

dishes, and full meals in both middle and high schools where menu choices are more expansive. This can also facilitate research in precommitment and social pressure by allowing students to retract their initial decision, once they are in the lunch line, surrounded by their peers.

Andrew S. Hanks, PhD
David R. Just, PhD
Brian Wansink, PhD

Author Affiliations: Department of Applied Economics and Management, Cornell University, Ithaca, New York (Hanks, Just, Wansink).

Corresponding Author: Andrew S. Hanks, PhD, Department of Applied Economics and Management, Cornell University, 17 Warren Hall, Ithaca, NY 14853 (ah748@cornell.edu).

Published Online: May 3, 2013. doi:10.1001/jamapediatrics.2013.82.

Author Contributions: All authors had full access to the data used in analysis and take full responsibility for the integrity and accuracy of the results.

Study concept and design: Hanks, Just, and Wansink.

Acquisition of data: Hanks and Just.

Analysis and interpretation of data: Hanks, Just, and Wansink.

Drafting of the manuscript: Hanks, Just, and Wansink.

Critical revision of the manuscript for important intellectual content: Hanks, Just, and Wansink.

Statistical analysis: Hanks and Just.

Obtained funding: Just and Wansink.

Administrative, technical, and material support: Wansink.

Study supervision: Just and Wansink.

Conflict of Interest Disclosures: None reported.

Funding/Support: We thank the US Department of Agriculture (USDA) for their generous support of this research through the grant that established the Cornell Center for Behavioral Economics in Child Nutrition Programs, USDA/Economic Research Service grant 59-5000-0-0090.

Role of the Sponsors: The USDA had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; and preparation, review, or approval of the manuscript.

Additional Contributions: We thank Adam Brumberg, BS, and Kathryn Hoy, RD, for coordinating the project with the participating schools and collecting tray waste data. We recognize Nutri Kids for its support in extracting sales information. We also are grateful for assistance from Laura Smith and Julia Hastings-Black.

1. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. *JAMA*. 2012;307(5):483-490.

2. Wansink B, Just DR, Payne CR. Mindless eating and healthy heuristics for the irrational. *American Economic Review*. 2007;99(2):165-169. doi:10.1257/aer.99.2.165.

3. Rock CL, Flatt SW, Sherwood NE, Karanja N, Pakiz B, Thomson CA. Effect of a free prepared meal and incentivized weight loss program on weight loss and weight loss maintenance in obese and overweight women: a randomized controlled trial. *JAMA*. 2010;304(16):1803-1810.

4. Loewenstein G, Brennan T, Volpp KG. Asymmetric paternalism to improve health behaviors. *JAMA*. 2007;298(20):2415-2417.

Convergent Validity of Parent-Reported Attention-Deficit/Hyperactivity Disorder Diagnosis: A Cross-Study Comparison

Getahun et al recently published a study titled “Recent Trends in Childhood Attention-Deficit/Hyperactivity Disorder”¹ in which they used medical records and well-defined criteria to generate the prevalence of diagnosed attention-deficit/hyperactivity disorder (ADHD) in a large southern California administrative sample. Their study contributes important geographically based estimates of ADHD and draws conclusions

