Trends in Fighting and Violence Among Adolescents in the United States, 2002–2014

Christopher P. Salas-Wright, PhD, Erik J. Nelson, PhD, Michael G. Vaughn, PhD, Jennifer M. Reingle Gonzalez, PhD, and David Córdova, PhD

Objectives. To examine trends in and correlates of fighting and violence among youths from the 3 largest racial/ethnic groups in the United States.

Methods. We derived race/ethnicity-specific prevalence estimates for fighting, group fighting, and attacks with intent to harm from the National Survey on Drug Use and Health, a population-based study of youths aged 12 to 17 years.

Results. The prevalence of youth fighting and violence decreased significantly in all racial/ethnic groups over the study period (2002–2014), dropping from a high of 33.6% in 2003 to a low of 23.7% in 2014, reflecting a 29% decrease in the relative proportion of young people involved in these behaviors. However, there was also a clear severity gradient in which year-by-year point estimates for fighting and violence were consistently highest among non-Hispanic African American youths, followed by Hispanic and then non-Hispanic White youths.

Conclusions. Although fighting and violence are on the decline among young people in general and across racial/ethnic subgroups, there is a stable pattern of disparities in youth involvement in these behaviors. (*Am J Public Health.* 2017;107:977–982. doi: 10.2105/AJPH.2017.303743)



See also Herrenkohl, p. 829.

iolence is a major issue with critical implications for the healthy development of young people in communities across the United States. Indeed, nearly 1 in 4 (23%) US high school students are involved in a serious violent altercation each year, and roughly 1 in 6 (16%) report carrying a weapon at least once per month. Recent estimates indicate that approximately 150 000 adolescents aged 12 to 17 years receive medical treatment annually as a result of nonfatal injuries caused by interpersonal violence,² with estimates of the health and social costs related to youth violence in the billions.³ The level of concern for the issue of youth violence is reflected in recent calls for research on violence from the National Institutes of Health⁴ as well as memoranda from the White House⁵ urging social and behavioral scientists to advance our understanding of youth violence and its prevention.

Beyond the immediate consequences, evidence has made clear that youth involvement in violence is also related to a number of important psychosocial and behavioral outcomes. 6-10 It has been well established that young people who take part in violence are at markedly greater risk for involvement in other health-risk behaviors such as comorbid alcohol and drug use. 11-14 However, not all young people are equally at risk for involvement in violence. For instance, epidemiological surveillance data suggest that non-Hispanic African American (hereafter "African American") and Hispanic youths are at greater risk than non-Hispanic White (hereafter "White") youths for involvement in various manifestations of violence. 15 Similarly, relative to female adolescents, male

adolescents are at increased risk for involvement in violence. 16

Although substantial research has accrued on the prevalence of youth violence and the links between violent offending and key psychosocial and behavioral outcomes, there is a lack of systematic research examining trends in violence among youths, and few studies have focused on trends across racial/ ethnic and gender subgroups. An examination of trends in violence is critical in providing an empirical basis for prevention and intervention efforts and in informing programs designed to address subgroups that may be disproportionately affected by violence. Moreover, there is reason to suspect that, despite pressing concerns about the impact of violence among youths, there may be shifts under way with respect to the proportions of young people involved in violence. Indeed, a number of epidemiological trend studies focused on youth problem behaviors such as alcohol and drug use, truancy, and handgun use indicate that recently there have been meaningful reductions in the number of young people involved in problem behaviors. 17-20

In the study described here, we used data from a US population-based investigation—the National Study on Drug Use and Health (NSDUH)—that surveyed nearly 210 000 adolescents aged 12 to 17 years, including 138 152 White, 31 595 African American, and 39 646 Hispanic adolescents. Our aim was to explore trends in and correlates of fighting, group fighting, and attacks with the intent to harm among youths

ABOUT THE AUTHORS

Christopher P. Salas-Wright is with the School of Social Work, Boston University, Boston, MA. Erik J. Nelson is with the School of Public Health, Indiana University, Bloomington. Michael G. Vaughn is with the School of Social Work, College for Public Health and Social Justice, Saint Louis University, St. Louis, MO. Jennifer M. Reingle Gonzalez is with the School of Public Health, Division of Epidemiology, Human Genetics, and Environmental Sciences, University of Texas, Dallas Regional Campus. David Córdova is with the School of Social Work, University of Michigan, Ann Arbor.

