuss it together in a respectful manner, with an awareness of the tendency to judge or stigmatise partners who had sexual encounter(s) outside of monogamous relationships.

[I talked to] my partner ... Maybe just about how best to deal with, um, say if a situation arose that one of us had an STI or an STD, how best to address it together without judging each other. But also, how then to solve the issue if someone has been unfaithful... And how best you would deal without being judgemental ... to keep me accountable to not being aggressive towards my partner. (V01, woman, born in Zimbabwe)

GBM participants tended to rely on their regular intimate partners, past and present, for informational and practical support. Some explained how their knowledge about HIV services had developed within their intimate relationships, confirming other research which identified the importance of intimate partners among GBM couples for managing HIV (Beougher, Gómez, and Hoff 2011) and general sexual health issues.

... one of my ex-partners, he told me about [the sexual health clinic]. He was like, 'Hey, I'm going to this hospital, which is very close to your place, so you should go and check'. (M05, man, born in Mexico)

Besides intimate partners, online platforms were also a source of sexual health information, including HIV, as discussed in other studies (Brennan et al. 2018). Perceptions on the quality of online information was varied, with some very trusting ('... Yes, I Google... just do research on Internet would be good' – A02, man, born in Burundi), others were more distrustful ('... you can't really trust Google' – A01, woman, born in Tanzania), while some were more cautious, cross-checking information with other sources ('I compare [information from] my GP ... [with] Uh the one of, uh Google. And if it's similar, I trust them [the online information]' – A04, man, born in Ethiopia).



Overall, participants reported that they developed their HIV health literacy within the context of their sexual health and wellbeing. To make their contextual understanding of HIV practical and relevant for their everyday sexual life, participants used relational strategies to appraise the information they had access to.

Relational strategies to appraise HIV health information

Participants mobilised their networks to discuss HIV health information by building partnerships with general practitioners (GPs) and activating literacy mediators in their family and communities.

Building partnerships with GPs

Considering that GPs play an important role in providing preventive health care and management of chronic conditions in Australia (Gordon et al. 2022), most participants invested time and efforts to build partnerships with GPs, which required self-advocacy and long-term collaboration strategies. Self-advocacy was integral to the process of finding a GP that matched their needs and preferences in health communication. Self-advocacy also included a focus on gender dynamics and perseverance in asking questions and expressing concerns to the GPs.

... But the trick to [find a GP] is just asking questions where you're not sure... like, always, always ask no matter what. And it depends on your relationships that you have with your doctor. Sometimes it could be gender, maybe you're female, the doctors are male, they're not understanding you. Ask for a different doctor... (A01, man, born in Tanzania)

Once the participants had found a GP that matched their needs and preferred ways of communicating clinical information, the dynamic between them and the GP became more collaborative. This collaborative relationship was critical to navigate some commonly identified challenges, such as language barriers (Gray et al. 2019, 2021).

My understanding of Australian English was at that moment, very fucking bad. And I start[ed] my [HIV] treatment with a British doctor, who actually was fucking wonderful ... it was pretty easy to talk with her... Actually I remember now the first moment when I came to the GP office, I request[ed] an interpreter, but after five minutes, because it was so easy to understand her, she say, 'Do you want to keep to talk with the interpreters? Because we can make the communication fluently between us. (M02, man, born in Colombia)

Collaboration often led to trust and critical discussion between the participants, as informed patients and their GPs. Their discussions were key to appraising online sexual health information in the context of a health system that differed to the one in their home countries. Furthermore, the discussions indicate the active strategies participants pursued in engaging with HIV health information.

I compare [online] information with my GP, because also you have the situation where despite there is the knowledge on the internet, you also have to face reality, and reality is like this bureaucracy... change depends on the country where you are. So, you need to consult that kind of information with your GP. (M02, man, born in Colombia)

Participants built their partnerships with local GPs to enhance their critical HIV health literacy. Self-advocacy and collaboration were identified as part of the process of building these partnerships. This process demonstrates participants' advanced social skills in developing HIV health literacy. However, participants also used other people within their social networks and the health system to understand HIV health information and navigate the health system.

Activating literacy mediators

Outside the clinical setting, most participants had specific people that they talked to about their health. Previous studies have referred to these actors who co-produce health knowledge as literacy mediators (Edwards et al. 2015; Samerski 2019). In the context of sexual health and HIV, there were two types of literacy mediators that the participants preferred: first, family and ethnic communities' members who were health professionals; and second, people who were living with HIV and/or had experience of being diagnosed with STIs.