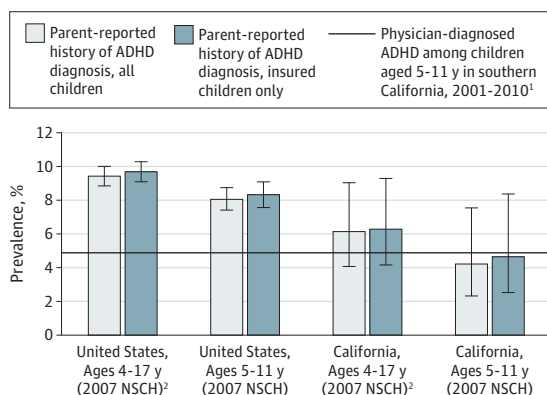
about increasing ADHD prevalence within southern California. However, the authors cited our previous research² to support a commonly held assertion that parent and teacher reports of ADHD “overestimate true prevalence.”¹ To date, parent-reported ADHD diagnosis on national health surveys has not been directly validated against a clinical standard and thus needs further study before conclusions related to validity can be made. However, studies like that by Getahun and colleagues may inform the evidence base for the validity of using survey data for monitoring ADHD over time. Our research estimated that the parent-reported prevalence of ADHD for children aged 4 to 17 years in California was 6.2% (in 2007),² which may appear high compared with the estimate by Getahun and colleagues of 4.9% among children aged 5 to 11 years in California (in 2001-2010). Herein, we replicate our previous analyses of parent-reported ADHD with a sample more comparable to the study population analyzed by Getahun and colleagues.

Methods | To allow for descriptive comparison, we revisited our previous analyses of data from the 2007 National Survey of Children’s Health (NSCH),² further restricting the sample (73 123 children aged 4-17 years) to one more closely reflecting that used by Getahun and colleagues: specifically, children in California aged 5 to 11 years who were covered by health insurance (n = 590). The NSCH has 2 ADHD diagnostic indicators: one for having ever been told by a health care provider that a child had ADHD and the other for having current ADHD. The ADHD case definition by Getahun and colleagues was more reflective of a period prevalence rate than a point prevalence rate, suggesting that the “ever” diagnostic indicator was more appropriate for cross-study comparison. Prevalence estimates of the national, state-based, and age- and insurance-restricted NSCH survey estimates and 95% CIs of parent-reported ADHD were calculated using SUDAAN version 10.0.1 statistical software (RTI International) to account for the complex sampling design.

Results | Based on NSCH data, nationally, 9.5% (95% CI, 9.0%-10.0%) of children aged 4 to 17 years had ever received a parent-reported ADHD diagnosis (**Figure**). This estimate was only slightly lower than, but statistically indistinguishable from, that of children with health insurance (9.8%; 95% CI, 9.2%-10.3%). Restricting the data to insured children aged 5 to 11 years, the national prevalence of children with a history of ADHD diagnosis decreased by 14.3%, to 8.4% (95% CI, 7.7%-9.1%). Further subsetting the age- and insurance-restricted analysis to children in California reduced the prevalence by 44.3% of the national rate, to 4.7% (95% CI, 2.5%-8.4%) of insured California children aged 5 to 11 years with a history of ADHD.

Discussion | On initial inspection, the ADHD rate reported by Getahun and colleagues (4.9%) appears lower than previous² national (9.5%) and California-based (6.2%) estimates of parent-reported ADHD. However, the analyses presented here confirm previous reports of the sensitivity of these estimates to insurance status, geography, and age.³⁻⁵ When considering these factors, the estimated prevalence of parent-reported ADHD in California closely approximates the rate of documented ADHD diagnosis in medical records of a southern California popula-

Figure. Prevalence and 95% CIs of Attention-Deficit/Hyperactivity Disorder Among Children



Prevalence and 95% CIs of attention-deficit/hyperactivity disorder (ADHD) among children by insurance status, geography, age, and data source. NSCH indicates National Survey of Children's Health.

tion, with the rate found by Getahun and colleagues falling within the 95% CI of the NSCH estimate of ADHD among children in California, regardless of age. Therefore, in contrast to the authors' statements that studies relying on parent-reported cases of ADHD "overestimate true prevalence,"¹ an alternative conclusion may be drawn from this study. Specifically, the study by Getahun and colleagues provides evidence of convergent validity that demonstrates the appropriateness of parent report for monitoring state-based and national prevalence of ADHD.

Susanna N. Visser, MS
 Melissa L. Danielson, MSPH
 Rebecca H. Bitsko, PhD
 Ruth Perou, PhD
 Stephen J. Blumberg, PhD

Author Affiliations: National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention, Atlanta, Georgia (Visser, Danielson, Bitsko, Perou); National Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland (Blumberg).

