ORIGINAL ARTICLE

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Evaluating HIV/AIDS education and prevention models targeting minorities, mobile and migrant populations: A systematic literature review

Introduction

The 2008-2011 aids&mobility project aimed to improve health literacy and awareness among the immigrant population of HIV and the health service availability by training young migrants as certified transcultural mediators to promote health and prevention in their communities.

The project established its activities and target population on included a systematic literature review of the scientific literature. The literature wes also the frame of reference for the evaluation and publication of results. Evaluation was based on the folllowing:

- Outcomes of the HIV health promotion activities and drug-related programs aimed at increasing access to counselling, testing and treatment;
- Method used to measure outocoms;
- Method used to calculate effectiveness calculated and whether comparable to economic modelling; eventual "social accounting";
- Policy recommendations to ensure program sustainability;

The review describes the results of the analysis of relevant research articles identified through a systematic database search.

Methods

The literature search was conducted in April 2009 and included studies on migrants, mobile populations and ethnic minorities. Relevant intervention strategies considered were HIV/AIDS awareness raising actions, prevention, education and testing activities (e.g. educational sessions conducted by transcultural staff and/or volunteers).

Studies that produced increased awareness participation rates in programs and improved access to prevention, diagnosis and care were also considered.

The following restrictions were applied: English language, publica-

tion status (published articles, abstracts from relevant conferences) and date of publication (between 1998 and 2008).
The databases and websites listed below (Systematic MeSH search) were used for the research: MEDLINE (access with key words), Cochrane Library, PsycINFO, Health Services/Technology Assessment Text (HSTAT), Centers for Disease Control and Prevention (CDC) of Atlanta, Bulletin of the World Health Organisation (WHO), Bulletin of the New York Academy of Medicine. (Table 1)
The study was conducted according to the method developed by the Monash University (Mel-

Table 1: Literary review inclusion criteria

Inclusion criteria:	
Study subjects	migrants, mobile populations and ethnic minorities
Interventions	HIV/AIDS awareness, prevention, education and testing activities (e.g. educational sessions conducted by transcultural staff and/or volunteers)
Comparisons	no intervention
Outcomes	increased rate of participation in programs, increased awareness, improved access to prevention, diagnosis and care
Search terms:	
HIV/AIDS terms	HIV prevention
Migration terms	immigrants, migration, mobility
Education terms	education, transcultural mediators
Policy terms	barriers, stigma, policy
Restrictions:	
English language	
Publication status (published articles, abstracts from relevant conferences)	
Date of publication (between 1998 and 2008)	
Databases and websites (Systematic MeSH search):	
MEDLINE access with key words	
Cochrane Library	
PsycINFO	
HSTAT	
Centers for Disease Control and Prevention (CDC) of Atlanta	
Bulletin of the World Health Organisation (WHO)	
Bulletin of the New York Academy of Medicine	
The literature search was conducted in April 2009.	

bourne, Australia), and adopted by the Centre for Clinical Effectiveness at Southern Health (Victoria, Australia) for the development of evidence-based clinical practice guidelines. While adequate and sound research summaries already exist, this method proposes to analyse a limited number of sources, ranking them according to their methodological quality. The quality of the evidence presented by each research study was assessed according to the definitions given in the "Levels of Evidence" guide of the Australian National Health & Medical Research Council's (NHMRC) (Table 2).
The authors first considered databases containing systematic reviews, then evidence-based clinical practice guidelines and health technology assessments, and finally individual randomised controlled trials. When adequate summaries were found, individual research trials were not included, as this kind of source is more easily influenced by bias, susceptible to generalisation and subject to other difficulties.

Results
A total of 110 papers were analysed. Out of this sample, 80 were considered potentially appropriate, 70 evaluated in detail, 5 excluded and 65 further analysed. 19 dealt with cultural, social and structural barriers, 26 mainly focused on HIV counselling and testing and 20 were about strategies and policy interventions.
A table showing the ranking process is reported in Annex 1. It is divided into three parts: background, reports and discussion. Each line gives authors, title and publication date of the article, study design, level of evidence according to the NHMRC guidelines and a summary of objectives, methods, results and conclusions. No systematic review or meta-analysis was found. The authors ranked 15 papers at level I and 8 at levels II and III. 36 publications were identified as case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, expert committees reports (i.e. consensus) and case studies were ranked at level IV (Table 3a and 3b).

Table 2: Levels of evidence

Level I	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials.
Level II	Evidence obtained from at least one properly designed randomised controlled trial.
Level III	1- Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method).
	2- Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group.
	3- Evidence obtained from comparative studies with historical control, two or more single-arm studies or interrupted time series without a parallel control group.
Level IV	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies.

Source: *The National Health & Medical Research Council's Levels of Evidence (NHMRC Australia): A Guide to the Development, Implementation and Evaluation of Clinical Practice Guidelines (NHMRC 1998).*

Table 3a: Distribution of papers across the NHMRC Levels of Evidence

Papers		Evidence level I	Evidence level II	Evidence level III	Evidence level IV
Total screened	110	N/A	N/A	N/A	N/A
Potentially appropriate studies evaluated	80	N/A	N/A	N/A	N/A
Evaluated in detail	70	N/A	N/A	N/A	N/A
Studies excluded	5	N/A	N/A	N/A	N/A
Papers considered for further review	65	15	8	8	36

Table 3b: Papers considered for further review

Papers		Evidence level I	Evidence level II	Evidence level III	Evidence level IV
Papers dealing with cultural, social and structural barriers	19	6	2	3	9
Papers dealing mainly with HIV counselling and testing	26	1	4	3	18
Papers dealing mainly with strategies and policy interventions	20	6	2	2	10
Total papers considered for further review:	**65**	**15**	**8**	**8**	**36**

Discussion

Several studies describe the effectiveness of HIV-prevention among different groups at risk: men who have sex with men (MSM), youth and injecting drugs users (IDU) (Auerbach et al., 2000, CDC 2001, Fernandez et al., 1998). HIV-prevention programs for mobile populations generally adopt multilevel interventions aimed at reducing stigma and discrimination (Fakoya et al., 2008, Kouznetsov et al., 2008, Mahajan et al., 2008, Waldo et al. 2000). HIV prevention and treatment programs were shown to adopt different strategies for reducing the impact of cultural, social and structural barriers and improving effectiveness: street outreach services (Tenner et al., 1998), educational materials (Albarracin et al., 2008), anonymous testing and counselling protocols (Kellerman et al., 2006), voluntary peer education (Kocken et al., 2001, Khumalo-Sakutukwa et al., 2008) and community events (Simpson et al., 1998). The data provided by several studies was based on pre- and post-test questionnaires (Lazarus et al., 2006, Poudel et al., 2005) and semi-structured interviews on HIV awareness and related behaviors (Pronyket al., 2002). Projects implemented in different European countries (Netherlands: Kocken et al., 2001, Ger-

many: Salman 2006) adopted the transcultural mediation model (Mayer et al., 2008) in the framework of HIV prevention campaigns. A randomised controlled study (Albarracìn et al.,2008) assessed the effect of health information and education interventions on participation in prevention counselling; a pseudo-randomised study (Kocken et al., 2008) while a case-control study looked at changes in sexual behaviour as an outcome of interventions implemetented (Chad et al., 2004). A descriptive paper studied the feasibility of training outreach workers, leaders of women self-help groups and local barbers as low-educated peer educators assessing outcomes in terms of new HIV diagnoses, referrals to specialist services and HIV/AIDS knowledge (Van Rompay et al., 2008). A case-control study compared HIV-related sexual behaviours among mobile and non-mobile women and men in social venues in Burkina Faso (Khan et al., 2008), showing that mobile women are more likely to have multiple sexual partners and transactional sex. Outreach voluntary counselling and testing (Forsyth et al, 2002, Morin et al., 2006, Genberg et al., 2008) was a common method for assessing the efficacy of HIV-programs in Africa. Bateganya et al in 2007 compared randomised controlled trials and non-randomised trials on home-based HIV voluntary counseling for improving HIV testing in developing countries. They limited their recommendations to the large-scale use of home-based testing programs (rarely implemented in Europe). Different studies analysed strategies for HIV counseling and migrant populations testing regardless of whether they adopted the peer education approach (Bischofberger et al., 2008**,** Kocken et al., 2001, Martijn et al., 2004). Another study showed that while migrant mediator training enables targeted prevention campaigns in a variety of ethnic populations (Salman, 2008), the complexity of multilevel interventions limited interpretation of results of HIV prevention activities. Two papers assessed the impact of medical and psychological support (de Wit et al., 2008, Woods et al., 1998), three articles analysed the intervention of volunteer mediators addressing couples and families (de Guzman et al., 2001, Kerr-Pontes et al., 2004, Malow et al., 2004) and one study analysed social and sexual networks (Rhodes et al., 2006) whereas two papers focused on institutions and communities as a whole (Coates et al., 2008, Villacorta et al., 2007). When comparing racial, ethnic and national minorities, Eschel et al. (2008) considered socio-economic status (SES) identifying this as one of the barriers to access to testing for migrants. Shedlin et al. (2006), also discussed this issue in a paper on immigrant groups in the New York metropolitan area while Gillespie-Johnson et al. looked at it (2008) in the context of immigrant women of Jamaican origin. WHO's recommendations and the European AIDS Clinical Society (EACS) guidelines focus on HIV, the increasing access to HIV testing and early care in vulnerable populations (Kocken et al., 2008). Recommendations for health promotion activities aiming at increasing access to counselling, testing and treatment include routine HIV-testing in health care settings for persons aged 13-64 years, ensuring appropriate and early access to care and treatment, and facilitating access to social support.