Correspondence should be sent to Christopher P. Salas-Wright, PhD, School of Social Work, Boston University, 264 Bay State Rd, Boston, MA 02215 (e-mail: cpsw@bu.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link. This article was accepted February 19, 2017. doi: 10.2105/AJPH.2017.303743

from the nation's 3 largest racial/ethnic groups as well as across gender between 2002 and 2014.

METHODS

The NSDUH provides population estimates for an array of substance use and health-related behaviors in the US general population aged 12 years and older. Relative to other national-level data sources examining youth violence, the NSDUH is a particularly rich resource in terms of its sampling frame and representativeness. For instance, rather than being limited to school-enrolled youths (as with the Youth Risk Behavior Surveillance System²¹), NSDUH participants include household residents, civilians on military bases, and residents of shelters, group homes, and single rooms in hotels. Moreover, in contrast with the Federal Bureau of Investigation's uniform crime reports, 22 which rely exclusively on crimes reported to authorities, the NSDUH measures self-reported youth involvement in a variety of externalizing behaviors including fighting and violence.

As a means of increasing the likelihood of valid respondent reports, NSDUH study participants are interviewed in private at their places of residence via computerassisted interviewing methods, including an audio computerassisted self-interviewing methodology. Since 2002, NSDUH data have been collected annually with refreshed samples through a data collection methodology that allows for year-to-year comparisons, trend analyses, and the pooling of survey data from multiple years. ²³

All public use NSDUH data are deidentified by the Substance Abuse and Mental Health Services Administration. However, the NSDUH was reviewed, according to the guidelines of the US Department of Health and Human Services' Office for Human Research Protections, by RTI International's institutional review board. The NSDUH design and methods are summarized briefly here; a detailed description of the study's procedures is available elsewhere. Since 2002, a total of 723 283 respondents have completed the survey; in our study we restricted analyses to White, African American,

and Hispanic respondents aged between 12 and 17 years (n = 209393) to ensure stable prevalence estimates for our stratified trend analyses.

Measures

Fighting and violence. We examined violence on the basis of self-reports of past-year youth involvement in fighting at school or work (n = 49 544; 21.6%), group fighting (n = 34493; 15.0%), or attacks with the intent to harm (n = 16762; 7.3%). Survey items included "How many times have you gotten into a serious fight at school or work?" "How many times have you taken part in a fight where a group of friends fought against another group?" and "How many times have you attacked someone with the intent to seriously hurt them?" Adolescents reporting 1 or more instances of involvement in the past 12 months were coded as 1, and those reporting no involvement were coded as 0. We also created a variable for "any fighting or violence" in which youths reporting any involvement in serious fighting, group fighting, or attacks were coded as 1 and those reporting no violent involvement were coded as 0.

Control variables. We included a number of individual, school-related, parental, behavioral, and sociodemographic variables as control variables in our trend analyses. We also conducted supplementary analyses (see Tables A–C, available as supplements to the online version of this article at http://www.ajph.org) to examine relationships between these factors and youth fighting and violence.

Individual factors. We examined 2 individual-level factors: risk propensity and religiosity. In the case of these (and subsequent) composite measures, we conducted internal consistency analyses to generate Cronbach alpha coefficients reflecting the reliability of different measures. Risk propensity was based on 2 items ($\alpha = 0.74$) measuring adolescents' enjoyment of risky behavior (i.e., "like to test yourself by doing something a little risky" and "get a real kick out of doing things that are a little dangerous"). Religiosity was examined on the basis of a 4-item scale ($\alpha = 0.77$) tapping both public

religious engagement (i.e., religious service attendance, participation in religious groups) and private religious importance (i.e., importance and influence of beliefs).

