The International Research on Racial/Ethnic Disparities in HIV Infection Among Injecting Drug Users: First Results

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Background

• Higher rates of HIV infection among racial/ethnic (R/E) minority injecting drug users (IDUs) reported in both US and international studies. ¹⁻²⁶

• Important exceptions exist to the general trend of higher prevalence among R/E minorities. ²⁷⁻²⁸ In some settings, HIV rates are higher among majority rather than minority populations. ¹⁵, ²⁹⁻³⁰
Background Cont’d.

• Individual risk behavior does not necessarily explain higher HIV infection among R/E minority groups. 10, 31-33

• Higher rates of HIV/AIDS among R/E minority IDUs create conditions for emergence of self-sustained heterosexual HIV transmission among minorities. 34-37
Methods

• Sources for Systematic Review: published and unpublished reports based on US and international data

• Primary database: PubMed

• Articles searched were prepared (unpublished) or published between Sep 1984 - Dec 2010
Methods Cont’d.

- **Study selection:** IDUs, R/E demographic data, and HIV prevalence or incidence analyzed within R/E subpopulations

- **Quality Assurance** conducted to ensure inter-associate reliability for abstract screening and article coding

- **Meta-analytic statistical techniques** for quantitative analysis (CMA, STATA)
Systematic Review: Year 1

33,033 records identified through PubMed

25,837 records screened

2,130 articles retrieved

811 articles reviewed 04/09-03/10

1,319 articles: eligibility TBD

114 eligible

697 ineligible
Diversity of R/E Minority Groups

- African-American
- Black
- Hispanic
- Latino
- Mexican-Am.
- Puerto Rican
- Central/South American
- Caribbean Hispanic
- Other/Ethnic Minority/Non-White/Mixed
- Indigenous Australian
- Aboriginal
- American Indian
- Southeast Asian
- Asian
- Roma
- Telugu
- Malay
- Yi
- Uighur
Results

- R/E disparities examined in 78 prevalence studies, totaling 141 R/E minority:majority comparisons

- Plurality of comparisons from the US (93), China (10), and Canada (9)

- 99 (70%) of comparisons demonstrate higher HIV prevalence among R/E IDUs, 29 (21%) showed no meaningful difference, and 13 (9%) found lower HIV prevalence among R/E minority IDUs
Results Cont’d

• Mean weighted OR for HIV prevalence in R/E minority:majority IDUs was 2.40 (95% CI 2.31-2.50)

• Mean weighted OR for HIV in US Black:White was 2.77 (95% CI 2.57-2.97), significantly greater than the mean weighted OR for all minority:majority comparisons

• Heterogeneity from I-squared = 89.4%
Findings

• In reporting of R/E demographics, “Other” sometimes represents minority groups with modest numbers; it can also refer to ethnic majority groups.

• Failure to report HIV infection rates by R/E group despite collection of demographic data by authors. Possible publication bias obscuring successful efforts to reduce R/E disparities.
Findings Cont’d.

• R/E differences can emerge at earliest phase in HIV epidemic and can persist for decades.
Direction

• Great heterogeneity among studies suggests multiple causal factors which contribute to R/E group differences in HIV infection.

• Project set to continue data collection through ~August 2011.

• Meeting the challenge of R/E HIV infection disparities requires more focused research, new interventions, and a detailed application of the human rights perspective in harm reduction.
References