It is widely acknowledged that social support improves the efficacy of HIV-prevention. The social impact of this kind of program can be measured, among other thing, by assessing volunteer support. However a review of the efficacy of workplace prevention and policy recommendations in AIDS prevention programs concludes that "social accounting" is poorly practised (Coates et al., 2007). A review of HIV/AIDS policies underlines the need for "*developed and developing country governments, civil society (including business) and global agencies working on HIV/AIDS to make their programmes more accountable to the public*" (Collins et al.,2008). National strategies aimed at reducing HIV transmission and advisable future policy interventions are described in different articles. A systematic review focuses on strategies combating stigma against people with HIV-infection (Mahajan et al., 2008). A number of international initiatives achieving no useful results are described by Szekeres (2008). Several examples were found of measures implemented to improve HIV/AIDS health care programs: cooperation with non-governmental organisations (NGOs) in India (Van Rompay et al., 2008), combined interventions adopting microfinance for AIDS and gender equity (IMAGe) in South Africa (Pronk et al., 2006), health care facilities and AIDS-related health information

in Hong Kong (Bandyopadhyay et al., 2002) and, finally, the Swiss “Migrants Project” (Haour-Knipe et al., 2000).

The analysis of HIV/AIDS prevention among migrants revealed obstacles to accessing public services related to cultural and linguistic barriers, stigma and discrimination.

No systematic review evaluating the efficacy of HIV-education programs involving cultural mediators for minority migrant populations was identified.

Peer education in HIV-prevention programs appear to be the most appropriate intervention model for achieving outcomes such as increase in HIV-testing (Van Rompay et al., 2008, Kaplan et al., 2002) and intention to use condoms (Kocken et al, 2001, Poudel et al., 2005).

Limitations of the selected articles include:

- no standard approach to HIV prevention in migrant populations and ethnic minorities exist;
- most randomised controlled studies aimed at determining the efficacy of behavioural/social interventions are community-based projects;
- prospective programmes do not account for the long-term impact of interventions on migrant populations and ethnic minorities.

The analysis of policies and strategies points out two main motivating factors for HIV/AIDS prevention programs: limiting the spread of infection and the negative economic impact of possible outbreaks.

It is advisable to offer programs tailored for each community and in several different languages (Delor et al., 2000, Barten et al., 2007, Kocker et al., 2001, Michele et al., 2006), particularly as regards mobile populations, to enable effective risk evaluation among different ethnic groups and ensure dissemination of information on HIV/AIDS, access to health services and appropriate health screening.

Background (Annex I)

BACKGROUND	STUDY DESIGN & NHMRC LEVELS OF EVIDENCE	DESCRIPTION
CDC's HIV/AIDS Prevention Research Synthesis Project **Compendium of HIV Prevention Interventions with Evidence of Effectiveness** *November 1999 (Revised on August 31, 2001)*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	The Centers for Disease Control and Prevention (CDC) developed this *Compendium of HIV Prevention Interventions with Evidence of Effectiveness* to respond to prevention service providers, planners, and others who request science-based interventions that work to prevent HIV transmission. All interventions selected for this *Compendium* came from behavioural or social studies that had both intervention and control/comparison groups and positive results for behavioural or health outcomes. The *Compendium* provides state-of-the-science information about interventions with evidence of reducing sex- and/or drug-related risks, and the rate of HIV/STD infections. These interventions have been effective with a variety of populations, e.g., clinic patients, heterosexual men and women, high-risk youth, incarcerated populations, injection drug users, and men who have sex with men.
Haour-Knipe M, Fleury F, Dubois-Arber F **HIV/AIDS prevention for migrants and ethnic minorities: three phases of evaluation.** *Soc Sci Med 2000 Sep;51(5):78*	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	This paper describes three phases of evaluation of the Migrants Project (exploratory studies, process, and outcome evaluations). Key elements are to avoid potential for stigmatising by: (1) placing HIV/AIDS prevention efforts for migrant populations within an overall national HIV/AIDS prevention strategy; (2) informing and sensitising general populations within migrant communities before initiating more targeted prevention with migrant IDUs, MSM, and CSWs; (3) encouraging, facilitating and guiding health promotion efforts.
Jepson R, Clegg A, Forbes C, Lewis R, Sowden A, Kleijnen J. **The determinants of screening and interventions for increasing uptake: a systematic review.** *Health Technology Assessment* 2000;4 (14):1-133	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	
Simpson, Wendy M, Johnstone Frank D, Boyd, Fiona M Goldberg, David J Hart ,J Graham, Prescott, Robin J. **Uptake and acceptability of antenatal HIV testing: randomised controlled trial of different methods of offering the test** *BMJ* 1998; (24 January) 316:262-267	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objectives.* To determine the uptake and acceptability of different methods of a universal offer of voluntary HIV testing to pregnant women. *Methods***.** Randomised controlled trial involving four combinations of written and verbal communication, followed by the direct offer of a test. The control group received no information and no direct offer of a test, although testing was available on request. 3024 pregnant women booking at the clinic of the city of Edinburgh over a 10 month period. *Results.* Uptake rates were 6% for those in the control group and 35% for those directly offered the test. Neither the style of leaflet nor the length of discussion had an effect on uptake. Significant independent predictors of uptake were a direct test offer; the midwife seen; and being unmarried, previously tested, and younger age. Knowledge of the specific benefits of testing increased with the amount of information given, but neither satisfaction nor anxiety was affected by the type of offer. *Conclusions.* The universal offer of HIV testing is not intrusive and is acceptable to pregnant women. A policy of offering the HIV test to all women resulted in higher uptake and did not increase anxiety or dissatisfaction. Uptake depends more on the midwife than the method of offering the test. Low uptake rates and inadequate detection of HIV infection point to the need to assess a more routine approach to testing.

Collins C, Coates TJ, Szekeres G. **Accountability in the global response to HIV: measuring progress, driving change.** AIDS. *2008 Aug;22 Suppl 2:S105-111*	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	This article makes several suggestions to increase the impact of accountability efforts, including connecting accountability to sustained advocacy.
Szekeres G, Coates TJ, Ehrhardt AA **Leadership development and HIV/AIDS.** AIDS. *2008 Aug;22 Suppl 2:S19-26*	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	This article examines the growing need for HIV/AIDS leadership development, and describes and assesses a number of current initiatives that focus on leadership development in a variety of populations and settings. A series of recommendations are provided to expand the scope and impact of leadership development activities.
Mahajan AP, Sayles JN, Patel VA, Remien RH, Sawires SR, Ortiz DJ, Szekeres G, Coates TJ. **Stigma in the HIV/AIDS epidemic: a review of the literature and recommendations for the way forward.** AIDS. *2008 Aug;22 Suppl 2:S67-79*	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	In this paper, it was systematically review the scientific literature on HIV/AIDS-related stigma to document the current state of research, identify gaps in the available evidence and highlight promising strategies to address stigma. The authors focused on the following key challenges: defining, measuring and reducing HIV/AIDS-related stigma as well as assessing the impact of stigma on the effectiveness of HIV prevention and treatment programs.
Auerbach JD, Coates TJ. **HIV prevention research: accomplishments and challenges for the third decade of AIDS.** Am J Public Health. *2000 Jul;90(7):1029-32*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This article observes the declining rates of HIV prevalence and incidence in places and populations with historically high rates--for example, injection drug users in New York City.
Tompkins M, Smith L, Jones K, Swindells S. **HIV education needs among Sudanese immigrants and refugees in the Midwestern United States.** AIDS Behav. *2006 May;10(3):319-23*	Evidence obtained from comparative studies with historical control, two or more single-arm studies or interrupted time series without a parallel control group. Level III-3 evidence	This study evaluated knowledge, attitudes, and beliefs about HIV/AIDS as well as risk behaviour in the Sudanese immigrant and refugee population of Nebraska (N = 47). The results demonstrated that a significant proportion of individuals from this population are poorly educated about HIV infection, exhibit attitudes and beliefs that may increase their risk for disease acquisition, and create barriers to HIV prevention and care, and engage in high-risk sexual behaviours.
Fakoya I, Reynolds R, Caswell G, Shiripinda I **Barriers to HIV testing for migrant black Africans in Western Europe**. HIV Med. *2008 Jul;9 Suppl 2:23-5*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This paper values the barriers to HIV testing for sub-Saharan migrants, with particular emphasis on the UK and the Netherlands. Cultural, social and structural barriers to testing, such as access to testing and care, fear of death and disease and fear of stigma and discrimination in the community, can be identified.
Overcoming migrants' barriers to health. *Bullettin World Health Organization, 2008 August*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	In this paper the diversity of the migrant populations – from people in search of work or education to more vulnerable groups like asylum seekers and refugees- was described. Apart from the increased potential for the spread of infectious disease that a more mobile global population brings, there is also rising concern that migrants' health needs are not always adequately met.