School-related factors. We examined adolescents' self-reports of usual grades, academic engagement, and peer substance use. As a means of measuring usual grades, youths were asked to report their average grades for the most recent semester or grading period they completed. Response options were "A average," "B average," "C average," and "D average or lower." Academic engagement was based on a 5-item scale ($\alpha = 0.77$) measuring perceived importance of and interest in learning and school activities. Numerous NSDUH-based investigations have employed these variables and describe them in greater detail.^{25,26} We also examined perceived peer substance use. Specifically, participants were asked to report "how many of the students in your grade at school" smoke cigarettes, drink alcohol, or use marijuana or hashish (0 = few or none, 1 = most or all).

Parental factors. We examined 3 parental factors: parental conflict, parental control, and parental affirmation. Parental conflict was based on the following question: "During the past 12 months, how many times have you argued or had a fight with at least one of your parents?" Youths reporting 10 or more conflicts were coded as 1, and all other youths were coded as 0. As a means of assessing parental control, youths were asked "During the past 12 months, how often did your parents limit the amount of time you went out with friends on school nights?" Responses of "always or sometimes" were coded as 1 and responses of "seldom or never" as 0. Parental affirmation was based on a 2-item index ($\alpha = 0.86$) comprising variables reflecting youths' perceptions of parental support and encouragement.

Delinquency. We also examined youth self-reports of involvement in other delinquent and antisocial behaviors, including drug selling, truancy, theft, and handgun carrying. For all items, adolescents reporting 1 or more instances of delinquent behavior were coded as 1, and those reporting no involvement were coded as 0.

Substance use. We examined past-year use of tobacco, alcohol (any use [≥ 1 drink on the same occasion] and binge use [≥ 5 drinks on the same occasion]), marijuana or hashish, and any other illicit drug excluding marijuana (e.g., cocaine or crack, methamphetamine). For each of these items, participants reporting 1 or more instances of use were coded as 1 and all others as 0.

Sociodemographic factors. The following sociodemographic variables were included: age (0 = 12–14 years, 1 = 15–17 years), gender (0 = female, 1 = male), race/ethnicity (1 = White, 2 = African American, 3 = Hispanic), presence of father in the household (0 = yes, 1 = no), and total annual family income (1 = < \$20 000, 2 = \$20 000–\$49 999, 3 = \$50 000–\$74 999, 4 = \geq \$75 000). It should be noted that, although commonly used in NSDUH-based studies of young people, the household income variable does not take into consideration household size or composition.

Statistical Analyses

We conducted logistic regression analyses focusing on fighting, group fighting, and attacks to examine the significance of trend changes while controlling for all of the sociodemographic, individual-level, schoolrelated, and parental factors listed earlier, as well as substance use and co-occurring violent and nonviolent antisocial behavior. Survey year was included as a continuous independent variable following the trend analysis method used by the Centers for Disease Control and Prevention.²⁷ Our approach is also consistent with frequently cited trend studies²⁸ and recent trend studies involving NSDUH data.²⁹ We used survey data functions available in R to compute prevalence estimates and conduct regression analyses.³⁰ This system implements a Taylor series linearization to adjust standard errors of estimates for complex survey sampling design effects including clustered multistage data.

RESULTS

Figure 1 and Table 1 display prevalence estimates and 95% confidence intervals (CIs) for involvement in fighting or violence (i.e., 1 or more instances of involvement in fighting,

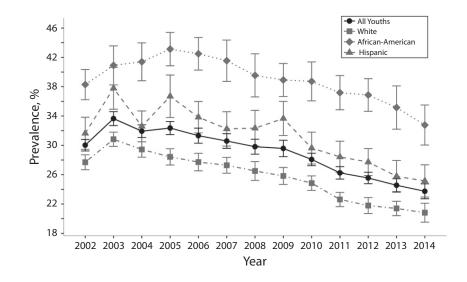


FIGURE 1—Prevalence Estimates for Fighting and Violence Among Youths, by Race/ Ethnicity: National Study on Drug Use and Health, United States, 2002–2014

group fighting, or attacks with intent to harm) among youths in general and according to race/ethnicity. Several points should be highlighted. For example, there was a clear severity gradient in which year-by-year point estimates for involvement in fighting and violence were consistently highest among African American youths, followed by Hispanic and then White youths. Moreover, it is important to note that, with very few exceptions, the 95% confidence intervals for the 3 racial/ethnic groups essentially did not overlap. This is noteworthy because examination of overlapping and nonoverlapping confidence intervals is a frequently used approach to assessing differences in prevalence across demographic subgroups in large epidemiological data files.31