Having family and ethnic community members who were health professionals enhanced access to health information and services. Participants expressed the ease in which they discussed health information by contacting people whom they shared similar lived experiences and had trusting relationships.

My GP... she was, um, South American as well, right? So, when you have the same culture and the same kind of background somewhat, you know, I feel like it's... you kinda trust them a bit more. (M04, man, born in Ecuador)

GBM participants acknowledged the importance of digesting clinical information *via* the experience of those who live with HIV or had been diagnosed with STIs. In Australia, this socialisation of clinical information had its origin within HIV social movements (Fitzgerald, Mutch, and Herron 2019; Kippax and Stephenson 2012) and further demonstrated to be desirable and useful practice in the context of sexual and reproductive health of migrants.

I had a friend. He had a lot of sexual partners... in Australia... he's got a lot of STD checks done in the past ... And he, he had most of them already as well. So whenever something happens, um, or I'm a bit skeptical, bit scared, let's put it that way, I have, so far, called him, reached out to him, and um he also referred me to that [community-based testing clinic] in [town]... (M04, man, born in Ecuador)

Both types of literacy mediators highlight the need to increase the diversity of health workforce so as to better support a peer model in HIV prevention and sexual health education. By discussing HIV health information using these relational strategies, participants also reflected on the gaps that needed to be addressed collectively to enhance their HIV health literacy.

Critical gaps in developing HIV health literacy

Many participants understood that developing HIV health literacy is an ongoing process and that there are contextual barriers and gaps they cannot address at an individual level. These barriers and gaps encompass socio-cultural norms at a

community level, GP training in HIV management at a service provision level, and the fragmented links between the health system and the educational system.

At a community level, heterosexual women participants from Sub-Saharan African backgrounds stressed the need to address intergenerational gaps in learning about HIV and sexual health. As previous studies in various Sub-Saharan African and refugee communities have highlighted (Dean et al. 2017a; McMichael and Gifford 2009), taboos about discussing sex, sexuality and sexual health in a family context have significant implications. One participant suggested that further exploration of parents' perspectives is needed.

The issue we have within the African community is that we can't talk to our parents about [sexual health]. And this lack of understanding between parents and, like, young people, and that's because they're not able to sit down and talk about sexual health. So, I would love to see this interview being conducted to parents... for them, not in this manner, but like in a manner where they could actually be able to talk to their children about this in a positive way. (A01, woman, born in Tanzania)

At a service provision level, GBM participants stressed the need to educate GPs about PrEP. Although GPs were identified as important partners, GPs' views on PrEP as part of primary care (Pleuhs et al. 2020; Rai, Ross, and Richardson 2021) and their views on diverse sexual practices with PrEP (Smith et al. 2021) were seen as influencing their communication with patients. In this study, GBM participants identified that accessing PrEP through GPs that have limited sexual health and HIV training may result in poor quality of sexual health care.

I went to the normal GP I just directly told him that I'm gay and that [I have] sexual partners. And then could you give me the PrEP? And then I took PrEP, which is a Truvada [early regimen to treat HIV, which is also used as PrEP] for the almost like three months then I feel like, 'Oh my God, three months later, my body still not tolerance that'.... And then he just told me that just don't take it if your body can't tolerate that. But that time, Descoyy [a more recently approved medication for PrEP] is already came out ... And I wonder if I started taking Descovy, I shouldn't get [HIV] at all. (S01, man, born in China)

Finally, at a systemic level, many participants saw the importance of better collaboration between the sexual health services and the educational sector. For an example, they identified English language schools as an important avenue to disseminate HIV and sexual health information, especially considering that many international students begin their life in Australia in these facilities (Robertson 2017).

I arrive as an English [language] student. So, I didn't have all the skills, listening, speaking, anything. So, for me the School, the English [language] school, ... need explain you where to go. Maybe in a short video, what to do. If you have a sexual problem, what to do. (M01, man, born in Colombia)

The three gaps across community, service provision and systemic levels above were barriers that participants could not overcome solely as individuals to enhance their HIV health literacy. Participants identified them with the intention of collaborating with researchers, policy makers, and services to achieve organisational, cultural and systemic change.

