

## Research Summary

*A realist review of evidence to guide targeted approaches to HIV/AIDS prevention among immigrants in high-income countries.*

### Main messages

#### Context

Immigrants from developing and middle-income countries now make up a significant proportion of people living with HIV in many high-income countries including Australia.

In Australia, targeted and appropriate interventions have been largely successful in minimising HIV transmission among sub-cultures of gay men, sex workers and injecting drug users. A key gap in our evidence base includes what we can learn from interventions implemented in other high-income countries to guide new, or strengthen existing, approaches to culturally appropriate HIV prevention with immigrants in Australia.

#### Key questions

Typically it is taken as a given that prevention interventions will be more effective if they are culturally appropriate and health promotion practitioners use a range of strategies and activities to achieve this. However, there is rarely an examination of what mechanisms – the ‘change elements’ or program theories of the intervention – contribute to culturally appropriate interventions. Intervention mechanisms are what generate responses in immigrants to the activities of the intervention.

This research, in the form of a review of evidence, sought to ‘unpack’ the mechanisms for achieving cultural appropriateness in HIV prevention interventions with immigrants.

#### Analysis and synthesis of findings

A preliminary set of seven mechanisms – ‘*authenticity*’, ‘*understanding*’, ‘*consonance*’, ‘*specificity*’, ‘*embeddedness*’, ‘*endorsement*’ and ‘*framing*’ were generated from a scan of the literature.

These mechanisms were then tested, revised and refined against evidence – 74 ‘grey’ and peer-reviewed studies and reports relevant to HIV prevention interventions with immigrants – found in systematic searches in major public health databases.

The evidence indicates that the pivotal mechanisms contributing to cultural appropriateness in HIV prevention interventions with immigrants are ‘*understanding*’ and ‘*consonance*’ – ensuring that language (usually the ‘mother tongue’) and cultural values are included as key elements in the development and implementation of the intervention.

‘*Authenticity*’, ‘*specificity*’ and ‘*embeddedness*’ were moderately important in contributing to cultural appropriateness – mechanisms that dealt with staffing, targeting through ethnicity, and using settings for interventions – from the evidence included in the review.

There was mixed evidence for the roles of ‘*endorsement*’ and ‘*framing*’, which suggests that gaining community endorsement or partnering initiatives with immigrant community institutions were the least critical mechanisms in contributing to cultural appropriateness in terms of HIV prevention interventions.

Further research is needed to examine the relationships between these seven mechanisms and any impacts they contribute to the effectiveness of interventions and HIV-related health outcomes.

## **Executive Summary**

### **Background and context**

This research explored the current state-of-play of HIV prevention with immigrants from developing and middle-income countries living in high-income countries to generate insights which might inform the development and implementation of culturally appropriate HIV prevention for immigrants in Australia.

Immigrants from developing and middle-income countries accounted for more than 20% of Australian HIV notifications in the period 2003–2007.<sup>1</sup> The higher priority accorded to people from culturally and linguistically diverse (CALD) backgrounds in current national and local HIV strategies<sup>2 3</sup> generates a broad policy and practice question on ‘how’ to implement culturally appropriate HIV prevention with immigrants.

Immigrants in Australia comprise a heterogeneous aggregation of diverse sub-populations in terms of countries of origin, ethnicities, languages spoken, reasons for migration and dominant modes of HIV transmission. For example, the dominant modes of HIV transmission among immigrant communities in Australia tend to mirror epidemics in regions of birth and are atypical to the predominant modes of transmission found among the Australian-born community and immigrants born in other high-income countries.<sup>1</sup> Alongside this there is some evidence of disparities being experienced by immigrants from developing and middle-income countries in areas such as later presentation with HIV.<sup>1</sup>

HIV prevention in Australia has included whole-of-population approaches alongside targeted approaches which address HIV primary and secondary prevention with specific groups – usually those disproportionately affected by HIV/AIDS such as gay men or injecting drug users. Targeted health promotion interventions for immigrants have also formed part of the HIV response in Australia. Immigrants in Australia may have acquired HIV prior to their first arrival in Australia, on subsequent travel abroad, or within Australia. A key gap in our evidence base includes what we can learn from interventions implemented in other high-income countries to guide new, or strengthen existing, approaches to culturally appropriate primary and secondary HIV prevention with people from CALD backgrounds locally.

It is generally accepted that health promotion interventions will be more effective if they are culturally appropriate to the population they serve, even if the strategies and mechanisms used to achieve ‘appropriateness’ vary widely and are rarely examined in depth,<sup>4</sup> and there is no review of evidence to examine cultural appropriateness in terms of HIV prevention – a value-laden area of public health that crosses private and moral domains – with immigrants.

### **The research question**

This research explored both ‘targeted’ and ‘culturally appropriate’ approaches to primary and secondary HIV prevention with immigrants including a span of interventions from community-level approaches using mass media and social marketing through to interventions delivered at a group level. In particular, the research examined the intervention mechanisms (or theories) used to make them culturally appropriate to immigrant populations in contexts similar to Australia. Thus the broad question the research sought to answer was ‘How and why interventions work (or not), for which groups of immigrants, and in what contexts?’