In addition, after control for a host of sociodemographic, psychosocial, and behavioral factors, there was a significant (adjusted odds ratio [OR] = 0.980; 95% CI = 0.976, 0.984) and substantively meaningful decrease in fighting and violence among youths in general over the study period. Specifically, there was a 9.9% drop from the highest level observed in 2003 (prevalence estimate = 33.65%; 95% CI = 32.7%, 34.6%) to the lowest level in 2014 (prevalence estimate = 23.73%; 95% CI = 22.7%, 24.8%), reflecting a 29% decrease in the relative proportion of young people involved in fighting and violence.

In the case of racial/ethnic subgroups, we observed a statistically significant and substantively meaningful downward trend in fighting and violence over the course of the study among White (adjusted OR = 0.980; 95% CI = 0.975, 0.985), African American (adjusted OR = 0.984; 95% CI = 0.974, 0.993), and Hispanic (adjusted OR = 0.972; 95% CI = 0.961, 0.984) youths. It should be noted, however, that there was also a pattern among all groups in which there was a slight uptick in fighting and violence during the early years of the study (2002–2005) before a steady pattern of decline through 2014.

For example, the prevalence of fighting and violence increased among African American youths from 2002 (prevalence estimate = 38.28; 95% CI = 36.2, 40.3) to 2005 (prevalence estimate = 43.13: 95%) CI = 40.8, 45.4) before decreasing steadily to the lowest level in 2014 (prevalence estimate = 32.77; 95% CI = 30.0, 35.5; adjusted OR = 0.96; 95% CI = 0.95, 0.97). Steep decreases were also observed among Hispanic youths between 2005 (prevalence estimate = 36.69; 95% CI = 33.7, 39.6) and 2014 (prevalence estimate = 25.15; 95% CI = 22.9, 27.4; adjusted OR = 0.95; 95% CI = 0.93, 0.97). Given this observed pattern, we conducted supplemental analyses to test for nonlinear trends. When we modeled the year variable as quadratic (i.e., year × year), we found no evidence of nonlinear trends, and

FABLE 1—Prevalence of Fighting and Violence Among Adolescents: National Study on Drug Use and Health, United States, 2002–2014