Chad A. Leaver, MSc, Dan Allman, MSc, Ted Meyers, PhD and Paul J. Veugelers, PhD. **Effectiveness of HIV Prevention in Ontario, Canada: A Multilevel Comparison of Bisexual Men** .*American Journal of Public Health. July 2004, Vol 94, No. 7*	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group. Level III. 2 evidence	*Objectives.* The effectiveness of community-level HIV prevention programming for men who have sex with men. *Methods.* Comparisons were made between unprotected intercourse by bisexual men (n = 1016) with male and female partners in geographic regions with and without HIV prevention programming. *Results.* Men living in geographic regions with HIV prevention programming had significantly less frequent unprotected homosexual intercourse with both casual and regular partners. In contrast, no differences were observed for unprotected heterosexual intercourse. *Conclusions.* This study provides evidence supporting the effectiveness of community-level HIV prevention programming and the need for its broader implementation. The study also demonstrates the suitability of multilevel methods for examining the effectiveness of community-level public health programs.
Delor F, Hubert M. **Revisiting the concept of 'vulnerability'.***Soc Sci Med.* 2000 *Jun;50(11):1557-70*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	In this article the concept of vulnerability has been clarified to reinforce its heuristic capacity and political and practical relevancy.
David Ingleby **Getting Multicultural Health Care off the Ground: Britain and The Netherlands Compared.** *Migration, Health and Social Care, 2006 December, 2 ;3/4: 4-15.*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This article analyses 'internal' (professional) and 'external' (social) factors which lead to the implementation of measures to improve health care delivery for migrants and ethnic minorities in Netherlands and UK. The authors analyse similarities and differences between these countries in terms of migrant and minority population, social climate and government policy.
de Guzman A. **Reducing social vulnerability to HIV/AIDS: models of care and their impact in resource-poor settings.***AIDS Care, 2001 Oct;13(5):663-75*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This paper evaluates the impact of HIV/AIDS care models on socially vulnerable groups, such as women and children.
Rhodes SD, Hergenrather KC, Montaño J, Remnitz IM, Arceo R, Bloom FR, Leichliter JS, Bowden WP. **Using community-based participatory research to develop an intervention to reduce HIV and STD infections among Latino men.** *AIDS Educ Prev. 2006 Oct;18(5):375-89.*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This article reports the results of HoMBReS (Hombres Manteniendo Bienestar y Relaciones Saludables) program that is a sexual risk reduction intervention designed to reduce HIV and STD infection among recently arrived, non-English-speaking Latino men who are members of a multicounty Latino soccer league in central North Carolina. This article describes: (a) the CBPR partnership history and further expansion; (b) the development of the intervention through the integration of collected formative data, theoretical considerations, and findings from the scientific literature; and (c) lessons learned while using a CBPR approach to develop HoMBReS.

Lazarus JV, Himedan HM, Østergaard LR, Liljestrand J. **HIV/AIDS knowledge and condom use among Somali and Sudanese immigrants in Denmark** *Scand J Public Health*. 2006;34(1):92-9.	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* This study explores the knowledge, attitudes and practices among Somali and Sudanese immigrants in Denmark with regard to HIV/AIDS and condom use. *Methods.* A 78-item questionnaire, divided into five thematic sections, was given to 192 purposively selected Sudanese and Somalis of both sexes, aged 18-49, who had lived in Denmark for one or more years. It was administered in Arabic and Somali in four locations and supplemented by 13 semi-structured interviews. *Results.* Education, sex, and nationality, but not length of residence in Denmark, were positively associated with knowledge about HIV/AIDS. Less than half of both men and women scored more than 70% on the knowledge portion of the questionnaire, while Sudanese knew more than Somalis. Men had a more negative attitude towards condoms than women, but greater knowledge about them. One-third of the women reported never having seen or heard of a condom, and almost half had never received information about condoms. Both sexes preferred receiving such information from the TV or friends instead of family doctors or HIV-positive individuals. *Conclusions.* This study suggests that knowledge about HIV/AIDS is low in these two Danish immigrant groups, The groups receive little information, while condom knowledge is particularly low among poorly educated women, and men have a negative attitude to condom use.
Fernandez I. **Vulnerable to HIV / AIDS. Migration.** *Integration*. 1998 Fall;(57):36-42	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	This report discusses the impact of globalization, patterns of migration in Southeast Asia, gender issues in migration, the links between migration and HIV/AIDS, and spatial mobility and social networks.
Migration and AIDS. *Int Migr*. 1998;36(4):445-68	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	This article presents the perspectives of UNAIDS and the International Organization for Migration (IOM) on migration and HIV/AIDS. It identifies research and action priorities and policy issues, and describes the current situation in major regions of the world.
Khan MR, Patnaik P, Brown L, Nagot N, Salouka S, Weir SS. **Mobility and HIV-related sexual behavior in Burkina Faso** AIDS Behav. 2008 Mar;12(2):202-12.	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group. Level III.2 evidence	*Objectives*. To identify where HIV/AIDS interventions targeting mobile individuals should be implemented. *Methods.* This study compared HIV-related sexual behavior among mobile and non-mobile populations in Burkina Faso *Results.* Men (N = 940) and women (N = 430) responded to a sexual behavior survey while socializing at venues where people meet sexual partners in eight Burkina Faso villages. Mobile women were more likely than non-mobile women to report new sexual partnerships (adjusted prevalence odds ratio (POR): 2.07, 95% confidence interval (CI): 1.19-3.59) and transactional sex (adjusted POR: 2.30, 95% CI: 1.55-3.42) in the past month. *Conclusions.* Mobility was most common and associations between mobility and sexual partnership levels were particularly strong among women interviewed in urban commercial towns situated near international borders. Mobile women were most likely to be interviewed at venues such as bars and clubs, making these appropriate locations for HIV/AIDS interventions. Mobility was not associated with HIV-related sexual behaviours among men.
de Wit JB, Adam PC. **To test or not to test: psychosocial barriers to HIV testing in high-income countries.** *HIV Med*. 2008 Jul;9 Suppl 2:20-2	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	In this paper published literature in the fields of public health, behavioural medicine, and (health) psychology were assessed and synthesized. Testing for HIV seems to be more likely when individuals perceive that they have been at risk, though this association is not perfectly observed. Fear of the consequences of testing positive -mainly worries related to discrimination and rejection - also hinders HIV testing. Finally, individuals appear more likely to test for HIV when they perceive more benefits from testing.

Michele G. Shedlin, Ernest Drucker, Carlos U. Decena, Susie Hoffman, Gauri Bhattacharya, Sharlene Beckford, and and Ricardo Barreras **Immigration and HIV/AIDS in the New York Metropolitan Area** *Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 83, No. 1, 2006*	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objectives.* This collaborative analysis utilizes data from three studies of immigrant groups in New York to describe and compare these factors that provide the context for risk and prevention of HIV/AIDS and other health challenges. *Methods.* Data discussed were obtained utilizing multi-method approaches to identify and describe HIV risks among both new and more established immigrant populations within the urban settings of North America, with NYC as a central focus. Demographic and epidemiological data situate the analysis within the larger contexts of US migration and the HIV/AIDS epidemic in NYC. *Results.* The authors identify risk and protective factors embedded to varying degrees in immigrants_ multiple cultures and sub-cultures. The three populations studied include: 1) new Hispanic immigrants from the Dominican Republic, Mexico and Central America; 2) West Indian (Caribbean) immigrants from Jamaica, Trinidad/ Tobago and other anglophone Caribbean nations; and 3) South Asian immigrants from India (Indian Americans). The paper seeks differences and commonalities, focusing on the social, attitudinal and behavioral factors that contribute to increased HIV/AIDS vulnerability among these populations. Topics addressed include factors affecting HIV/AIDS vulnerability of immigrant groups, goals and expectations, health and mental health issues, gender role change, sexual risk, alcohol and other drug use, perception of HIV/AIDS risk and implications for prevention.

Reports

REPORT	STUDY DESIGN & NHMRC LEVELS OF EVIDENCE	DESCRIPTION
Eshel A, Moore A, Mishra M, Wooster J, Toledo C, Uhl G, Agüero LW **Community stakeholders' perspectives on the impact of the minority AIDS initiative in strengthening HIV prevention capacity in four communities** Ethn Health. *2008 Jan;13(1):39-54*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives*. The Minority AIDS Initiative (MAI) was launched in 1998. The Centres for Disease Control and Prevention (CDC) conducted an evaluation to assess the influence of MAI in four communities, and the extent to which these communities increased their capacity to meet the HIV prevention needs of racial and ethnic minorities. *Methods.* Retrospective data were collected annually through individual interviews over three years. Individual interviews were conducted with community stakeholders across the three waves of data collection. Data were analyzed using standardized qualitative methods including codebook development, coding, inter-coder agreement assessments, and data interpretation. *Results.* Community stakeholders reported that MAI increased capacity to respond to the HIV epidemic and provide services to racial and ethnic minorities. Specifically, MAI was perceived to have increased community empowerment, involvement, and awareness of HIV/AIDS; expanded HIV-related services and organizational self-sufficiency; and improved collaboration and the coordination of services in the community. *Conclusions.* MAI represented an initial national attempt to address the disproportionate rates of HIV/AIDS among racial and ethnic minorities.
Kouznetsov L, Kuznetsov AV, Zippel SA. **Risky sexual behaviour, taboo of HIV/AIDS and HIV-prevention topics: interviews with HIV-positive immigrants from the former Soviet Union.** Int J STD AIDS. *2008 Jan;19(1):71-2*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This article describes stigmatization and discriminations of HIV-positive people in Russian immigrants that live in Germany discovered by semi-structured interviews.