Discussion

This paper has explored HIV health literacy among priority migrant communities in Queensland, Australia. Participants' critical HIV health literacy was demonstrated by their need to situate HIV health information within the context of sexual health and wellbeing. In this context, engagement with HIV health information tended to be situational, depending on their intimate relationship status and practices, and their access to broader online sexual health information. To help turn their contextual understanding of HIV into practice, participants strategically chose who they trusted to analyse the HIV health information they had received. Their trusted allies included GPs and literacy mediators within their communities. Finally, participants demonstrated their reflective capacities by highlighting the limits of their HIV health literacy and signalling the gaps that need to be addressed at community, service, and systemic levels. These various aspects of engaging with HIV health information indicate the contextual, situational, relational and reflective nature of their critical HIV health literacy. These findings have implications for future health promotion practice.

First, some participants, such as those from Sub-Saharan African backgrounds, related their lack of engagement with HIV health information to their exposure to such information pre-migration and their desire to approach sexual activities away from a health risks discourse to one of sexual health and wellbeing. While this lack of engagement with HIV health information and services might contribute to late diagnosis (Kirby Institute 2022; Marukutira et al. 2020), the findings also emphasised the need to situate HIV health information within the narrative of sexual health and wellbeing that participants saw as meaningful (Gruskin et al. 2019; McDaid et al. 2021; Mitchell et al. 2021). For example, sexual health education should engage with sexual pleasure, intimacy, and healthy relationships (Gruskin et al. 2019) instead of focusing only on clinical information on HIV transmission and prevention. This health promotion strategy would generate resources that are relevant and desirable for priority migrant communities in Australia.

Second, health promotion practitioners should acknowledge conversations within families about sexual health and sex are considered shameful and taboo in some settings (Dean et al. 2017a; McMichael and Gifford 2009; Mullens et al. 2018). While not unique to migrant families, practitioners must, without being reductive, be sensitive to socio-cultural norms that influence how sexual health is constructed and discussed within a specific community. To avoid imposing Western understandings of sexual health and wellbeing (Sowemimo 2018), deliberative methods such as a community engagement approach to facilitate collaborative dialogue about complex issues (Gregory, Hartz-Karp, and Watson 2008), should be considered to discuss sexual health and wellbeing concerns with migrant parents. By using multiple experts as the source of diverse knowledge about the problems, deliberative methods, such as community panels, have been demonstrated to be helping in addressing health challenges from a social, ethical and legal perspective (Bombard et al. 2013; Degeling et al. 2020; Hassan et al. 2020).

Third, health promotion practitioners should pay attention to the centrality of GPs for priority migrant communities. This finding may explain why some migrants do

not trust newer methods such as HIV self-testing and peer-based HIV testing (Blondell et al. 2021). GP-patient relationships are highly valued and participants in this study went to great lengths to partner with the 'right' GP. Health promotion practitioners should focus their advocacy towards improving GPs' understanding of PrEP and HIV-related stigma to ensure that migrants are provided with multiple ways of preventing HIV (Kaladharan et al. 2021; Rai, Ross, and Richardson 2021; Smith et al. 2021). The health system must also dismantle some of the barriers that prevent people from non-Western backgrounds being recruited and retained within the healthcare workforce to enhance the heath literacy mediation that occurs within and beyond clinical settings. For an example, despite Australia being lauded as a multicultural country, whiteness remains the norm in Australian medical practice, the workforce and research (Mayes 2020).

Limitations and strengths

There are limitations to this study. Collaborating with peer researchers and having them interview the participants was important to gaining better understanding of participants' critical HIV health literacy. However, this does not necessarily mean that interviewees possessed the same lived experiences or ways of knowing the world. As such, the methodology could be strengthened by having a researcher experienced in interview techniques to collaborate with the peer researchers during data collection to support them in reflecting, clarifying, and probing into participants' responses. Despite this potential limitation, the peer researchers in this study had worked in health care and community services quite extensively, which contributed to detailed and meaningful findings.

The study attempted to analyse patterns in HIV health literacy across heterogenous populations in terms of ethnicity, gender, age, visa status, and language. Because of this, the findings may overlook nuances unique to each priority migrant population. In contrast, the study generated much needed understanding of HIV health literacy in a multicultural context, which can be translated into practice alongside other empirical evidence on the specific communities (see Blondell et al. 2021; Dean et al. 2017b). Using both approaches could contribute to a more pluralistic understanding of health literacy among migrant populations (Garad 2017).