Variable	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Any fighting or violence													
All youths ^a	30.0 (29.2, 30.8)	33.7 (32.7, 34.6)	30.0 (29.2, 30.8) 33.7 (32.7, 34.6) 31.9 (31.1, 32.8) 32.4	32.4 (31.5, 33.3)	31.3 (30.3, 32.3)	30.6 (29.6, 31.6)	29.8 (28.8, 30.8)	29.6 (28.5, 30.7)		28.1 (27.2, 28.9) 26.3 (25.4, 27.1)	25.6 (24.8, 26.3)	24.6 (23.7, 25.5)	23.7 (22.7, 24.8)
Whites	27.7 (26.7, 28.7)	27.7 (26.7, 28.7) 30.8 (29.9, 31.8)	29.4 (28.4, 30.5) 28.4	28.4 (27.3, 29.5)	27.7 (26.5, 28.9)	27.3 (26.2, 28.4)	26.5 (25.2, 27.8)	25.8 (24.7, 27.0)	24.9 (23.9, 25.9)	22.6 (21.6, 23.6)	21.8 (20.7, 22.9)	21.4 (20.4, 22.4)	20.8 (19.5, 22.1)
African Americans ^a	38.3 (36.2, 40.4)	40.9 (38.3, 43.6)	38.3 (36.2, 40.4) 40.9 (38.3, 43.6) 41.4 (38.8, 44.0) 43.1	43.1 (40.9, 45.4)	42.5 (40.3, 44.7)	41.5 (38.7, 44.4)	39.6 (36.6, 42.5)	38.9 (36.7, 41.2)	38.7 (36.1, 41.4)	37.2 (34.9, 39.5)	36.9 (34.7, 39.1)	35.2 (32.2, 38.1)	32.8 (30.2, 35.5)
Hispanics ^a	31.7 (29.5, 33.8)	37.8 (34.9, 40.7)	32.6 (30.5, 34.7) 36.7 (36.7 (33.8, 39.6)	33.8 (31.7, 36.0)	32.3 (29.9, 34.6)	32.3 (29.9, 34.8)	33.7 (31.3, 36.0)	29.6 (27.5, 31.8)	28.4 (26.3, 30.6)	27.7 (25.9, 29.6)	25.8 (23.6, 27.9)	25.2 (23.0, 27.4)
Serious fight at school													
or work													
All youths ^a	20.8 (20.1, 21.5)	24.2 (23.4, 25.0)	20.8 (20.1, 21.5) 24.2 (23.4, 25.0) 23.2 (22.5, 24.0) 24.0	24.0 (23.2, 24.8)	22.7 (21.9, 23.5)	22.8 (21.9, 23.7)	21.6 (20.7, 22.6)	22.0 (21.0, 23.0)		20.6 (19.8, 21.4) 19.3 (18.5, 20.1) 18.3 (17.6, 19.1)	18.3 (17.6, 19.1)	18.3 (17.5, 19.1)	18.3 (17.5, 19.1) 17.4 (16.6, 18.2)
Whites	18.8 (17.9, 19.8)	21.9 (21.1, 22.7)	21.1 (20.2, 22.0) 20.9	20.9 (19.9, 21.9)	20.0 (19.0, 20.9)	19.8 (18.8, 20.7)	19.3 (18.2, 20.37)	19.1 (18.1, 20.2)	18.1 (17.2, 18.9)	16.5 (15.6, 17.4)	15.6 (14.6, 16.6)	15.7 (14.8, 16.7)	15.1 (14.0, 16.2)
African Americans	26.7 (24.7, 28.7)	26.7 (24.7, 28.7) 29.7 (27.3, 32.2)	31.4 (29.2, 33.5) 31.4	31.4 (29.4, 33.3)	31.1 (28.8, 33.3)	31.9 (29.5, 34.2)	27.4 (25.2, 29.6)	28.6 (26.4, 30.9)	29.6 (27.0, 32.1)	28.1 (26.0, 30.1)	27.5 (25.3, 29.6)	27.0 (24.1, 29.8)	25.5 (23.2, 27.8)