Sexual & Reproductive Health and HIV Linkages: Evidence Review and Recommendations WHO/HIV/2008 UNFPA/2008 IPPF-HIV 2008 UNAIDS 2008 UCSF 2008	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	In order to gain a clearer understanding of the effectiveness, optimal circumstances, and best practices for strengthening sexual and reproductive health (SRH) and HIV linkages, a systematic review of the literature was conducted. The findings corroborate the many benefits gained from linking SRH and HIV policies, systems and services.
Claude-Hélène Mayer. **Identity and Health in Transcultural Mediation**. **The Model of Culture-Synergetic Transcultural Mediation and its Impacts** *Journal of Intercultural Communication Issue 17, June 2008*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This article introduces the model of "Culture-Synergetic Transcultural Mediation" (CSTM), which is based on transformative mediation philosophy and promotes culture-synergetic processes in conflict situations. These processes aim at transforming personal, relationship-based, structural and cultural identities. They particularly integrate the concept of identity and salutogenesis as important aspects in conflict transformation.
Gillespie-Johnson M. **HIV/AIDS prevention practices among recent-immigrant Jamaican women.** Ethn Dis. *2008 Spring;18(2 Suppl 2):S2-175-8*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* The study described the participants' HIV/AIDS prevention knowledge, behaviours, health-beliefs, and social and cultural factors that influenced their behaviours. *Methods.* This exploratory, descriptive, and phenomenological study explored the meaning of HIV/AIDS safer sex practices among 20 single, heterosexual women, 18-30 years old, who emigrated from Jamaica in the last 12 years. The Health Belief Model guided the study, and the maximum variation criterion sampling technique was used to select participants. In-depth interviews, journal entries, and field notes were used to collect data. Diekelmann, Allen, and Tanner's seven-stage process of Heideggarian hermeneutics data analysis was used to produce rich descriptions of shared practices and common meanings. *Results.* Women did not perceive themselves as susceptible to the disease. Women in this study did not use condoms. These women expressed lack of condom negotiation skills, fear of losing their relationship, and fear of physical or mental abuse from their significant other as barriers to using condoms. *Conclusions.* Most women were knowledgeable about HIV/AIDS prevention but have religious beliefs and cultural practices that were deeply embedded in their health practices. Many women were not sure of a mutually monogamous relationship, and talking about sexual issues was viewed as taboo.
Salaman R .**MiMi with Migrants for Migrants** *8th Training & Innovation Conference, Dresden 4. July 2008* **Improving Health Systems for Migrant Populations**	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	MiMi – Empowering Migrants MiMi started in 2003.Since then, the project has expanded to 37 cities, involved more than 120,000 immigrants. *Objectives*: The "MiMi - Migrants for Migrants. Intercultural Health in Germany" program recruits, trains, and supports intercultural mediators to teach German health system and health topics to their migrant communities.

R. Salman, M. Wienold, MAP-Projekt Hannover **TRANSCULTURAL MEDIATOR TRAINING (HIV/AIDS) AS A CORE FOR PREVENTION CAMPAIGNS** *Int Conf AIDS.* 2006 Aug 13-18;16 Abstract No. ThPE0517	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* The project aims to build health assets in migrant communities by training of transcultural HIV/AIDS mediators and involving them in a scientifically evaluated prevention campaign. *Methods.* A structured training (state-funded, 50 hours, German) in a migrant-based NGO involves some 50 migrant peers annually (2 sites). The campaign funds community group sessions organized and evaluated by mediators (usually in mother-tongue). Over 200 peers have been trained since 1989. Over 400 croup sessions were set in e.g. language courses, mosques, churches and cultural associations. While the centre provides a network to the mediators, annual events provide updates, and have developed new projects (facilitator service to health-care institutions, Turkish prevention team and hotline, African PWA training, specialized immunology training, a drive to establish community group sessions in Russian speaking countries). *Results.* Migrant-based mediator training is able to establish targeted prevention campaigns in diverse populations. Differentials in health assets persist into second and third generation. Sexuality, drug use, self-help and access to services as well as group-pedagogic issues remain to be key in HIV/AIDS-integration in multicultural settings. While demand for community services is high, lack of funding currently limits progressive dissemination of this approach beyond two sites (covering >0.5 Mio migrants). *Conclusions.* Migrant community group sessions should be an essential part of HIV-prevention campaigns. There is an open opportunity for community work in home-countries (vacation/returning prevention).
Bischofberger I. **HIV-infected sub-Saharan migrants in Switzerland: advancing cross-cultural health assessment.** *J Assoc Nurses AIDS Care. 2008 Sep-Oct;19(5):357-67.*	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group. Level III. 2 evidence	*Objectives.* HIV prevalence among sub-Saharan migrants in Switzerland has continuously increased in the past 2 decades. Cross-cultural challenges, which are relatively new to many nurses, arise. *Methods.* Qualitative interview data with 10 HIV-infected and 30 non infected sub-Saharan African migrants (including 10 who were peer educators) living in Switzerland were analyzed. *Results.* The results showed that HIV infection was characterized as invisible, shameful, risky, and treatable, representing helpful and problematic factors.
Martijn, C; de Vries, NK, Voorham, T; et al. **The effects of AIDS prevention programs by lay health advisors for migrants in the Netherlands.** *Patient Education and Counseling, (2004) 53: 157–165*	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group. Level III. 2 evidence	In this paper two studies describe the effectiveness of AIDS prevention programs by lay health advisors (LHAs) for migrants in The Netherlands. The effects of such AIDS programs were evaluated (Study 1) and compared with the effects of professional health advisors (PHAs, i.e. medical doctors or nurses) (Study 2). The first study concerned Turkish and Moroccan migrants and showed positive effects on knowledge, behavioural control, and social norm towards condom use. Iraqi refugees participated in the second study that concerned a direct comparison of LHA- and PHA-based programs. Both programs result in positive effects in terms of attitude change and knowledge, but the LHA program resulted in a stronger intention to discuss AIDS with children.

Kocken, P; Voorham, T; Brandsma, J; Swart, W.**Effects of peer-led AIDS education aimed at Turkish and Moroccan male immigrants in The Netherlands** *European Journal of Public Health, 2001, 11:2, 153-9.*	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objectives.* This study was conducted in The Netherlands into acquired immune deficiency syndrome (AIDS) education for Turkish and Moroccan men. They were trained to educate people from their own ethnic group. The effect of peer education on the perceived threat of AIDS and beliefs about condom use were studied. *Methods.* Places where male immigrants met, i.e. coffee houses, mosques and bars, were matched and randomly assigned to experimental and control groups. The experimental group filled out a short questionnaire at the end of the education session (post-test), whereas the control group was pre-tested and had the opportunity of following the AIDS education after participation in the questionnaire. *Results.* Using multilevel logistic regression analysis, an effect could be established on misunderstandings regarding human immunodeficiency virus (HIV) transmission (OR = 5.9 and 95% CI: 2.3-15.3) and risk appraisal for HIV infection (OR = 2.9 and 95% CI: 1.3-6.3). *Conclusions* .The perceived benefits of the protective effect of condom use were affected in men 30 years and older, the perceived barrier of diminished satisfaction if using condoms was changed among unmarried men, condom self-efficacy was affected in men who valued peer education as important and an effect on intention to use condoms was found among Moroccans.
Pronyk PM, Hargreaves JR, Kim JC, Morison LA, Phetla G, Watts C, Busza J, Porter JD **Effect of a structural intervention for the prevention of intimate-partner violence and HIV in rural South Africa: a cluster randomised trial** Lancet. *2006 Dec 2;368(9551):1973-83*	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objectives.* The aim of the Intervention with Microfinance for AIDS and Gender Equity (IMAGE) study was to assess a structural intervention that combined a microfinance program with a gender and HIV training curriculum. *Methods.* Villages in the rural Limpopo province of South Africa were pair-matched and randomly allocated to receive the intervention at study onset (intervention group, n=4) or 3 years later (comparison group, n=4). Loans were provided to poor women who enrolled in the intervention group. A participatory learning and action curriculum was integrated into loan meetings, which took place every 2 weeks. Both arms of the trial were divided into three groups: direct program participants or matched controls (cohort one), randomly selected 14-35-year-old household co-residents (cohort two), and randomly selected community members (cohort three). Primary outcomes were experience of intimate-partner violence--either physical or sexual--in the past 12 months by a spouse or other sexual intimate (cohort one), unprotected sexual intercourse at last occurrence with a non-spousal partner in the past 12 months (cohorts two and three), and HIV incidence (cohort three). Analyses were done on a per-protocol basis. *Results.* In cohort one, experience of intimate-partner violence was reduced by 55% (adjusted risk ratio [aRR] 0.45, 95% CI 0.23-0.91; adjusted risk difference -7.3%, -16.2 to 1.5). The intervention did not affect the rate of unprotected sexual intercourse with a non-spousal partner in cohort two (aRR 1.02, 0.85-1.23), and there was no effect on the rate of unprotected sexual intercourse at last occurrence with a non-spousal partner (0.89, 0.66-1.19) or HIV incidence (1.06, 0.66-1.69) in cohort three. *Conclusions,* A combined microfinance and training intervention can lead to reductions in levels of intimate-partner violence in program participants. Social and economic development interventions have the potential to alter risk environments for HIV and intimate-partner violence in southern Africa.