Another potential limitation was the breadth of the CHAT tool that was designed for health care professionals to assist them in identifying health literacy support needs and barriers (O'Hara et al. 2018). CHAT does not cover the full range of factors that influence health literacy. In particular, some of the systemic issues and social determinants of health are overlooked. A broader focus on health literacy would have provided an opportunity for a more reflexive discussion regarding the role social determinants play for critical HIV health literacy.

Conclusion

Understanding critical HIV health literacy among priority migrant communities is essential to progress current efforts to virtually eliminate HIV transmission in Australia. Despite existing literature highlighting lack of knowledge and skills, the participants in this study demonstrate agency, capacity and competence to collaborate with health services and members of their communities. Future health promotion practitioners working within these communities should focus on sex positive approaches that shift away from the narrow focus on deficit in clinical understanding of HIV, promotes cultural change, and strengthens collaboration with the GPs. Further quantitative and qualitative research of relevance to the development of migrants' critical HIV health literacy, including via their collective actions to address social determinants of health, is critical to advancing the field.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

JD received funding from the 2021 Gilead Fellowship Research Grant program to conduct this study.

ORCID

Satrio Nindyo Istiko http://orcid.org/0000-0002-2337-0800 Olivia Hollingdrake http://orcid.org/0000-0002-1108-4567 Jenny Zhengye Hou http://orcid.org/0000-0003-0276-6344 Bridget Abell (i) http://orcid.org/0000-0002-1324-4536 Amy B. Mullens (b) http://orcid.org/0000-0002-0939-9842 Daniel Vujcich (i) http://orcid.org/0000-0003-4849-4444 Jo Durham (b) http://orcid.org/0000-0003-0544-9424

References

- Abel, T., and R. Benkert. 2022. "Critical Health Literacy: Reflection and Action for Health." Health Promotion International 37 (4): daac114. https://doi.org/10.1093/heapro/daac114
- Beougher, S. C., W. Gómez, and C. C. Hoff. 2011. "The Couple as Context: Latino Gay Male Couples and HIV." Culture, Health & Sexuality 13 (3): 299-312. https://doi.org/10.1080/136910 58.2010.528032
- Blackshaw, L. C. D., E. P. F. Chow, R. Varma, L. Healey, D. J. Templeton, A. Basu, D. Turner, et al. 2019. "Characteristics of Recently Arrived Asian Men Who Have Sex with Men Diagnosed with HIV Through Sexual Health Services in Melbourne and Sydney." Australian and New Zealand Journal of Public Health 43 (5): 424–428. https://doi.org/10.1111/1753-6405.12926
- Blondell, S. J., J. Debattista, M. P. Griffin, and J. Durham. 2021. "I Think They Might Just Go to the Doctor': Qualitatively Examining the (Un)acceptability of Newer HIV Testing Approaches Among Vietnamese-born Migrants in Greater-Brisbane, Queensland, Australia." Sexual Health 18 (1): 50-57. https://doi.org/10.1071/SH20064
- Bombard, Y., J. Abelson, D. Simeonov, and F.-P. Gauvin. 2013. "Citizens' Perspectives on Personalized Medicine: A Qualitative Public Deliberation Study." European Journal of Human Genetics: EJHG 21 (11): 1197–1201. https://doi.org/10.1038/ejhg.2012.300
- Braun, V., and V. Clarke. 2021a. Thematic Analysis. London: SAGE Publishing.
- Braun, V., and V. Clarke. 2021b. "To Saturate or Not to Saturate? Questioning Data Saturation as A Useful Concept for Thematic Analysis and Sample-size Rationales." Qualitative Research in Sport, Exercise and Health 13 (2): 201-216. https://doi.org/10.1080/215967 6X.2019.1704846