Hispanics ^a	23.2 (21.3, 25.1)	28.0 (25.5, 30.5)	23.6 (21.7, 25.6) 28.1 (28.1 (25.5, 30.7)	24.6 (22.8, 26.3)	25.1 (22.8, 27.5)	24.4 (22.2, 26.6)	25.6 (23.4, 27.7)	21.2 (19.2, 23.2)	20.7 (18.7, 22.8)	19.4 (17.8, 21.0)	19.4 (17.5, 21.4)	17.8 (16.0, 19.6)
Group fighting													
All youths ^a	16.1 (15.5, 16.8)	18.5 (17.7, 19.3)	16.1 (15.5, 16.8) 18.5 (17.7, 19.3) 17.0 (16.2, 17.7) 16.9 (16.9 (16.2, 17.7)	17.2 (16.3, 18.0)	15.7 (15.0, 16.4) 14.6 (13.9, 15.3)	14.6 (13.9, 15.3)	14.6 (13.8, 15.4)		13.2 (12.6, 13.7) 12.3 (11.6, 13.1) 12.0 (11.3, 12.7)	12.0 (11.3, 12.7)	11.0 (10.3, 11.6)	10.9 (10.2, 11.6)
Whites ^a	14.8 (14.0, 15.6)	17.0 (16.1, 17.9)	14.8 (14.0, 15.6) 17.0 (16.1, 17.9) 15.6 (14.7, 16.4) 14.8 (14.8 (14.0, 15.6)	15.0 (14.1, 15.9)	14.1 (13.3, 14.9)	12.8 (11.9, 13.6)	12.5 (11.7, 13.4)		11.8 (11.1, 12.5) 10.6 (9.9, 11.3)	10.0 (9.2, 10.7)	9.4 (8.7, 10.2)	9.5 (8.7, 10.3)
African Americans ^a	19.7 (17.9, 21.4)	21.5 (19.1, 23.9)	20.3 (17.9, 22.8) 21.2 (21.2 (19.4, 22.9)	21.9 (19.9, 23.9)	20.4 (18.5, 22.5)	18.6 (16.6, 20.7)	18.9 (17.0, 20.9)	17.1 (15.3, 18.9)	15.8 (14.0, 17.6)	15.7 (13.6, 17.7)	15.2 (13.3, 17.1)	13.8 (11.7, 15.9)
Hispanics ^a	18.2 (16.2, 20.1)	21.3 (18.8, 23.9)	21.3 (18.8, 23.9) 19.2 (17.4, 20.9) 20.6 (18.3, 23.0)	20.6 (18.3, 23.0)	20.5 (18.5, 22.5)	16.8 (14.8, 18.8)	17.2 (15.1, 19.3)	17.3 (15.5, 19.1)	14.2 (12.5, 15.8)	14.4 (12.7, 16.1)	14.7 (13.1, 16.4)	12.12 (10.5, 13.8)	12.5 (10.8, 14.2)
Attack with intent to													
seriously harm													
All youths ^a	7.8 (7.4, 8.3)	8.5 (8.1, 9.0)	8.3 (7.8, 8.8)	7.5 (7.0, 7.9)	7.9 (7.4, 8.5)	7.5 (7.1, 8.0)	7.2 (6.7, 7.7)	7.4 (6.8, 7.9)	7.3 (6.8, 7.9)	5.9 (5.5, 6.3)	5.8 (5.3, 6.3)	5.2 (4.8, 5.6)	4.7 (4.2, 5.2)
Whites	6.7 (6.2, 7.3)	7.1 (6.6, 7.7)	7.2 (6.7, 7.8)	6.0 (5.5, 6.5)	6.4 (5.9, 7.0)	6.4 (5.9, 6.9)	6.2 (5.6, 6.8)	5.8 (5.3, 6.4)	6.0 (5.4, 6.5)	4.7 (4.2, 5.2)	4.4 (3.9, 4.9)	4.3 (3.7, 4.8)	3.9 (3.4, 4.4)
African Americans ^a	13.2 (11.9, 14.5)	13.4 (11.8, 15.1)	14.0 (12.0, 16.0) 13.3 (13.3 (11.5, 15.1)	12.4 (10.9, 13.9)	12.7 (11.4, 14.1)	12.0 (10.2, 13.8)	12.0 (10.2, 13.7)	12.6 (10.7, 14.5)	9.8 (8.8, 10.8)	11.2 (9.7, 12.7)	9.9 (8.5, 11.3)	8.1 (6.6, 9.6)
Hispanics	7.3 (6.0, 8.5)	9.5 (8.2, 10.8)	(2.8.8.0)	7.3 (6.1, 8.6)	9 0 (7 4 10 7)	69 (54 84)	64 (57 76)	84 (71 96)	75 (61 89)	65 (5 5 7 4)	59 (46 71)	46 (37 54)	45 (35 56)