Van Rompay KK, Madhivanan P, Rafiq M, Krupp K, Chakrapani V, Selvam D. **Empowering the people: Development of an HIV peer education model for low literacy rural communities in India.** Hum Resour Health 2008 Apr 18;6:6	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives*. This paper describes a peer education model developed to educate and empower low-literacy communities in the rural district of Perambalur (Tamil Nadu, India). *Methods*. From January to December 2005, six non-governmental organizations (NGO's) with good community rapport collaborated to build and pilot-test an HIV peer education model for rural communities. The program used participatory methods to train 20 NGO field staff (Outreach Workers), 102 women's self-help group (SHG) leaders, and 52 barbers to become peer educators. Cartoon-based educational materials were developed for low-literacy populations to convey simple, comprehensive messages on HIV transmission, prevention, support and care. In addition, street theatre cultural programs highlighted issues related to HIV and stigma in the community. *Results.* The program is estimated to have reached over 30 000 villagers in the district through 2051 interactive HIV awareness programs and one-on-one communication. Outreach workers (OWs) and peer educators distributed approximately 62 000 educational materials and 69 000 condoms, and also referred approximately 2844 people for services including voluntary counselling and testing (VCT), care and support for HIV, and diagnosis and treatment of sexually-transmitted infections (STI). At least 118 individuals were newly diagnosed as persons living with HIV (PLHIV); 129 PLHIV were referred to the Government Hospital for Thoracic Medicine (in Tambaram) for extra medical support. Focus group discussions indicate that the program was well received in the communities, led to improved health awareness, and also provided the peer educators with increased social status. *Conclusions* .Using established networks (such as community-based organizations already working on empowerment of women) and training women's SHG leaders and barbers as peer educators is an effective and culturally appropriate way to disseminate comprehensive information on HIV/AIDS to low-literacy communities. Similar models for reaching and empowering vulnerable populations should be expanded to other rural areas.
Kaplan EH, Soskolne V, Adler B, Leventhal A, Shtarkshall RA **A model-based evaluation of a cultural mediator outreach program for HIV+ Ethiopian immigrants in Israel.** Eval Rev. *2002 Aug;26(4):382-94*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This article presents a model-based evaluation of a program designed to reduce HIV transmission from HIV-infected Ethiopian immigrants in Israel. This study's approach focuses on pregnancy rate reduction, estimated from administrative periodic reporting data, as a measure of unprotected sexual exposure. The models show that among both HIV+ women and the female sex partners of HIV+ men, the ongoing pregnancy rates estimated during the intervention were significantly lower than the estimated baseline pregnancy rates, suggesting reductions in unprotected sexual exposures among those participating in the program.
Poudel KC, Jimba M, Joshi AB, Poudel-Tandukar K, Sharma M, Wakai S. **Retention and effectiveness of HIV/AIDS training of traditional healers in far western Nepal.** Trop Med Int Health. *2005 Jul;10(7):640-6.*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* To evaluate HIV/AIDS training for traditional healers (THs) in far western Nepal. *Methods*. A structured questionnaire and assessed THs' knowledge of HIV transmission immediately prior to the initial training conducted from June to December 1999, and then 9-12 months after the training in 2000. *Results.*THs significantly improved their knowledge of HIV transmission, misconceptions and preventive measures after the training. The FGD and key informant interview results showed that the trained THs provided culturally acceptable HIV/AIDS education to the local people, distributed condoms and played a role in reducing the HIV/AIDS-related stigma.

Bateganya MH, Abdulwadud OA, Kiene SM. **Home-based HIV voluntary counseling and testing in developing countries.** Cochrane Database Syst Rev. *2007 Oct 17;(4)*	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	*Objectives.* To identify and critically appraise studies addressing the implementation of home-based HIV voluntary counselling and testing in developing countries.) To determine whether home-based HIV voluntary counselling and testing (HBVCT) is associated with improvement in HIV testing outcomes compared to facility-based models. *Methods.* Randomized controlled trials (RCTs) and non-randomized trials (e.g., cohort, pre/post-intervention and other observational studies) were analyzed comparing home-based HIV VCT against other testing models. *Conclusions* Home-based testing and/or delivery of HIV test results at home, rather than in clinics, appears to lead to higher uptake in testing. However, given the limited extant literature and the limitations in the included existing studies, there is not sufficient evidence to recommend large-scale implementation of the home-based testing model.
Malow RM, Jean-Gilles MM, Devieux JG, Rosenberg R, Russell A. **Increasing access to preventive health care through cultural adaptation of effective HIV prevention interventions: a brief report from the HIV prevention in Haitian youths study.** *ABNF J. 2004 Nov-Dec;15(6):127-32*	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group. Level III. 2 evidence	This article describes an HIV prevention study among Haitian youths, based on the cultural adaptation of a cognitive behavioural HIV risk reduction intervention entitled "Becoming a Responsible Teen." *Objectives.* The aim of the study is to evaluate whether the BART intervention is more effective than a control condition in reducing HIV risk behaviour in the target population. The project explores how self-efficacy, behavioural intentions, social factors and acculturation influence the risk behaviour of Haitian American adolescents.
Pronyk PM, Kim JC, Makhubele MB, Hargreaves JR, Mohlala R, Hausler HP. **Introduction of voluntary counselling and rapid testing for HIV in rural South Africa: from theory to practice.** AIDS Care. *2002 Dec;14(6):859-65*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* This article describes the introduction of VCT among five primary health care (PHC) facilities in a rural South African setting, alongside a multidimensional impact assessment as part of a national pilot program. *Methods.* Twenty health workers in five PHC facilities were trained to provide VCT using rapid-testing assays. The feasibility of VCT introduction and its overall acceptability to clients and providers were evaluated using clinic testing registers, semi-structured interviews with counsellors and mock client encounters. *Results* .One year after its introduction, a major increase in the quantity of HIV testing, the proportion of clients who receive their results, and the proportion who present voluntarily was observed. The majority of those presenting were women, and 20-40 year olds predominated. There was a high level of acceptance among health workers, and the quality of VCT was rated very good in mock client encounters. *Conclusions* .This work demonstrates one effective model for improving access to VCT through existing primary health care services in a rural South African context.
Khumalo-Sakutukwa G, Morin SF, Fritz K, Charlebois ED, van Rooyen H, Chingono A, Modiba P, Mrumbi K, Visrutaratna S, Singh B, Sweat M, Celentano DD, Coates TJ; NIMH Project Accept Study Team. **Project accept (HPTN 043): a community-based intervention to reduce HIV incidence in populations at risk for HIV in sub-Saharan Africa and Thailand.** J Acquir Immune Defic Syndr. *2008 Dec 1;49(4):422-31.*	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objectives.* Reduce HIV-related stigma has the potential to reduce the incidence of HIV-1 infection in the developing world. *Methods.* A multilevel intervention providing community-based HIV mobile voluntary counseling and testing, community mobilization, and post-test support services was developed. Forty-eight communities in Tanzania, Zimbabwe, South Africa, and Thailand were randomized to receive the intervention or clinic-based standard voluntary counselling and testing (VCT), the comparison condition. Quality assurance procedures to evaluate staff fidelity to the intervention was also developed. *Results.* In the first year of the study, a 4-fold increase in testing was observed in the intervention versus comparison communities. An overall 95% adherence to intervention components was also found. Study outcomes, including prevalence of recent HIV infection and community-level HIV stigma, will be assessed after 3 years of intervention. *Conclusions.* The provision of mobile services, combined with appropriate support activities, may have significant effects on utilization of voluntary counselling and testing. These findings also provide early support for community mobilization as a strategy for increasing testing rates.

