

Dynamic Trends in HIV/AIDS Diagnoses and its Biological, Sexual and Drug Use Risk Factors among Adolescents in Washington, DC

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Background

- Washington, DC has one of the highest HIV/AIDS seroprevalence rates in the United States, with 3.2% of the adult population and 7.2% of black men living with HIV/AIDS (DC DOH HIV/AIDS Annual Update 2010);
- HIV incidence has increased among American youth. These adolescents remain at high risk;
- This study was to assess the dynamic trends of HIV/AIDS diagnoses and its biological, sexual and drug use risk factors among youths (13-24 years) in Washington D.C.

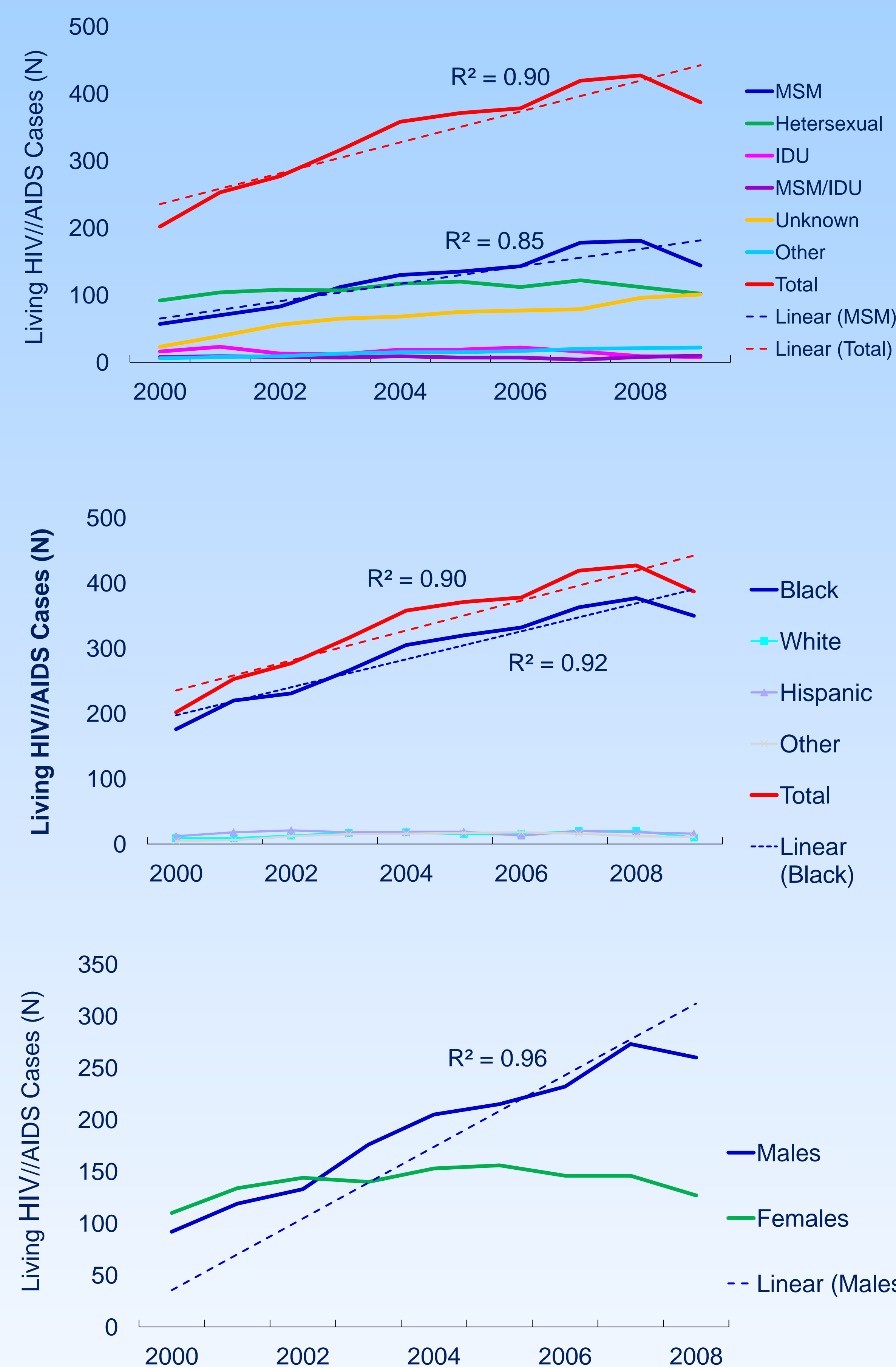
Methods

- Diagnoses of HIV/AIDS and other sexually transmitted diseases (STDs) were analyzed using HIV/AIDS and STD surveillance data from 2001 to 2009;
- To explore trends in HIV/AIDS diagnoses over time, we estimated the annual percent change (EAPC) with Poisson regression;
- Sexual and drug use risk factors were developed from 5 serial DC-based Youth Risk Behavior Surveillance Surveys (YRBSS) from 1999 to 2009.

Results

- A total of 419 participants aged 13-24 years were diagnosed with HIV in 2009 in DC; 67% were male; 90% African Americans, the major transmission categories were male-to-male sexual contacts (MSM, 51.8%), heterosexual (36.7%), and injection drug use (7%) (Fig 1, 2, 3).

Results (continued)



- The prevalence of new HIV diagnoses increased significantly (EAPC=10%) from 0.3% (95%CI: 0.2%-0.3%) in 2000 to 0.5% (95%CI: 0.4%-0.5%) in 2009 (Fig 1 and 2);
- The overall prevalence rates of diagnoses from 2000 to 2009 were contributed mainly from MSM (EAPC: 32%) (Fig 1), black/African American (EAPC: 15%) (Fig 2), and male (EAPC: 30%) (Fig 3);

Results (continued)

- From 2000 to 2009, the number of primary and secondary syphilis diagnoses increased significantly among males and blacks, leveled in other groups. Chlamydia (5%) and Gonorrhea (2%) diagnoses are common in youths with most of them occurred in blacks (Chlamydia: 73%; Gonorrhea: 81%);
- Serial YRBSS from 1999 to 2009 suggested that high school students had sex (48%-65%), more sexual partners ($\geq 23\%$ -40%), sex in the past 3 months (34%-48%), unprotected sex in the last act (75%-82%), drug/alcohol use before sex (12%-16%) were common. High rates (25%-41%) of high school students involved in offering/selling drugs;
- Among middle/high school students, alcohol use was common (38%-67%); marijuana (11%-45%) and inhalant (6%-16%) were most common drugs, followed by Ecstasy (4%-9%), cocaine (2%-7%), methamphetamine (2%-6%), and heroin (2%-5%).

Conclusion

- There is a continuing rise of HIV new diagnoses among adolescents in DC.
- Multiple sex partners, unprotected sex, substance use are common among the adolescents in DC.
- Interventions that address access to health care and prevention interventions that address sexual/drug use risks including harm reduction services are needed to reduce HIV transmission in youth and reduce HIV racial and sex disparities.

Acknowledgements

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