

Substance Abuse Among Youth in Miami-Dade County, 2005-2007

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BACKGROUND

The 2005 Youth Risk Behavior Survey (YRBS) of 9th to 12th graders in Miami-Dade County public schools found that 69.7% of students tried alcohol, 28.3% tried marijuana, and 6.3% tried cocaine in their lifetime. Results also showed that Hispanics had a higher percentage of usage when compared to Blacks or Whites. The 2007 White House Office of National Drug Control Policy (ONDCP) special report entitled "Hispanic Teens and Drugs" also concluded that Hispanics were at the highest risk for substance abuse. With the county's 60% Hispanic population, this issue is of concern for the community. This is the first study to compare multiple sources of data to describe substance abuse among youth from areas such as healthcare utilization to criminal charges.

METHODS

Data was obtained from the following sources:

- 1) Emergency department (ED) chief complaint data from Electronic Surveillance System for Early Notification of Community Based Epidemics (ESSENCE)
- 2) Miami-Dade Fire Rescue 911 Call Center
- 3) Agency for Healthcare Administration (AHCA) hospital admissions
- 4) Florida Department of Highway Safety and Motor Vehicles (DHSMV) DUI records
- 5) Miami-Dade Juvenile Services Department (JSD) records of substance-related arrests

SAS 9.1.3 was utilized for analysis

RESULTS

ESSENCE

In 2006, there were 431 ED visits for substance abuse among youth aged 10 to 19 years. There was no difference in the percentage of visits by gender. Seasonality showed that there were a higher number of visits in the autumn and visits increased with age. The majority (80%) of visits were related to drugs rather than alcohol. Overall, there was a higher percentage of visits among Whites when compared to Blacks and Hispanics. However, in the 10 to 14 year old age group, Hispanics accounted for 70% and females accounted for 76% of visits whereas in the 15 to 19 age group, they accounted for 43% and 48% of visits, respectively.

911

In 2006, there were 2,323 overdose related calls to 911 for all ages; 1,480 (63.7%) of these calls

involved teens aged 10 to 19 years. Additionally, for females, 59% of suicide-related 911 calls were due to a drug overdose while 33% were for males.

AHCA

There were 160 different ICD-9-CM Principal Diagnosis Codes used to search for substance abuse related admissions. In 2006, there were 181 admissions among teens (10 – 19 years) with an average cost per visit of \$17,621. There was no difference in the number of admissions between males and females.

DHSMV

Seventeen different DUI-related codes were used for analysis. Between 2005 and 2007, there were 585 arrests of youth under 21 years of age, of which 85% were among males. From 2006 to 2007, the arrest rate among Blacks increased threefold from 90 to 290 per 100,000 population while White/Hispanic increased from 140 to 170 per 100,000 population. Youth 19 and 20 years old accounted for 75% of the underage DUI arrests. Additionally, the number of arrests in the county accounted for 4% of the arrests for Florida although Miami-Dade encompasses 13% of the state's population.

JSD

Results from 5,278 arrests for youth under 18 years of age between 2005 and 2007 demonstrated the following: 90% of all arrests were among males, Blacks had an arrest rate three times more than Whites and 75% of arrests were among 16 and 17 year olds. Most crimes involved either possession or trafficking of marijuana (51%) and/or cocaine (33%).

CONCLUSIONS

After reviewing findings from all of the data sources, it is apparent there were disparities in race/ethnicity and gender in alcohol and drug usage, healthcare utilization and criminal behavior. This multi-faceted study has prompted the Miami-Dade County Health Department to create a comprehensive report which can be distributed to involved organizations in order to target specific interventions and educational programs.

REFERENCES

1. CDC. Youth Risk Behavior Surveillance-United States, 2005. Morbidity and Mortality Weekly Report 55 (5), 2006. <http://www.cdc.gov/mmwr/PDF/SS/SS5505.pdf>
2. White House Office of National Drug Control Policy. Hispanic Teens and Drugs- A Special Report, 2007. http://www.Mediacampaign.org/hispnc_yth/HispanicTeens_and_Drugs.pdf