Villacorta V, Kegeles S, Galea J, Konda KA, Cuba JP, Palacios CF, Coates TJ; NIMH Collaborative HIV/STD Prevention Trial Group **Innovative approaches to cohort retention in a community-based HIV/STI prevention trial for socially marginalized Peruvian young adults.** Clin Trials. *2007;4(1):32-41*	Evidence obtained from case series (either post-test or pre-test and post-test),opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* This article describes news strategies to maintain high participation rates over time. *Methods.* Longitudinal clinical trials that included detailed preliminary ethnographic research to identify the behaviours of key target groups, approaches to develop strong informal bonds between project staff and participants outside of study settings, and methods to enhance positive participant attitudes towards the study. *Results* .The overall study retention rate after two years was 84%, even though only 26% of the study populations supplied complete locator information (telephone, address and the names of two friends). *Conclusions.* The methods used to maintain contact with the populations were labour intensive, low tech and adequate for these populations and could be used to retain study participants in other marginalized, urban, low-income areas.
Morin SF, Khumalo-Sakutukwa G, Charlebois ED, Routh J, Fritz K, Lane T, Vaki T, Fiamma A, Coates TJ. **Removing barriers to knowing HIV status: same-day mobile HIV testing in Zimbabwe.** J Acquir Immune Defic Syndr. *2006 Feb 1;41(2):218-24*	Evidence obtained from case series (either post-test or pre-test and post test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* A mobile HIV voluntary counseling testing (VCT) strategy was developed. *Methods.* Free anonymous mobile VCT using 2 rapid HIV tests in 12 marketplaces in Epworth and Seke, Zimbabwe was provided. *Results* A total of 1099 individuals participated in mobile VCT between March 2002 and August 2003. The proportion of participants infected with HIV was 29.2%. Overall, 98.8% of participants elected to receive HIV test results the same day. Reasons for not testing previously were often logistic (eg, inconvenience of hours [25.6%] and location [20.7%] or cost [8%]). Those who used the same-day mobile testing services (testers vs. nontesters) perceived themselves at higher risk for HIV infection (adjusted odds ratio [AOR] = 1.8) but were less likely to have known people with HIV (AOR = 0.49) or where to get tested (AOR = 0.57). *Conclusions.* Same-day HIV testing in community settings seems to be acceptable in sub-Saharan Africa. Barriers to HIV testing are often logistic and can be overcome with community-based strategies.
Forsyth AD, Coates TJ, Grinstead OA, Sangiwa G, Balmer D, Kamenga MC, Gregorich SE. **HIV infection and pregnancy status among adults attending voluntary counseling and testing in 2 developing countries.** Am J Public Health. *2002 Nov;92(11):1795-800*	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objectives.* This study investigated the impact of HIV voluntary counseling and testing (VCT) on reproduction planning among 1634 adults in 2 sub-Saharan countries. *Methods.* Data were obtained from a multisite randomized controlled trial. *Results.* At 6 months post-VCT, the women more likely to be pregnant were younger (odds ratio [OR] = 2.5; 95% confidence interval [CI] = 1.0, 6.5), not using contraceptives (OR = 0.1; 95% CI = 0.1, 0.3), and HIV infected (OR = 3.0; 95% CI = 1.3, 7.0). An interaction emerged linking pregnancy intention at baseline and HIV serostatus with pregnancy at follow-up (OR = 0.1; 95% CI =.0, 0.4). *Conclusions.* Partner pregnancy rates did not differ by HIV serostatus among men. HIV diagnosis may influence reproduction planning for women but not for men.
Waldo CR, Coates TJ. **Multiple levels of analysis and intervention in HIV prevention science: exemplars and directions for new research.**. AIDS. *2000 Sep;14 Suppl 2:S18-26.*	Evidence obtained from case series (either post-test or pre-test and post test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	In this article theory to outline multiple levels of analysis at which preventive interventions was conceptualized. These levels include the individual, dyadic/small group, organizational, community, and societal/cultural. Advantages and disadvantages of locating HIV risk at each level were discussed. The field of HIV prevention science should address risk behaviour at all levels of analysis.

Kerr-Pontes LR, González F, Kendall C, Leão EM, Távora FR, Caminha I, do Carmo AM, França MM, Aguiar MH. **Prevention of HIV infection among migrant population groups in Northeast Brazil.** Cad Saude Publica. *2004 Jan-Feb;20(1):320-8.*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives.* The research focused on different configurations, beliefs, representations, and forms of social organization of behaviour thought to be associated with the population's capacity to efficiently follow AIDS prevention measures. *Methods.* Participants located in neighbourhoods known for having large migrant populations were identified by Family Health Program Workers in Fortaleza and Teresina. The study adopted a qualitative methodology. *Conclusions.* Several belief-system concepts and values, as well as the social organization of sexuality revealed in the study, represent obstacles both to AIDS prevention and condom use. The groups' increased vulnerability relates to the socioeconomic complexity that must be considered in HIV/AIDS control and prevention programs.
Rhodes SD, Hergenrather KC **Recently arrived immigrant Latino men identify community approaches to promote HIV prevention**. Am J Public Health. *2007 Jun;97(6):984-5.*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	North Carolina has one of the fastest-growing Latino communities in the United States and carries a disproportionate HIV infection burden. Recently arrived, monolingual (Spanish speaking), immigrant Latino men in Winston-Salem, NC, used photovoice to explore HIV prevention within their communities.
Woods ER, Samples CL, Melchiono MW, Keenan PM, Fox DJ, Chase LH, Tierney S, Price VA, Paradise JE, O'Brien RF, Mansfield CJ, Brooke RA, Allen D, Goodman E.**Boston HAPPENS Program: a model of health care for HIV-positive, homeless, and at-risk youth. Human immunodeficiency virus (HIV) Adolescent Provider and Peer Education Network for Services.** J Adolesc Health. *1998 Aug;23(2 Suppl):37-48.*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives* .The Boston HAPPENS [Human immunodeficiency virus (HIV) Adolescent Provider and Peer Education Network for Services] Program is a project supported by Special Projects of National Significance (SPNS) Program, HIV/AIDS Bureau, Health Resources and Services Administration, which provides a network of care for homeless, at-risk, and HIV-positive youth (ages 12-24 years), involving eight agencies. *Methods.* The program has provided services to 1301 youth, including 46 who are HIV-positive. Boston HAPPENS provides a citywide network of culturally and developmentally appropriate adolescent-specific care, including: (a) outreach and risk-reduction counseling through professional and adult-supervised peer staff, (b) access to appropriate HIV counseling and testing support services, (c) life management counseling (mental health intake and visits as part of health care and at times of crisis), (d) health status screening and services needs assessment, (e) client-focused, comprehensive, multidisciplinary care and support, (f) follow-up and outreach to ensure continuing care, and (g) integrated care and communication among providers in the metropolitan Boston area.

Discussion

DISCUSSION	STUDY DESIGN & NHMRC LEVELS OF EVIDENCE	DESCRIPTION
Albarracín D, Durantini MR, Earl A, Gunnoe JB, Leeper J. **Beyond the most willing audiences: a meta-intervention to increase exposure to HIV-prevention programs by vulnerable populations.** Health Psychol. *2008 Sep;27(5):638-44.*	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objectives* Enrolment in HIV-prevention interventions is more likely when the audience has safer rather than riskier HIV-relevant behavior. Thus, a meta-intervention was designed to increase participation by an audience of infrequent condom users in Florida. *Methods.* Participants (N = 400) were randomly assigned to 1 of 4 conditions varying the introduction to a counselling program. There was also an information-control group containing a description of the program *Methods.* m, and a no-information-control group solely containing an invitation. *Results.* Findings indicated that the experimental introduction was the most successful at yielding participation in the counselling program when the audience had low intentions to use condoms in the future. *Conclusions.* Intervention introductions countering participants resistance to change increase participation in HIV-prevention counselling among reluctant clients.
Genberg BL, Kulich M, Kawichai S, Modiba P, Chingono A, Kilonzo GP, Richter L, Pettifor A, Sweat M, Celentano DD; NIMH Project Accept Study Team (HPTN 043). **HIV risk behaviors in sub-Saharan Africa and Northern Thailand: baseline behavioral data from Project Accept.** J Acquir Immune Defic Syndr. *2008 Nov 1;49(3):309-19*	Evidence obtained from at least one properly designed randomised controlled trials. Level II evidence	*Objective.* This article describe the baseline data on HIV risk behaviors and HIV testing in sub-Saharan Africa and northern Thailand from Project Accept. *Methods.* A community-randomized controlled trial of community mobilization, mobile voluntary counselling and testing (VCT), and posttest support services for individuals aged 18-32 years yielded a sample of 14,657, with response rates ranging from 84%-94% across the 5 sites (Thailand, Zimbabwe, Tanzania, and 2 in South Africa). Individuals completed an interviewer-administered survey on demographic characteristics, HIV risk behaviors, and history of VCT. *Results.* In multivariate analysis, females, married individuals, less educated with 1 sexual partner in the past 6 months were more likely to have had unprotected intercourse in the previous 6 months. Rates of lifetime HIV testing ranged from 5.4% among males in Zimbabwe to 52.6% among females in Soweto. *Conclusions* Significant risk of HIV acquisition in Project Accept communities exists despite 2 decades of prevention efforts. Low levels of recent HIV testing suggest that increasing awareness of HIV status through accessible VCT services may reduce HIV transmission.
Coates TJ, Richter L, Caceres C. **Behavioural strategies to reduce HIV transmission: how to make them work better.** Lancet. *2008 Aug 23;372(9639):669-84*	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	This paper makes five key points. First is that the aggregate effect of radical and sustained behavioural changes in a sufficient number of individuals potentially at risk is needed for successful reductions in HIV transmission. Second, combination prevention is essential since HIV prevention is neither simple nor simplistic. Third, prevention programs can do better. The effect of behavioural strategies could be increased by aiming for many goals (eg, delay in onset of first intercourse, reduction in number of sexual partners, increases in condom use, etc) that are achieved by use of multilevel approaches (eg, couples, families, social and sexual networks, institutions, and entire communities) with populations both uninfected and infected with HIV. Fourth, prevention science can do better. Fifth, we need to get the simple things right. The fundamentals of HIV prevention need to be agreed upon, funded, implemented, measured, and achieved.