Note. Estimates are weighted for the complex survey design of the National Study on Drug Use and Health. Sociodemographic, individual, school-related, parental, and behavioral factors were and 2014 after control for sociodemographic, individual, school-related, parental, and behavioral factors. prevalence between 2002 ³Significant (P<.05) decrease in controlled for in the analyses

there were no changes in the overall trend models for fighting and violence or for individual manifestations of fighting or violence.

Trends in Fighting

Beyond aggregate measures of any involvement in serious fighting and violence, we also calculated prevalence estimates and 95% confidence intervals for each particular manifestation of fighting or violence by race/ethnicity (Table 1). An examination of trends in fighting among adolescents reveals several important findings. For instance, there was a significant decrease (adjusted OR = 0.980; 95% CI = 0.976, 0.984) in fighting over the study period, with particularly noteworthy decreases between 2003 (prevalence estimate = 24.2; 95% CI = 23.4, 25.0) and 2014 (prevalence estimate = 18.3; 95% CI = 17.5, 19.2). In examining trends among racial/ethnic subgroups, however, we observed a significant decrease in fighting only among Hispanic youths (adjusted OR = 0.97; 95% CI = 0.95, 0.99); the prevalence of fighting among White and African American youths decreased but not to the level of statistical significance.

In addition, as evident in the nonoverlapping 95% confidence intervals, the prevalence of fighting was significantly lower among White youths than among African American and Hispanic youths across nearly all study years (with the exception of 2004).

Trends in Group Fighting

Among youths in general, the overall prevalence of group fighting decreased significantly (adjusted OR = 0.964; 95% CI = 0.957, 0.971) from the highest prevalence of 18.5% in 2003 to the lowest prevalence of 10.9% in 2014. Notably, the prevalence of group fighting decreased significantly in all racial/ethnic groups. Importantly, however, in comparing the prevalence among racial/ethnic groups, we found that—as evidenced by the nonoverlapping 95% confidence intervals group fighting was significantly lower (other than in 2010) among White youths than African American and Hispanic youths across the study period. Also, supplementary analyses (data not shown) revealed that group fighting was significantly more prevalent among male than female adolescents from 2002 to 2009; however, the male prevalence decreased significantly after 2009 and was statistically similar to that among female adolescents after 2011.

Trends in Attacks

A statistically significant decrease (adjusted OR = 0.989; 95% CI = 0.979, 0.999) in attacks on someone with the intent to harm occurred between 2002 (prevalence estimate = 7.8; 95% CI = 7.4, 8.3) and 2014 (prevalence estimate = 4.7; 95% CI = 4.2, 5.2) among youths in general. Notably, although representing only a 3.1% change in overall prevalence, the reduction between 2002 and 2014 reflects a 40% proportional decrease in the prevalence of youth attacks. The overall prevalence of attacks with intent to harm was stable across racial/ethnic groups. However, supplementary analyses (data not shown) revealed that the prevalence of such attacks changed most markedly among male adolescents, decreasing from 9.5% in 2002 to 5.2% in 2014. There was also a slight decrease in attacks among female adolescents (from 6.1% to 4.2%) during the study period.

DISCUSSION

Our findings address a critical gap in understanding of the overall trends and correlates of fighting and violence among young people in the United States. With respect to trends, the prevalence of youth fighting and violence decreased significantly over the course of the study, dropping from a high of 33.6% in 2003 to a low of 23.7% in 2014. Notably, this change constitutes a more than 29% reduction in the proportion of youths reporting involvement in 1 or more forms of interpersonal conflict (i.e., serious fighting, group fighting, and attacks with the intent to harm). Moreover, this trend change was significant even when a wide array of sociodemographic, psychosocial, substance use, and violent and nonviolent behavioral correlates were taken into account.

Beyond the composite measure of fighting and violence, we also observed important reductions in fighting, group fighting, and attacks examined individually. Notably, these decreases in the prevalence of fighting and violence are in keeping with an emerging body of research documenting a clear pattern of declines in a variety of health-risk and illegal behaviors among youths in the United States. ^{17–20}

As encouraging as these findings may be, a closer look at the trend data reveals a more nuanced pattern of results. That is, despite important reductions among young people in general, it is evident that disparities in fighting and violence persist, particularly with respect to differences across racial/ethnic groups. More precisely, we observed a severity gradient in which the overall prevalence of involvement in fighting and violence was lowest among White youths, incrementally higher among Hispanic youths, and markedly elevated among African American youths.

