# Racial Trends in Syphilis among Men with Same-Sex Partners in Atlanta, Georgia

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Abstract: Early syphilis cases attributable to homosexual transmission declined in DeKalb County, Georgia, from 191 in 1981 to 97 in 1985. This decline occurred only among White men with same sex partners (SSP); early syphilis among Black men with same sex partners has risen. This pattern is consistent with the hypothesis that changes in sexual behavior instituted by White men at risk of acquiring HTLV-III/LAV infection may have resulted in decreased incidence of early syphilis among those men. (Am J Public Health 1988; 78:66-67.)

#### Introduction

During the decade of the 1970s, early syphilis (less than one year's duration) underwent a major change-the percentage of White male persons with this disease who reported at least one male partner rose from 38 per cent to 70 per cent,<sup>1</sup> indicating that such men were becoming increasingly important in the transmission of syphilis. From 1982 to 1983, however, the percentage of syphilis attributable to male homosexual transmission of syphilis decreased nationwide.<sup>2</sup> As with the recent one-year decline in gonorrhea rates among Denver's homosexual men,<sup>3</sup> this decline was taken as indi-rect evidence that fear of AIDS (acquired immunodeficiency syndrome) had altered sexual behavior in that group. In Atlanta, the city with the highest 1985 rates of primary and secondary syphilis in the United States,<sup>4</sup> a decline in syphilis occurred since 1981 in one county, DeKalb. We have analyzed data reported by this county for the years 1981 to 1985.

### Methods

Data sources from 1981 to 1983 were Centers for Disease Control (CDC) Interview Records submitted from Fulton and DeKalb counties. These counties comprise 65 per cent of metropolitan Atlanta's population<sup>5</sup> and report over 90 per cent of the early syphilis from this city. We reviewed DeKalb County's forms for all years, 1981–85.

We also reviewed in detail 306 (a 50 per cent systematic sample) of DeKalb County's Interview Records (CDC 73.54) of early syphilis among men naming at least one same sex partner (SSP) in the years 1981 to 1985. Sample cases were stratified and compared by year relative to clinical, behavioral, demographic, and socioeconomic variables. Black sample cases for all years were compared to White sample cases for all years.

## Results

The relative proportions of early syphilis cases reported from the Atlanta metropolitan area by each of these two counties varied from 17 per cent to 22 per cent (DeKalb) and from 72 per cent to 76 per cent (Fulton), without a consistent trend. The percentage of cases reporting at least one SSP for the years 1981–83 declined from 69 per cent to 53 per cent in DeKalb County and from 42 per cent to 35 per cent in Fulton County. Sexual preference data for the years 1984 to 1985 are available from DeKalb County cases only.

The annual number of early syphilis cases reported in DeKalb County from 1981 to 1985 varied during the five years studied from 343 to 230 (Figure 1). Cases among heterosexual men ranged from 73 to 105 and did not follow a consistent pattern. Cases among men reporting at least one SSP decreased in all but one year, from 191 to 97 in 1985. A downward trend was observed only among White men with SSP (Figure 1).

Clinical, socioeconomic, behavioral, and demographic data were analyzed in the 306 sample male patients who reported at least one SSP. The percentage of cases reported by public clinics compared to those diagnosed in the private sector, the reason for and stage at examination, and the percentage of patients having a high degree of sexual activity, as defined by reporting more than 10 sexual partners over a three-month period, did not change substantially over the years studied. Other aspects of this study sample have changed, however. The percentage of syphilis cases occurring among men employed in professional and mid-level occupations (annual income more than \$20,000) decreased from 62 per cent to 35 per cent; the percentage of patients who are high school and college graduates decreased from 98 per cent to 85 per cent (p < .01).

Black patients accounted for 18 per cent of the sample cases in DeKalb County in 1981, rising to 75 per cent in 1985. Overall, Black cases were 10 times as likely as White sample cases to be employed in low-income occupations (95 per cent Confidence Interval 3.97, 30.2) and twice as likely to have less than 12 years of education (95 per cent CI 1.2, 3.3).