Coates TJ, Fiamma A, Szekeres G, Dworkin S, Remien RH, Hanson BW, Rudatsikira JB. Business' role in exercising leadership, promoting equity, embracing accountability, and developing partnerships. *AIDS. 2007 Jul;21 Suppl 3:S3-9*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	In an effort to advance the discussion and implementation of business action on HIV/AIDS, the UCLA Program in Global Health at the David Geffen School of Medicine at the University of California, Los Angeles, USA, hosted a think tank in Durban, South Africa, from 21 to 23 June 2006. The meeting brought together businesses, civil society organizations and academic researchers from southern Africa, the United States, and Europe. Its goals were: To review and consider available evidence on the epidemiology and impact of HIV/AIDS in the workplace; To establish how businesses have responded to the HIV/AIDS epidemic, and document what is known about the efficacy of workplace prevention and care programs; To assess the wider role of the private sector in advancing the key goals of accountability, equity and leadership in the fight against the virus; To determine future research needs and how those needs can be met; To make evidence-based programmatic and policy recommendations to maximize the contributions that the business sector can make towards HIV/AIDS prevention and care in South Africa.
Clark RC, Mytton J. **Estimating infectious disease in UK asylum seekers and refugees: a systematic review of prevalence studies** J Public Health (Oxf). *2007 Dec;29(4):420-8*	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	*Objectives* The prevalence of infectious diseases such as tuberculosis (TB), HIV and hepatitis B in the UK asylum seeker and refugee population is currently uncertain. *Methods.* Systematic review of published and unpublished studies. *Results.* Five studies met the inclusion criteria. Three studies reported the prevalence of TB with rates ranging from 1.33 to 10.42 per 1000. The three studies reporting hepatitis B estimated rates from 57 to 118 per 1000. One study reported a prevalence rate for HIV of 38.19 per 1000. *Conclusions.* A small number of studies have been identified reporting prevalence rates for TB, hepatitis B and HIV that vary widely where comparisons are available. These differences may reflect true variation in risk between study populations, but are likely to be affected by sampling difficulties encountered when researching these population groups.
Sexual & Reproductive Health and HIV Linkages: Evidence Review and Recommendations *Prepared and published by IPPF, UCSF, UNAIDS, UNFPA, WHO,* 2008	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	The international community agrees that the Millennium Development Goals will not be achieved without ensuring universal access to SRH and HIV prevention, treatment, care and support. In order to gain a clearer understanding of the effectiveness, optimal circumstances, and best practices for strengthening SRH and HIV linkages, a systematic review of the literature was conducted. The findings corroborate the many benefits gained from linking SRH and HIV policies, systems and services.
Bandyopadhyay M, Thomas J. **Women migrant workers' vulnerability to HIV infection in Hong Kong.** AIDS Care. *2002 Aug;14(4):509-21*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives* This paper reports migrant women worker's access to AIDS-related health information and health care facilities, perceptions about vulnerability, and risk behaviour profile in Hong Kong. *Methods.* Data was collected through a pre-tested questionnaire from a random sample of 2,010 women migrant workers. *Results..* A majority of the migrant women workers (63.6%) have been living and working in Hong Kong for between 4-10 years. Fifty-four per cent of the respondents felt that being a female they were vulnerable to HIV infection. Overall, the knowledge regarding HIV/AIDS and its route of transmission is inadequate amongst the migrant women workers in Hong Kong. It appears that AIDS-related information education and communication needs of women migrants workers are not met by the current HIV prevention and care activities in Hong Kong. The study indicates that migrant women workers who experienced sexual violence (9%) in Hong Kong perceive themselves to be 'at risk' of HIV infection. Seventy per cent of the respondents reported that they have felt discriminated against in Hong Kong, of which 42% felt discriminated against in Hong Kong hospitals. *Conclusions.* Addressing discrimination in health care settings is an essential element of AIDS prevention. The discussion urges researchers and policy makers to pay more attention to the vulnerability of migrant women workers.

Haour-Knipe M, Fleury F, Dubois-ArberF.**HIV/AIDS prevention for migrants and ethnic minorities: three phases of evaluation.** Soc Sci Med. *1999 Nov;49(10):1357-72.*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This paper describes three phases of evaluation of the Migrants Project (exploratory studies, process, and outcome evaluations). Outcome evaluation has shown that: a government sponsored HIV/AIDS prevention program can meet with acceptance by migrant communities; considerable engagement in prevention activities can be mobilised; and AIDS prevention among such communities can be effective. The strategy adopted by the program is thus supported. Key elements are to avoid potential for stigmatising by: (1) placing HIV/AIDS prevention efforts for migrant populations within an overall national HIV/AIDS prevention strategy; (2) informing and sensitising general populations within migrant communities before initiating more targeted prevention with migrant IDUs, MSM, and CSWs; (3) encouraging, facilitating and guiding health promotion efforts which emerge from within migrant communities themselves.
Kocken,P;Voorham,T; Brandsma, J;Swart, W. **Effects of peer-led AIDS education aimed at Turkish and Moroccan male immigrants in The Netherlands.** *European Journal of Public Health*, 2001, 11:2, 153-9.	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	*Objectives.* An evaluation study was conducted in The Netherlands into acquired immune deficiency syndrome (AIDS) education for immigrants given in their native language by peers. Turkish and Moroccan men were trained to educate people from their own ethnic group. The effect of peer education on the perceived threat of AIDS and beliefs about condom use were studied. *Methods.* Places where male immigrants met, i.e. coffee houses, mosques and bars, were matched and randomly assigned to experimental and control groups. The experimental group filled out a short questionnaire at the end of the education session (post-test), whereas the control group was pre-tested and had the opportunity of following the AIDS education after participation in the questionnaire. *Results* .Using multilevel logistic regression analysis, an effect could be established on misunderstandings regarding human immunodeficiency virus (HIV) transmission (OR = 5.9 and 95% CI: 2.3-15.3) and risk appraisal for HIV infection (OR = 2.9 and 95% CI: 1.3-6.3). The perceived benefits of the protective effect of condom use were affected in men 30 years and older, the perceived barrier of diminished satisfaction if using condoms was changed among unmarried men, condom self-efficacy was affected in men who valued peer education as important and an effect on intention to use condoms was found among Moroccans. *Conclusions.* Continuation of peer-led AIDS education for immigrants and adaption of the message to the needs of specific target groups is recommended.
Kocken,P;Joosten-van Zwanenburg, E; de Hoop, T. **Effects of health education for migrant females with psychosomatic complaints treated by general practitioners - A randomised controlled evaluation study,** *Patient Education and Counseling* (2008) 70: 25–30.	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	*Objectives.* The effectiveness of use of migrant health educators in the general practitioners' care for female migrants with psychosomatic problems was evaluated to contribute to the improvement of the care for these patients. *Methods.* A randomised controlled trial (RCT) design was used. A total of 104 patients (75%) agreed to take part in the intervention study. The patients were from Turkish and Moroccan immigrant groups living in The Netherlands. The intervention group received counselling and education from the migrant health educators as adjuncts to the GPs' care. Special attention was given to the patient's cultural background, supporting the communication between GP and patient. The control group received regular treatment from their GPs. *Results* .A significant improvement of perceived general health, psychological health and reported ability to cope with pain was observed among the intervention group. No effects were found for social support and the perceived burden of stressful life-events. *Conclusions.* The patients' perceived health and coping abilities improved through the intervention as a whole. Not all outcome measures had been affected due to among others the diversity of physical and psychological complaints the patients suffered from, non-compliance and a perceived decrease of disability over time. The intervention methods should be integrated in the patient care delivery for migrants in general practice.