Indeed, although minor fluctuations were observed across the study period, the mean difference in the prevalence of involvement in fighting and violence between White and African American youths was more than 13%. Moreover, the gap between African American and Hispanic youths appeared to widen over the latter part of the study, reaching a difference in prevalence of nearly 10% in 2013 (35.0% among African Americans and 25.6% among Hispanics) before narrowing slightly in 2014 (32.8% among African Americans and 25.2% among Hispanics).

Notably, we also found that a number of correlates were consistently linked with an increased risk for violence among young people across racial/ethnic groups (see Tables A-C). For instance, consistent with prior research on gender and youth violence, 16 we found that male youths tended, with few exceptions, to be more likely than female youths to take part in violence. We also found, perhaps unsurprisingly, that young people (irrespective of racial/ethnic group) involved in violence were also more likely to be involved in other antisocial behaviors (e.g., drug selling, theft, handgun carrying). This is consistent with research underscoring the frequent comorbidity of violent, nonviolent, and other antisocial behaviors among young people.7,13

Our findings may have a number of implications for violence prevention and policy. For example, despite an overall downward trend in fighting and violence among youths from all racial/ethnic groups, we found clear evidence of racial/ethnic disparities, with African American youths exhibiting markedly elevated levels of involvement in all manifestations of fighting and violence. This result underscores the importance of developing and implementing prevention efforts focused on African American (and, perhaps to a lesser extent, Hispanic) youths, particularly male youths and those struggling with academic engagement, school failure, and frequent parental conflict.

In addition, our findings pointing to the comorbidity of violence and other antisocial behaviors (e.g., theft, drug selling) suggest that multicomponent interventions, as well as interventions targeting salient risk factors related to youth violence and other problem behaviors, may be particularly useful and efficient in terms of addressing youth behavioral problems. Such an approach not only is cost effective but is also consistent with research and theorizing highlighting the syndemic nature of violence and other risk behaviors. Such as a proposed in the syndemic nature of violence and other risk behaviors.

Limitations

Our results should be interpreted in light of several limitations. First, all of the variables we included in our analyses were derived exclusively from youth self-reports. As such, it is possible that some youths underreported or overreported their involvement in fighting and violence as well as their involvement in other behaviors such as substance use and delinquency. Second, although we examined a wide array of sociodemographic, psychosocial, and behavioral correlates of violence, the NSDUH did not include contextual and situational variables that may have helped us understand the specific factors surrounding violent encounters (e.g., youths "fighting back" after having been attacked or fighting while intoxicated). Finally, although the NSDUH surveyed youths in a variety of noninstitutional settings, including homeless shelters and other temporary residences, it did not include young people in juvenile detention or other institutional facilities.

Conclusions

The National Institutes of Health and the Obama administration recently called on social and behavioral scientists to conduct research that can advance our understanding of youth violence. In the present study, we responded to this call. Overall, our findings suggest that, among young people in general and across racial/ethnic subgroups, fighting and violence are on the decline; regretfully, however, we also identified a marked and primarily stable pattern of disparities in youth violence, with African American youths standing out as the group most affected by serious fighting, group fighting, and violent attacks.

Our findings suggest a number of avenues for future research. For example, future studies should attempt to include deeper measurement of the situational and contextual determinants of interpersonal violence among young people, including the types of mechanisms that escalate conflict. Moving forward, developmental and prevention scientists would do well to further explore the origins of disparities in fighting and violence and develop and implement programs designed to address youth violence, particularly among those most at risk. AJPH

CONTRIBUTORS

C. P. Salas-Wright led the overall conceptualization of the study and the writing of the article. E. J. Nelson conducted all of the statistical analyses in collaboration with C. P. Salas-Wright and M. G. Vaughn. M. G. Vaughn also played a central role in conceptualizing the overall study and interpreting the findings. J. M. Reingle Gonzalez and D. Córdova contributed to the writing and revision of the introduction and discussion sections.

ACKNOWLEDGMENTS

This research was supported in part by grant R25 DA030310 from the National Institute on Drug Abuse.

HUMAN PARTICIPANT PROTECTION

No protocol approval was needed for this study because deidentified data were used.

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