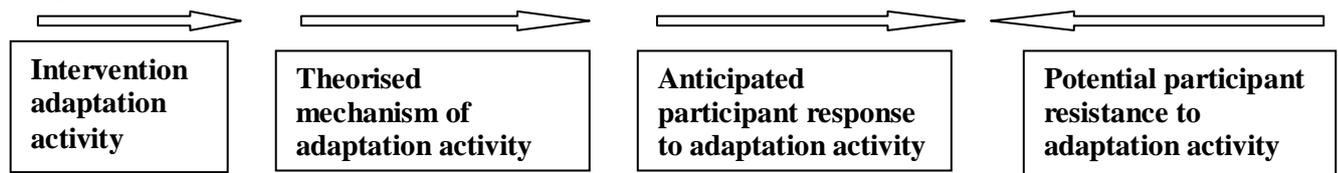
The research focused on primary and secondary interventions at group or community levels<sup>5</sup> to answer the research question:

*What are the key program theories or mechanisms for cultural appropriateness operating in primary and secondary HIV/AIDS prevention interventions at group and community levels among immigrants from developing and middle-income countries living in high-income countries?*

## Approach and methods

This research frames interventions as a series of implementation ‘chains’, each made up of an adaptation activity which generates an anticipated response and/or a potential resistance to the intervention from immigrants<sup>6</sup> (Fig. 1). Intervening between the adaptation activity and anticipated response by immigrants are the theorised mechanisms – the ‘change elements’ or program theories of the intervention<sup>6</sup> (Fig. 1). It is important to note that these ‘chains’ operate in non-linear and unpredictable ways.<sup>7</sup> Here, for simplicity, the implementation ‘chain’ is presented in a linear ‘path’ with the participant response and participant resistance represented as outcomes which point in different directions. In reality, these two different outcomes can be alternate responses influenced by context to the program mechanism (Fig. 1).

**Fig. 1 An intervention implementation ‘chain’**



A scan of the literature mapped seven preliminary mechanisms contributing to cultural appropriateness in HIV prevention interventions (not shown here). These seven mechanisms were theorised as the key, rather than the only, interrelated mechanisms contributing to cultural appropriateness in interventions with immigrants. Using an example of an intervention with Latino immigrants in the USA, ‘*authenticity*’ and ‘*understanding*’ mechanisms were hypothesised to be operating when, for example, Latino facilitators delivered a series of HIV education sessions to groups of Latino immigrants in Spanish.

The research followed a realist methodology<sup>7</sup> to review evidence relevant to HIV prevention with immigrants found in systematic searches against the seven theorised mechanisms and to refine them in light of this evidence. Unlike systematic reviews, this review did not seek to answer questions of effectiveness.

Systematic searches were carried out on major public health databases (PubMed, CINAHL, Sociological Abstracts, PsychInfo) and Google Scholar to find peer-reviewed and grey literature relevant to HIV prevention among immigrants. Two types of studies contributed to the review of evidence: studies of interventions and qualitative studies of immigrants’ views on HIV/AIDS prevention. This research method was based on the work of others in the HIV field<sup>8</sup> and sought to bring together ‘expert’ and ‘lay’ understandings<sup>9</sup> to enhance this review of the evidence of HIV prevention among immigrants.

Thirty-four intervention studies contributed to the analysis and synthesis of evidence with the majority implemented in the USA, three in Israel and the Netherlands, and one each in Switzerland, Australia, Canada and New Zealand. Forty qualitative studies contributed to the analysis and synthesis with the majority conducted in the USA, eight studies carried out in the UK, seven in Australia, and one each in Sweden, Canada and Japan.

The seven theorised mechanisms – ‘*authenticity*’, ‘*understanding*’, ‘*consonance*’, ‘*specificity*’, ‘*embeddedness*’, ‘*endorsement*’ and ‘*framing*’ – were ‘the lens’<sup>7</sup> to analyse the evidence from the 34 intervention studies and 40 qualitative studies. In keeping with a realist review of evidence,<sup>7</sup> the intervention studies and qualitative studies were used to test, revise and refine the seven mechanisms which were theorised to be operating in culturally appropriate HIV/AIDS prevention interventions with immigrants.

## Key findings

The strongest evidence across the studies reviewed supported the role of ‘*understanding*’ and ‘*consonance*’ mechanisms, indicating the pivotal role of using the language of immigrants – usually the ‘mother tongue’ – and incorporating elements of cultural values into the intervention content to

develop appropriate HIV prevention interventions for immigrants. Key challenges in using these two mechanisms in ‘real-world’ interventions included the heterogeneity of immigrant community languages resulting in a need to prioritise the language(s) of the intervention and the challenges of finding common ground between ‘old-country’ and ‘new-country’ cultural values when adapting the intervention content.

