

# Racial/Ethnic Disparities in Injection Drug Use in Large US Metropolitan Areas

HANNAH COOPER, ScD, SAMUEL R. FRIEDMAN, PHD, BARBARA TEMPALSKI, MA, MPH, RISA FRIEDMAN, MPH, AND MARIE KEEM, MED

**PURPOSE:** Because blacks and Latinos bear a disproportionate burden of injection-related health problems compared with whites, we sought to describe black/white and Latino/white disparities in injecting drugs in 94 US metropolitan statistical areas (MSAs) in 1998.

**METHODS:** Using US Census data and three databases documenting injectors' use of different healthcare services (drug treatment, HIV counseling and testing, and AIDS diagnoses), we calculated database-specific black/white and Latino/white disparities in injecting in each MSA and created an index of black/white and Latino/white disparities by averaging data across the three databases.

**RESULTS:** The median black/white injecting disparity in the MSAs ranged from 1.4 to 3.7 across the three databases; corresponding median Latino/white injecting disparities ranged from 1.0 to 1.1. Median black/white and Latino/white index disparity values were 2.6 and 1.0, respectively.

**CONCLUSIONS:** Although whites were the majority of injectors in most MSAs, database-specific and index black/white disparity scores indicate that blacks were more likely to inject than whites. While database-specific and index disparity scores indicate that Latinos and whites had similar injecting rates, they also revealed considerable variation in disparities across MSAs. Future research should investigate these disparities' causes, including racial/ethnic inequality and discrimination, and study their contributions to the disproportionate burden of injection-related health problems borne by blacks and Latinos. Ann Epidemiol 2005;15:326–334. © 2005 Elsevier Inc. All rights reserved.

KEY WORDS: Blacks, Hispanics, Substance Abuse/Intravenous, Substance-related Disorders, HIV, US/Epidemiology.

#### INTRODUCTION

Public health research and surveillance systems in the US consistently find that blacks and Latinos bear disproportionate burdens of injection-related health problems compared with whites, including injection-related HIV/AIDS and overdose morbidity and mortality(1–10). Racial/ethnic disparities in injection-related AIDS, for example,

Medical and Health Research Association of New York City, Inc. (H.C.); National Development and Research Institutes, Inc. (H.C., S.R.F., B.T., R.F., M.K.); Institute for AIDS Research, National Development and Research Institutes, Inc. (S.R.F.); Department of Epidemiology, Bloomberg School of Public Health, Johns Hopkins University (S.R.F); and Center for Urban Epidemiologic Studies, New York Academy of Medicine (S.R.F) New York, NY.

Address correspondence to: Dr. Hannah Cooper, NDRI, 71 West 23rd Street, 8th Floor, New York, NY 10010. Tel.: (212) 845-4641; Fax: (917) 438-0894. E-mail: cooper@ndri.org

While conducting this research, the first author was supported by a Behavioral Science Training in Drug Abuse Research post-doctoral fellowship sponsored by the Mental and Health Research Association of New York City, Inc. and National Development and Research Institutes, Inc. with funding from the National Institute on Drug Abuse (5T32 DA07233). All other authors were supported by NIDA grant # R01 DA13336 ("Community Vulnerability and Response to IDU-Related HIV"). Points of view, opinions, and conclusions in this article do not necessarily represent the official position of the US Government, Medical Health and Research Association, or National Development and Research Institutes, Inc.

Received June 7, 2004; accepted October 19, 2004.

are stark: in 2000, blacks and Latinos each comprised 12% of the adult population but 50% and 24%, respectively, of newly-diagnosed injection-related AIDS cases, while whites constituted 71% of adults but only 25% of newly-diagnosed injection-related AIDS cases (11, 12). Characterizing the racial/ethnic composition of injecting populations is vital to investigating whether racial/ethnic differences in rates of injecting contribute to excess injection-related morbidity and mortality among blacks and Latinos, as has been previously hypothesized (9, 13, 14), and thus in furthering progress toward the *Healthy People 2010* goal of reducing racial/ethnic differences in HIV/AIDS rates (15). Efforts to characterize the composition of injecting populations have, however, been complicated by the stigmatized and illegal nature of injecting (16–20).