#### Discussion

In DeKalb County, the decrease in cases of early syphilis among men with SSP was due to a decline among White men

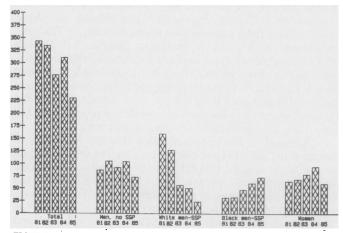


FIGURE 1—Syphilis in DeKalb County, 1981-85: Number of Early Cases by Sex, Sexual Preference, and Race of Men with Same Sex Partners (SSP)

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with SSP. Among Black men with SSP, the number steadily increased during the study period. This pattern in DeKalb County syphilis epidemiology is consistent with the hypothesis that changes in sexual behavior<sup>6</sup> instituted by persons at risk of acquiring human immunodeficiency virus (HIV) have resulted in decreased incidence of early syphilis among such persons, as it has elsewhere of gonorrhea.<sup>7</sup> Homosexual men with AIDS or AIDS-related complex compared to homosexual men without these conditions have higher rates of syphilis.<sup>8,9</sup> In these persons, syphilis may be a marker for behaviors that increase the risk of AIDS,<sup>10</sup> although an independent risk due to syphilis infection has been suggested.<sup>11</sup>

The data from DeKalb County suggest that some individuals at risk of acquiring AIDS continue high-risk behavior, as reflected by the increase in early syphilis.<sup>10</sup> This failure to adopt sexual behavior that would reduce the risk of HIV infection was preferentially seen among less educated and poorer men with SSP, who in this population are more likely to be Black.

A substantial influx of Black male homosexuals accompanied by an eflux or massive change in health care seeking behavior among White homosexual men could account for our findings. In all neighboring states and counties, early syphilis among White men regardless of sexual preference decreased during the study period. Although the percentage of DeKalb County residents who are Black rose from 27 per cent in 1980 to 29 per cent in 1985,<sup>5</sup> the substantial increase in the percentage of early syphilis patients who are Black men with SSP suggests that the increase in the Black population alone does not account for our findings. Nevertheless, increases in syphilis among Black men have not been consistently demonstrated in all surrounding areas, and data are not available on sexual preference after 1983 in surrounding areas.

Education and economics may play a role in the racial differences observed in needle-sharing practices and, therefore, in HIV infection rates among White, Black, and Hispanic IV drug abusers.<sup>12,13</sup> Similarly, these factors may influence the effectiveness of sexual behavior "risk reduction" efforts in modifying sexual practices in the target group. Until a vaccine or medication becomes available to prevent or treat AIDS, lifestyle risk-reduction changes are the major preventive public health measures. New strategies are particularly needed for men with low income and low educational attainment, who in many areas of the United States, as in DeKalb County, are likely to be Black.

#### REFERENCES

- Fichtner R, Aral SO, Bount JH, et al: Syphilis in the United States: 1967-1979. Sex Transm Dis 1983; 10:77-80.
- Centers for Disease Control: Syphilis—United States, 1983. MMWR 1984; 33:433–436.
- 3. Judson F: Fear of AIDS and gonorrhea rates in homosexual men. Lancet (letter) 1983; 2:159–160.
- Division of Sexually Transmitted Diseases, Centers for Disease Control: Rates of Primary and secondary syphilis, selected counties and cities, United States, 1985.
- Population and housing estimates for the Atlanta region. Atlanta Regional Commission Research Reports. October 1985; November 1986.
- Centers for Disease Control: Self-reported behavioral change among gay and bisexual men—San Francisco. MMWR 1985; 34:613-615.
- Centers for Disease Control: Declining rates of rectal and pharyngeal gonorrhea among males—New York City, MMWR 1984; 33:295–297.
- Jaffe HW, Choi K, Thomas PA, et al. National case-control study of Kaposi's sarcoma and Pneumocystis carinii pneumonia in homosexual men: Part 1, epidemiologic results. Ann Intern Med 1983; 99:145–151.
- Guinan ME, Thomas PA, Pinsky PF, et al: Heterosexual and homosexual patients with the acquired immunodeficiency syndrome. Ann Intern Med 1983;99:151-158.
- Valdiserri R, Brandon W, Lyter D: AIDS surveillance and health education: Use of previously described risk factors to identify high-risk homosexuals. Am J Public Health 1984; 74:259-260.
- Moss AR, Osmond D, Bacchetti P, et al. Risk factors for AIDS and HIV seropositivity in homosexual men. Am J Epidemiol 1987; 125:1035-1047.
- Centers for Disease Control: Acquired immunodeficiency syndrome (AIDS) among Blacks and Hispanics—United States. MMWR 1986; 35:655-656.
- Bakeman R, Lumb JR, Jackson RE, Smith DW: AIDS risk-group profiles in whites and members of minority groups. N Engl J Med 1986; 315:191-192.

## NCCLS 1988 Annual Meeting Announced

The National Committee for Clinical Laboratory Standards has announced the dates of its upcoming annual meeting, to be held March 24–25, 1988 in Sheraton Meadowlands, East Rutherford, New Jersey. The theme for the meeting—"Testing Today and Tomorrow"—promises to cover timely issues of interest to everyone involved in clinical laboratory testing. Mini-symposia include:

- The Communication Challenges of Home-Use Testing
- Exposure of the Laboratory Worker to AIDS
- The Destiny of Microbiology Testing
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