- Brennan, D. J., R. Souleymanov, N. Lachowsky, G. Betancourt, D. Pugh, and O. McEwen. 2018. "Providing Online-Based Sexual Health Outreach to Gay, Bisexual, and Queer Men in Ontario, Canada: Qualitative Interviews with Multisectoral Frontline Service Providers and Managers." AIDS Patient Care and STDs 32 (7): 282-287. https://doi.org/10.1089/apc.2018.0027
- Bröder, J., P. Chang, I. Kickbusch, D. Levin-Zamir, E. McElhinney, D. Nutbeam, O. Okan, et al. 2018. "IUHPE Position Statement on Health Literacy: A Practical Vision for A Health Literate World." Global Health Promotion 25 (4): 79-88. https://doi.org/10.1177/1757975918814421
- Communicable Diseases Branch. 2019. HIV in Queensland 2018. Brisbane: Queensland Health.
- Communicable Diseases Branch. 2023. "Notifications of Bloodborne Viruses and Sexually Transmissible Infections (BBVSTIs) in Queensland: 1 January-31 December 2022." Queensland Health. https:// www.health.qld.gov.au/__data/assets/pdf_file/0017/1175021/bbv-sti-quarterly-surveillance-2022.pdf
- Cornelisse, V. J., J. Armishaw, M. Catton, D. Murphy, and E. J. Wright. 2022. "Barriers to Accessing HIV Pre-exposure Prophylaxis for Medicare-ineligible People in Melbourne, Australia: Analysis of Patients Attending the PrEPMe Clinic." The Medical Journal of Australia 216 (6): 320-321. https://doi.org/10.5694/mja2.51455
- Dean, J., M. Mitchell, D. Stewart, and J. Debattista. 2017a. "Intergenerational Variation in Sexual Health Attitudes and Beliefs Among Sudanese Refugee Communities in Australia." Culture, Health & Sexuality 19 (1): 17-31. https://doi.org/10.1080/13691058.2016.1184316
- Dean, J. A., M. Mitchell, D. Stewart, and J. Debattista. 2017b. "Sexual Health Knowledge and Behaviour of Young Sudanese Queenslanders: A Cross-sectional Study." Sexual Health 14 (3): 254-260. https://doi.org/10.1071/SH16171
- Degeling, C., S. M. Carter, K. Dale, K. Singh, K. Watts, J. Hall, and J. Denholm. 2020. "Perspectives of Vietnamese, Sudanese and South Sudanese Immigrants on Targeting Migrant Communities for Latent Tuberculosis Screening and Treatment in Low-incidence Settings: A Report on Two Victorian Community Panels." Health Expectations: An International Journal of Public Participation in Health Care and Health Policy 23 (6): 1431-1440. https://doi.org/10.1111/hex.13121
- Edwards, M., F. Wood, M. Davies, and A. Edwards. 2015. "Distributed Health Literacy': Longitudinal Qualitative Analysis of the Roles of Health literacy Mediators and Social Networks of People Living with a Long-term Health Condition." Health Expectations 18 (5): 1180-1193. https:// doi.org/10.1111/hex.12093
- Fitzgerald, L., A. J. Mutch, and L. Herron. 2019. "Responding to HIV/AIDS: Mobilisation through Partnerships in A Public Health." In Succesful Public Policy, edited by J. Luetjens, M. Mintrom and P. Hart, 29-58. Canberra: ANU Press.
- Garad, R. M. 2017. "Health Literacy Driving Engagement in the Pluralist Context of Migrant Health in Australia." PhD diss., Deakin University.
- Gordon, J., H. Britt, G. C. Miller, J. Henderson, A. Scott, and C. Harrison. 2022. "General Practice Statistics in Australia: Pushing a Round Peg into a Square Hole." International Journal of Environmental Research and Public Health 19 (4): 1912. https://doi.org/10.3390/ijerph19041912
- Gough, K. V., I. Veléz-Torres, K. Ruette-Orihuela, J. Fayad, B. Bueno, G. Corredor, C. Escobar-Tello, et al. 2023. "Engaged Pedagogic Research: Transforming Societies through Co-learning and Social Action." Environment and Planning C: Politics and Space 41 (1): 109-129. https://doi. org/10.1177/23996544221116628
- Gray, C., G. Crawford, B. Maycock, and R. Lobo. 2021. "Socioecological Factors Influencing Sexual Health Experiences and Health Outcomes of Migrant Asian Women Living in 'Western' High-Income Countries: A Systematic Review." International Journal of Environmental Research and Public Health 18 (5): 2469. https://doi.org/10.3390/ijerph18052469
- Gray, C., G. Crawford, B. Maycock, and R. Lobo. 2022. "Exploring the Intersections of Migration, Gender, and Sexual Health with Indonesian Women in Perth, Western Australia." International Journal of Environmental Research and Public Health 19 (20): 13707. https://doi.org/10.3390/ ijerph192013707
- Gray, C., R. Lobo, L. Narciso, E. Oudih, P. Gunaratnam, R. Thorpe, and G. Crawford. 2019. "Why I Can't, Won't or Don't Test for HIV: Insights from Australian Migrants Born in Sub-Saharan Africa, Southeast Asia and Northeast Asia." International Journal of Environmental Research and Public Health 16 (6): 1034. https://doi.org/10.3390/ijerph16061034