Barten F, Mitlin D, Mulholland C, Hardoy A, Stern R. **Integrated approaches to address the social determinants of health for reducing health inequity.** *J Urban Health.* 2007 May;84(3 Suppl):i164-73	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This paper argues that it is essential to adopt a long-term multisectoral approach to address the social determinants of health in urban settings. For comprehensive approaches to address the social determinants of health effectively and at multiple levels, they need explicitly to tackle issues of participation, governance, and the politics of power, decision making, and empowerment.
Kellerman SE, Drake A, Lansky A, Klevens RM. **Use of and exposure to HIV prevention programs and services by persons at high risk for HIV.** AIDS Patient Care STDS. *2006 Jun;20(6):391-8*	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group. Level III. 2 evidence	*Objectives* .This paper describes the extent to which HIV prevention strategies reach a sample of high-risk persons and whether such exposure correlates with having been tested for HIV. *Methods* .Data are from the 2000 HIV Testing Survey, an anonymous interview study of men who have sex with men (MSM), injection drug users (IDU), and high-risk heterosexuals (HRH), recruited from appropriate venues in seven states and New York City. *Results.* Exposure to information interventions was high among 2491 respondents (85%-96%) and did not differ by testing status. Use of counseling or skills-building interventions varied by testing status for IDU (8% untested versus 41% tested, $p < 0.01$) and HRH (14% versus 20%, $p = 0.03$) but not MSM (15% versus 23%, $p = 0.08$). Among tested IDU, those receiving bleach kits were more likely to report consistent bleach use when injecting with nonsterile needles (25% versus 9%, $p = 0.003$). *Conclusions.* Exposure to HIV prevention information is high but exposure to counseling or skills-building interventions is less common and more prevalent among those previously tested. Prevention initiatives should focus on counseling and testing, skills-building, and prevention supplies.
Shedlin MG, Drucker E, Decena CU, Hoffman S, Bhattacharya G, Beckford S, Barreras R. **Immigration and HIV/AIDS in the New York Metropolitan Area.** *J Urban Health.* 2006 Jan;83(1):43-58.	Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials. Level I evidence	This collaborative analysis utilizes data from three studies of immigrant groups in New York to describe and compare these factors that provide the context for risk and prevention of HIVAIDS and other health challenges. Data discussed were obtained utilizing multi-method approaches to identify and describe HIV risks among both new and more established immigrant populations within the urban settings of North America, with NYC as a central focus. Demographic and epidemiological data situate the analysis within the larger contexts of US migration and the HIV/AIDS epidemic in NYC. The authors identify risk and protective factors embedded to varying degrees in immigrants' multiple cultures and sub-cultures. The three populations studied include: 1) new Hispanic immigrants from the Dominican Republic, Mexico and Central America; 2) West Indian (Caribbean) immigrants from Jamaica, Trinidad/Tobago and other Anglophone Caribbean nations; and 3) South Asian immigrants from India (Indian Americans). The paper seeks differences and commonalities, focusing on the social, attitudinal and behavioural factors that contribute to increased HIV/AIDS vulnerability among these populations. The data presented also identify some of the attitudes and behaviours of individuals and groups, as well as other facilitators and obstacles to transmission for immigrants as they adapt to new environments. Topics addressed include factors affecting HIV/AIDS vulnerability of immigrant groups, goals and expectations, health and mental health issues, gender role change, sexual risk, alcohol and other drug use, perception of HIV/AIDS risk and implications for prevention.

Tenner AD, Trevithick LA, Wagner V, Burch R. **Seattle YouthCare's prevention, intervention, and education program: a model of care for HIV-positive, homeless, and at-risk youth.** *J Adolesc Health.* 1998 Aug;23(2 Suppl):96-106.	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	YouthCare's project for youth who are human immunodeficiency virus (HIV)-positive or at high risk for becoming HIV positive is one of 10 supported by Special Projects of National Significance Program, HIV/Acquired Immunodeficiency Syndrome Bureau, Health Resources and Services Administration. Throughout its 23-year history, YouthCare has focused on serving runaway, homeless, sexual minority, and other youth "on the margins." YouthCare has developed creative service approaches. The agency developed a continuum of services which has provided care to 906 youth, including 37 who are HIV positive. The five major elements of the model include: (a) youth-specific HIV antibody test counseling, (b) outreach, (c) intensive case management for HIV-positive youth, (d) prevention services for youth at high risk of HIV infection, and (e) peer involvement. Quantitative evaluation helped in identifying youth served by the project (e.g., over one third self-identify as a sexual minority) and the sites at which services should be provided. This report's conclusion stresses that case management for this population, even though time and resource-intensive, is effective, and that services need to be flexible and tailored to each client's needs.
Rhodes SD, Hergenrather KC, Wilkin A, Alegría-Ortega J, Montaño J. **Preventing HIV infection among young immigrant Latino men: results from focus groups using community-based participatory research** .*J Natl Med Assoc.* 2006 Apr;98(4):564-73.	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives*. Latinos in the United States have been disproportionately affected by the intersecting epidemics of HIV and sexually transmitted diseases (STDs). *Methods*. Using a community-based participatory research (CBPR) approach to problem identification and exploration, a total of 74 Latino men (mean age 22.3, range 18-37) residing in an urban city in northwest North Carolina participated in one of eight focus groups on sexual health. *Results*. Among the findings of this study, >75% of participants reported Mexico as their country of origin; other participants reported being from Central and South American countries. Qualitative data analysis identified 13 themes, which were grouped into the following three domains: 1) psychosocial factors identified as influencing sexual risk health behaviors; 2) system-level barriers to sexual health; and 3) characteristics of potentially effective HIV prevention intervention approaches. *Conclusions*. The study findings suggest that community-based, male-centered interpersonal networks that provide individual and group education and skill-building and incorporate curanderos (Latino healers) and bilingual experts may be important elements of potentially effective intervention approaches to reach Latino men, who have been inaccessible to conventional HIV prevention programs.
Albarracín D, Leeper J, Earl A, Durantini MR. **From brochures to videos to counseling: exposure to HIV-prevention programs** AIDSBehav.*2008 May;12(3):354-62*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	*Objectives*.This research tested the prediction that reading a preventive brochure leads people to watch a preventive video, and that watching this video in turn leads to an increase in the likelihood of participating in a preventive counseling session. *Methods*. A sample of men and women from a southeastern community in the United States was recruited for a general health survey with the objective of examining participation in HIV-prevention interventions. Unobtrusive measures of exposure to HIV-prevention brochures, an HIV-prevention video, and an HIV-prevention counseling session were obtained. *Results*. Findings indicated that reading the brochures increased watching the video and that watching the video increased participation in the counseling session. The association between exposure to the video and exposure to the counseling was mediated by expectations that the counseling would be useful. Findings are discussed in terms of the need to ensure exposure to interventions to achieve intervention effectiveness.

Sani A, Kroese DP. **Controlling the number of HIV infectives in a mobile population.***Math Biosci.* 2008 Jun;213(2):103-12.	Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method). Level III. 1 evidence	*Objectives*. The spread of the human immunodeficiency virus (HIV) depends prominently on the migration of people between different regions. An important consequence of this population mobility is that HIV control strategies that are optimal in a regional sense may not be optimal in a national sense. *Methods*. Mathematical control problems for HIV spread in mobile heterosexual populations was applied. The cross-entropy method was applied to solve these highly multi-modal and non-linear optimization problems. The effectiveness of the method was demonstrated and was illustrate how the form of the optimal control function depends on the mathematical model used for the HIV spread.
Coenen T, Lundgren J, Lazarus JV, Matic S. **Optimal HIV testing and earlier care: the way forward in Europe.** HIV Med. *2008 Jul;9 Suppl 2:1-5*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	The articles were developed from a recent pan-European conference entitled 'HIV in Europe 2007. The conference, organized by a multidisciplinary group of experts representing advocacy, clinical and policy areas of the HIV field, was convened in an effort to gain a common understanding on the role of HIV testing and counselling in optimizing diagnosis and the need for earlier care. Key topics discussed at the conference and described in the following articles include: current barriers to HIV testing across Europe, trends in the epidemiology of HIV in the region, problems associated with undiagnosed infection and the psychosocial barriers impacting on testing. The supplement also provides a summary of the World Health Organization's recommendations for HIV testing in Europe and an outline of an indicator disease-guided approach to HIV testing proposed by a committee of experts from the European AIDS Clinical Society (EACS).
Richard Coker **Migration, public health and compulsory screening for TB and HIV** *Institute for Public Policy Research 2003*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	The aim of this paper then is to ensure that any policies which might be introduced to respond to concerns about immigrant-related infectious diseases reflect the epidemiological situation and the evidence-base relating to the benefits and costs of compulsory screening. It is also important to note that policies to introduce health screening for migrants to the UK (whether pre-entry or on-entry) will almost certainly be extremely expensive in terms of both start-up and recurring costs and once implemented may be difficult to halt. As the evidence in this paper suggests, these resources might be more effectively channelled into ensuring that all migrants to the UK have access to a 'welcome health check' – which would include a screening element – and treated as appropriate for any disease at an early stage.
Françoise Barten, Diana Mitlin, Catherine Mulholland, Ana Hardoy, and Ruth Stern **Integrated Approaches to Address the Social Determinants of Health for Reducing Health Inequity Journal of Urban Health.** *Bulletin of the New York Academy of Medicine, Vol. 84, 2007*	Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities, descriptive studies, reports of expert (i.e. consensus) committees, case studies. Level IV evidence	This paper argues that it is essential to adopt a long-term multisectoral approach to address the social determinants of health in urban settings. Integrated or multilevel approaches should address not only the immediate, but also the underlying and particularly the fundamental causes at societal level of related health issues. The political and legal organization of the policy-making process has been identified as a major determinant of urban and global health.

HAART
HIV correlated pathologies and other infections

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