The present analysis uses US Census data and three databases documenting injectors' use of different healthcare services (drug treatment, HIV counseling and testing, and AIDS diagnoses) to calculate database-specific black/white and Latino/white disparities in injecting in each metropolitan statistical area (MSA) and also index black/white and Latino/white disparities, created by averaging data across the three databases. Racial/ethnic disparities, a major focus of *Health People 2010* (15), can be seen as relative risks comparing the prevalence of a behavior or illness in one racial/ethnic group to its prevalence in another racial/ethnic

#### Selected Abbreviations and Acronyms

AIDS = acquired immune deficiency syndrome

APID = AIDS Public Information Database

CDC = Centers for Disease Control and Prevention

CTS = Counseling and Testing System

HIV = human immunodeficiency virus MSA = metropolitan statistical area

SAMHSA = Substance Abuse and Mental Health Services

Administration

TEDS = Treatment Episode Data Set

group (21). We use pairwise comparisons (i.e., black vs. white and Latino vs. white) rather than a measure summarizing disparities across multiple racial/ethnic groups to enable future research to investigate the possibly distinct factors shaping the causes and consequences of injecting for blacks, Latinos, and whites (22, 23).

MSAs are contiguous counties that include one or more central cities of at least 50,000 people that collectively form a single cohesive socioeconomic unit, defined by intercounty commuting patterns and socioeconomic integration (24, 25). MSAs were selected as the study's unit of analysis because data were readily available at this geographic level and because we posited that MSAs were meaningful epidemiologic units with which to study injectors: drugrelated epidemics travel from central cities to their surrounding suburbs and injectors often live in suburbs but buy drugs and perhaps receive drug-related services in the central city (26, 27).

#### Race/Ethnicity and Injection Drug Use

Research regarding the racial/ethnic composition of injection drug using populations has reached disparate conclusions. The Substance Abuse and Mental Health Services Administration's (SAMHSA's) 1998 National Household Survey on Drug Abuse report, the most recent report describing injection drug use prevalence by race/ethnicity, indicates that the prevalences of lifetime injecting are similar among blacks, whites, and Latinos (1.5%, 1.3%, and 0.9%, respectively, with overlapping 95% confidence intervals) (28). SAMHSA statisticians, however, recognize that the survey substantially underestimates injection drug use prevalence (29, 30), suggesting that it may not be a reliable source of information on racial/ethnic injecting distributions.

Other research suggests that racial/ethnic variations in drug addiction exist; given addiction's links to injecting (31–33), these variations may shape injection drug use. Research on frequently-injected drugs such as cocaine and heroin suggests that while whites start using earlier and have a higher lifetime prevalence of drug use than blacks (34–37), blacks stay addicted for longer periods than whites and are more likely to relapse after leaving treatment (34, 38, 39). While Latinos as a group report patterns of lifetime use of injectable drugs that are similar to those of whites (40),

substantial intra-group variation exists, with individuals of Puerto Rican descent and more acculturated individuals reporting higher rates of substance use and abuse than other Latino subgroups (41–43). Both blacks and Latinos report that drug treatment programs are difficult to access and poorly designed to meet their needs (44–46), a circumstance that might prolong addiction among these groups. This research collectively suggests that the prevalence of injecting might be higher among blacks and some Latino subgroups than whites.

#### **METHODS**

#### Overview

To calculate black/white and Latino/white disparities in injecting, we first estimated the percent of injectors in each MSA who were white, black, and Latino in each of three databases: SAMHSA's Treatment Episode Data Set (TEDS); Centers for Disease Control and Prevention's (CDC's) HIV Counseling and Testing Service database (CTS) and CDC's AIDS Public Information Database (APID). Using the resulting percents and US Census data on the percent of the total adult population in each MSA that was white, black, and Latino, we then calculated black/ white and Latino/white disparities in injecting in each MSA for each of the three databases. In addition to these databasespecific disparity estimates, we also created a single black/ white and Latino/white disparity estimate for each MSA by averaging data across the three databases. We report all four estimates of black/white and Latino/white disparities rather than just the index in the interests of transparency and to recognize that readers may have a preference for one estimate over the other, based on their needs. To validate our estimates, we correlated disparity scores with estimates of racial/ethnic disparities in injection-related health problems. While the focal year for all analyses was 1998, we combined 1997 to 1999 APID data to approximate 1998 because of small numbers of injection-related AIDS cases among blacks and Latinos in some MSAs.

#### Sample

To be included in the sample, MSAs had to have been home to more than 500,000 residents in 1993. Ninety-six MSAs met this criterion; 2 (San Juan-Bayamon, Puerto Rico and Richmond-Petersburg, Virginia), however, lacked needed data and were excluded, leaving a sample of 94. These 94 MSAs were located in 38 states and Washington, DC and had a median population of 1.2 million (range, 545,220–9,519,338) in 2000. MSA boundaries remained constant between 1993 and 2000 (Personal Communication, M. Ratcliffe, Chief of Population Division, US Census Bureau, 2004).

### Download English Version:

## https://daneshyari.com/en/article/10039155

Download Persian Version:

https://daneshyari.com/article/10039155

<u>Daneshyari.com</u>