- Green, E. C., A. Adams, C. Kennedy, T. Dlamini-Simelane, A. Ruark, P. Surkan, and A. Nunn. 2019. "Navigating Intimate Sexual Partnerships in An era of HIV: Dimensions of Couple Relationship Quality and Satisfaction Among Adults in Eswatini and Linkages to HIV Risk." SAHARA J: Journal of Social Aspects of HIV/AIDS Research Alliance 16 (1): 10-24. https://doi.org/10.1080/ 17290376.2019.1604254
- Gregory, J., J. Hartz-Karp, and R. Watson. 2008. "Using Deliberative Techniques to Engage the Community in Policy Development." Australia and New Zealand Health Policy 5 (1): 16. https:// doi.org/10.1186/1743-8462-5-16
- Gruskin, S., V. Yadav, A. Castellanos-Usiqli, G. Khizanishvili, and E. Kismödi. 2019. "Sexual Health, Sexual Rights and Sexual Pleasure: Meaningfully Engaging the Perfect Triangle." Sexual and Reproductive Health Matters 27 (1): 1593787-1593740. https://doi.org/10.1080/26410397.2019.1593787
- Gunaratnam, P., A. E. Heywood, S. McGregor, M. S. Jamil, H. McManus, L. Mao, R. Lobo, et al. 2019. "HIV Diagnoses in Migrant Populations in Australia-A Changing Epidemiology." PLoS One 14 (2): e0212268. https://doi.org/10.1371/journal.pone.0212268
- Hassan, L., A. Dalton, C. Hammond, and M. P. Tully. 2020. "A Deliberative Study of Public Attitudes Towards Sharing Genomic Data within NHS Genomic Medicine Services in England." Public Understanding of Science 29 (7): 702-717. https://doi.org/10.1177/0963662520942132
- Kaladharan, S., K. Daken, A. B. Mullens, and J. Durham. 2021. "Tools to Measure HIV knowledge, Attitudes & Practices (KAPs) in Healthcare Providers: A Systematic Review." AIDS Care 33 (11): 1500-1506. https://doi.org/10.1080/09540121.2020.1822502
- Kippax, S., and N. Stephenson. 2012. "Beyond the Distinction Between Biomedical and Social Dimensions of HIV Prevention Through the Lens of a Social Public Health." American Journal of Public Health 102 (5): 789-799. https://doi.org/10.2105/AJPH.2011.300594
- Kippax, S., N. Stephenson, R. G. Parker, and P. Aggleton. 2013. "Between Individual Agency and Structure in HIV Prevention: Understanding the Middle Ground of Social Practice." American Journal of Public Health 103 (8): 1367-1375. https://doi.org/10.2105/AJPH.2013.301301
- Kirby Institute. 2022. HIV, Viral Hepatitis and Sexually Transmissible Infections in Australia: Annual Surveillance Report 2022. Sydney: Kirby Institute for Infection and Immunity in Society, UNSW.
- Marukutira, T., R. T. Gray, C. Douglass, C. El-Hayek, C. Moreira, J. Asselin, B. Donovan, et al. 2020. "Gaps in the HIV Diagnosis and Care Cascade for Migrants in Australia, 2013–2017: A Cross-sectional Study." PLoS Medicine 17 (3): e1003044. https://doi.org/10.1371/journal. pmed.1003044
- Marukutira, T., M. Stoové, S. Lockman, L. A. Mills, T. Gaolathe, R. Lebelonyane, J. N. Jarvis, et al. 2018. "A Tale of Two Countries: Progress Towards UNAIDS 90-90-90 Targets in Botswana and Australia." Journal of the International AIDS Society 21 (3): e25090. https://doi.org/10.1002/ jia2.25090
- Mayes, C. 2020. "White Medicine, White Ethics: On the Historical Formation of Racism in Australian Healthcare." Journal of Australian Studies 44 (3): 287-302. https://doi.org/10.1080/ 14443058.2020.1796754
- McDaid, L., P. Flowers, O. Ferlatte, I. Young, S. Patterson, and M. Gilbert. 2021. "Sexual Health Literacy Among Gay, Bisexual and Other Men Who Have Sex with Men: A Conceptual Framework for Future Research." Culture, Health & Sexuality 23 (2): 207-223. https://doi.org/ 10.1080/13691058.2019.1700307
- McMichael, C., and S. Gifford. 2009. "It Is Good to Know Now...Before It's Too Late": Promoting Sexual Health Literacy Amongst Resettled Young People With Refugee Backgrounds." Sexuality & Culture 13 (4): 218–236. https://doi.org/10.1007/s12119-009-9055-0
- McMichael, C., and S. Gifford. 2010. "Narratives of Sexual Health Risk and Protection Amongst Young People From Refugee Backgrounds in Melbourne, Australia." Culture, Health & Sexuality 12 (3): 263-277. https://doi.org/10.1080/13691050903359265
- Mitchell, K. R., R. Lewis, L. F. O'Sullivan, and J. D. Fortenberry. 2021. "What Is Sexual Wellbeing and Why Does It Matter for Public Health?" The Lancet Public Health 6 (8): E608-E613. https:// doi.org/10.1016/S2468-2667(21)00099-2