**Fig. 2 The refined implementation ‘chains’ in HIV prevention interventions with immigrants**

| <b>Intervention adaptation activity</b>   | <b>Theorised mechanism of adaptation activity</b>                                   | <b>Anticipated participant response to adaptation activity</b>   | <b>Potential participant resistance to adaptation activity</b>  |
|---|---|--|---|
| Staffing the intervention with people who are bicultural, matched to the target group                                 | ‘ <i>Authenticity</i> ’ of intervention   | Intervention is ‘for them’ as the staff are ‘like them’  | ‘Tokenism’ of staffing, heterogeneity of target group leading to difficulties in ‘matching’, rejection of bicultural staff by HIV-positive immigrants             |
| Using immigrant community languages, matched to the target group  | ‘ <i>Understanding</i> ’ of intervention  | Understand – in a literal sense – intervention messages  | ‘Mistranslation’ in use of community languages in written materials and by interpreters   |
| Adapting intervention content to suit the target population   | ‘ <i>Consonance</i> ’ of intervention with cultural values, norms and symbols       | Intervention has recognisable elements of culture of participants – to deepen the symbolic understanding of the intervention                                 | ‘Dissonance’, especially if participants are highly acculturated, where culture is a source of oppression and HIV-related stigma                                  |
| Using ethnicity to target intervention to immigrants  | ‘ <i>Specificity</i> ’ of intervention with ethnicity of target group               | Intervention is specific to the ethnicity of the target group  | ‘Stereotyping’ in use of ethnicity as primary element of participant identity without adequate focus on other elements of identity including gender and sexuality |
| Delivering intervention through immigrant community structures and settings   | ‘ <i>Embeddedness</i> ’ of intervention within immigrant communities                | Intervention is encountered in familiar and local settings   | ‘Marginalising’ when participants do not belong or have chosen to withdraw from co-ethnic networks  |
| Consulting with immigrant communities and leaders   | ‘ <i>Endorsement</i> ’ of intervention by immigrants or immigrant community leaders | Intervention is ‘allowed’ and supported by immigrant communities   | ‘Denial’ by immigrant community leaders of HIV as an important health issue   |
| Partnering and involving immigrant community institutions in decision making and setting priorities for interventions | ‘ <i>Framing</i> ’ of intervention with and by immigrants                           | Intervention matches immigrant participants’ expectations for key HIV priorities and takes wider social contexts into account in addressing these priorities | ‘Rejection’ of the priority accorded to HIV by immigrant community institutions   |

Moderate evidence was found to support the role of three other mechanisms – ‘*authenticity*’, ‘*specificity*’ and ‘*embeddedness*’ – which indicated that staffing, targeting and settings were also critical elements in developing appropriate HIV interventions for immigrants. Matching the staff of the intervention to the immigrant target group could also assist in ‘*understanding*’ and ‘*consonance*’ mechanisms as bicultural staff were often bilingual and could be used as “cultural insighters”<sup>10</sup> for developing the intervention content. The importance of targeting the intervention in terms of ethnicity was related to contexts where the immigrant populations were highly heterogeneous (e.g., African-born immigrants in the UK). There was evidence to suggest that ethnicity alone was insufficient to target interventions without also considering other key elements of identity such as gender and sexuality. The evidence to support the outreach of interventions to settings familiar to the target

immigrant population was contingent on the target immigrant population(s) being ethnically or linguistically or racially stratified.

There was mixed evidence for the roles of the 'endorsement' and 'framing' mechanisms. The evidence from the intervention studies suggested that consulting with immigrant community leaders or partnering with immigrant community institutions were largely not critical when developing appropriate HIV interventions. However, the evidence from the qualitative studies suggested that the involvement of immigrant community leaders and institutions to gain support for interventions and participate in decision making and priority setting in planning could provide useful overarching support for HIV prevention interventions in an area of public health that is value-laden by the nature of the common routes of HIV transmission and commonly affected communities.

Information on participant characteristics or implementation environments is highly valued in a realist review of evidence as mechanisms may fire or misfire dependent on these contexts.<sup>7</sup> Whilst this review retrieved information on participant contexts through the inclusion of views studies, it was less able to attend to implementation environments. This implementation information was often not sufficiently described in the studies and the span of high-income countries where interventions had been carried out made it difficult to infer this contextual information. Future research may need to explore these implementation environments in more detail.

This review of evidence suggests that the pivotal mechanisms underpinning appropriate HIV prevention interventions for immigrants are language and cultural values. The staffing, targeting and use of settings as adaptation mechanisms in these interventions appear to be of less critical importance. Finally, the evidence suggests that immigrant community endorsement and involving immigrant community institutions encompass the least critical mechanisms when developing appropriate HIV prevention interventions for immigrants living in high-income countries. The refined mechanisms and responses are summarised above (Fig. 2). Further research is needed to examine the relationships between these seven mechanisms and any impacts they contribute to the effectiveness of interventions and HIV-related health outcomes among immigrants.

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