- Mpofu, E., F. Nkomazana, J. A. Muchado, L. Togarasei, and J. B. Bingenheimer. 2014. "Faith and HIV Prevention: The Conceptual Framing of HIV Prevention Among Pentecostal Batswana Teenagers." BMC Public Health 14 (1): 225. https://doi.org/10.1186/1471-2458-14-225
- Mullens, A. B., J. Kelly, J. Debattista, T. M. Phillips, Z. Gu, and F. Siggins. 2018. "Exploring HIV Risks, Testing and Prevention Among Sub-Saharan African Community Members in Australia." International Journal for Equity in Health 17 (1): 62. https://doi.org/10.1186/s12939-018-0772-6
- Murray, D., L. Mao, T.-H H. Wong, T. Chen, B. Mackie, S.-C. Kao, A. H. Mahee, et al. 2020. "High Levels of Engagement with Testing for HIV and Sexually Transmissible Infection Among Gav Asian men in Sydney and Melbourne: An Observational Study." Sexual Health 17 (2): 121-128. https://doi.org/10.1071/SH18216
- National Association of People with HIV Australia. 2022. Health Literacy Framework: Project Outcome 2019-2022. Sydney: National Association of People with HIV Australia. https://napwha. org.au/wp-content/uploads/2022/08/NAPWHA-HLF-Project-Report-2022.pdf
- Nutbeam, D., and J. E. Lloyd. 2021. "Understanding and Responding to Health Literacy as a Social Determinant of Health." Annual Review of Public Health 42 (1): 159-173. https://doi. org/10.1146/annurev-publhealth-090419-102529
- O'Hara, J., M. Hawkins, R. Batterham, S. Dodson, R. H. Osborne, and A. Beauchamp. 2018. "Conceptualisation and Development of the Conversational Health Literacy Assessment Tool (CHAT)," BMC Health Services Research 18 (1): 199. https://doi.org/10.1186/s12913-018-3037-6
- Osborne, R. H., C. C. Cheng, S. Nolte, S. Elmer, S. Besancon, S. S. Budhathoki, X. Debussche, et al. 2022. "Health Literacy Measurement: Embracing Diversity in a Strengths-based Approach to Promote Health and Equity, and Avoid Epistemic Injustice." BMJ Global Health 7 (9): e009623. https://doi.org/10.1136/bmjgh-2022-009623
- Phillips, T. R., N. Medland, E. P. F. Chow, K. Maddaford, R. Wigan, C. K. Fairley, J. E. Bilardi, and J. J. Ong. 2022. "Newly Arrived Asian-born Gay Men in Australia: Exploring Men's HIV Knowledge, Attitudes, Prevention Strategies and Facilitators Toward Safer Sexual Practices." BMC Infectious Diseases 22 (1): 209. https://doi.org/10.1186/s12879-022-07174-z
- Pitt, R., T. Davis, J. Manganello, P. Massey, O. Okan, E. MacFarlane, O. V. Butchal, et al. 2019. "Health Literacy in A Social Context: A Meta-narrative Review." In International Handbook of Health Literacy: Research, Practice and Policy Across the Lifespan, edited by O. Okan, B. Ullrich, D. Levin-Zamir, P. Pinheiro and K. Sørensen, 665-688. Bristol: Bristol University Press.
- Pleuhs, B., K. G. Quinn, J. L. Walsh, A. E. Petroll, and S. A. John. 2020. "Health Care Provider Barriers to HIV Pre-Exposure Prophylaxis in the United States: A Systematic Review." AIDS Patient Care and STDs 34 (3): 111-123. https://doi.org/10.1089/apc.2019.0189
- Power, R. 1994. Some Methodological and Practical Implications of Employing Drug Users as Indigenous Fieldworkers. London: Taylor and Francis.
- Rai, B., S. Ross, and D. Richardson. 2021. "P051 General practitioners' (GPs') Knowledge of and Attitudes to Prescribing Pre-exposure Prophylaxis for HIV (PrEP): A Pilot Study." Sexually Transmitted Infections 97 (Suppl 1): A74. https://doi.org/10.1136/sextrans-2021-sti.195
- Robertson, S. 2017. "Infrastructures of Insecurity: Housing and Language Testing in Asia-Australia Migration." Geoforum 82: 13-20. https://doi.org/10.1016/j.geoforum.2017.03.013
- Samerski, S. 2019. "Health Literacy as a Social Practice: Social and Empirical Dimensions of Knowledge on Health and Healthcare." Social Science & Medicine (1982) 226: 1-8. https://doi. org/10.1016/j.socscimed.2019.02.024
- Smith, A. K. J., B. Haire, C. E. Newman, and M. Holt. 2021. "Challenges of Providing HIV Pre-exposure Prophylaxis Across Australian Clinics: Qualitative Insights of Clinicians." Sexual Health 18 (2): 187–194. https://doi.org/10.1071/SH20208
- Sørensen, K. 2019. "Defining Health Literacy: Exploring Differences and Commonalities." In International Handbook of Health Literacy: Research, Practice and Policy Across the Lifespan, edited by O. Okan, B. Ullrich, D. Levin-Zamir, P. Pinheiro and K. Sørensen, 5-20. Bristol: Bristol University Press.
- Sowemimo, A. 2018. "#DecolonisingContraception The Importance of Preventing Unethical Practice in SRH and Learning from History." BMJ Sexual & Reproductive Health. https://blogs.

bmj.com/bmjsrh/2018/09/20/decolonisingcontraception-the-importance-of-preventing-u nethical-practice-in-srh-and-learning-from-history/

Sudarto, B., E. P. F. Chow, N. Medland, C. K. Fairley, E. J. Wright, J. Armishaw, B. Price, T. R. Phillips, and J. J. Ong. 2022. "How PrEPared Are You?": Knowledge of and Attitudes toward PrEP Among Overseas-born and Newly Arrived Gay, Bisexual, and Other Men Who Have Sex with Men in Australia." Frontiers in Public Health 10: 946771. https://doi.org/10.3389/fpubh.2022.946771

Vearey, J. 2012. "Learning from HIV: Exploring Migration and Health in South Africa." Global Public Health 7 (1): 58-70. https://doi.org/10.1080/17441692.2010.549494

Villa-Torres, L., T. González-Vázquez, P. J. Fleming, E. L. González-González, C. Infante-Xibille, R. Chavez, and C. Barrington. 2017. "Transnationalism and Health: A Systematic Literature Review on The Use of Transnationalism in the Study of the Health Practices and Behaviors of Migrants." Social Science & Medicine (1982) 183: 70-79. https://doi.org/10.1016/j.socscimed.2017.04.048

Walia, A. M., C. K. Fairley, C. S. Bradshaw, M. Y. Chen, and E. P. Chow. 2020. "Disparities in Characteristics in Accessing Public Australian Sexual Health Services Between Medicare-eligible and Medicare-ineligible Men Who Have Sex with Men." Australian and New Zealand Journal of Public Health 44 (5): 363-368. https://doi.org/10.1111/1753-6405.13029

WHO (World Health Organization). 2022. Health Literacy Development for the Prevention and Control of Noncommunicable Diseases: Volume 2. A Globally Relevant Perspective. Geneva: WHO. Accessed November 15, 2022. https://www.who.int/publications/i/item/9789240055353