Corresponding Author: Ms Visser, National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention, Mailstop E-88, 1600 Clifton Rd, Atlanta, GA 30333 (svisser@cdc.gov).

Published Online: May 13, 2013. doi:10.1001/jamapediatrics.2013.2364.

Author Contributions: Ms Visser had full access to all the data in the study and takes full responsibility for the integrity of the data and accuracy of the data analysis.

Study concept and design: Visser, Danielson, and Perou.

Acquisition of data: Blumberg.

Analysis and interpretation of data: Visser, Danielson, Bitsko, and Blumberg.

Drafting of the manuscript: Visser and Danielson.

Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Visser and Danielson.

Administrative, technical, and material support: Visser and Bitsko.

Study supervision: Visser and Perou.

Conflict of Interest Disclosures: None reported.

1. Getahun D, Jacobsen SJ, Fasset MJ, Chen W, Demissie K, Rhoads GG. Recent trends in childhood attention-deficit/hyperactivity disorder. *JAMA Pediatr*. 2013;167(3):282-288.

2. Centers for Disease Control and Prevention (CDC). Increasing prevalence of parent-reported attention-deficit/hyperactivity disorder among children: United States, 2003 and 2007. *MMWR Morb Mortal Wkly Rep*. 2010;59(44):1439-1443.

3. Visser SN, Blumberg SJ, Danielson ML, Bitsko RH, Kogan MD. State-based and demographic variation in parent-reported medication rates for attention-deficit/hyperactivity disorder, 2007-2008. *Prev Chronic Dis*. 2013;10:09.

4. Pastor PN, Reuben CA. Diagnosed attention deficit hyperactivity disorder and learning disability: United States, 2004-2006. *Vital Health Stat* 10. 2008;(237):1-14.

5. Zuvekas SH, Vitiello B. Stimulant medication use in children: a 12-year perspective. *Am J Psychiatry*. 2012;169(2):160-166.

COMMENT & RESPONSE

What Is Meant by "Increased Risk for Suicide"?

To the Editor As clinicians and researchers focused on youth suicide, we read with interest the report by Horowitz et al¹ on the Ask Suicide-Screening Questions (ASQ). This study examined the psychometric development of a brief suicide screening in the pediatric emergency department. Despite the promising findings, we would like to offer a word of caution to others further pursuing this line of work.

Horowitz and colleagues used the Suicidal Ideation Questionnaire (SIQ)² as a criterion standard. One important limitation not addressed is the direct overlap of items between the ASQ and SIQ. Of the 4 final items on the ASQ, 3 items are almost verbatim from the SIQ. When the SIQ serves as a means of comparison, it is no wonder that the items that most highly correlated with the SIQ were the items that were most similar. The final item of the ASQ, targeting the presence or absence of a previous suicide attempt, is the new and unique feature of the measure. Thus, it should be considered that Horowitz et al successfully developed an abbreviated version of the SIQ for use in the pediatric emergency department that further assesses suicide attempt history. This remains an important accomplishment, as Horowitz et al correctly noted that the development of a brief suicide screening in this clinical area is a significant contribution.

The more complex issue relates to the conclusions of Horowitz and colleagues. They suggest that the ASQ can identify patients at risk for suicide. This is problematic, because the SIQ, the measure serving as the criterion standard, is a screening instrument developed with the intent of measuring the severity of suicidal ideation.² It has been examined in psychiatric inpatients and youth in schools, correlated with constructs such as depression and hopelessness, and used to differentiate suicide attempters from nonattempters.³ However, prospective research finding the SIQ predictive of suicidal behaviors or death is lacking.

Both the SIQ, and now the ASQ, are valuable additions to a clinician's armamentarium of screening instruments for youth harboring suicidal thoughts. But, these instruments merely alert the clinician to the need for further evaluation of suicide risk. Suicidal ideation has some degree of predictive value regarding the potential for suicide attempt, but the relationship between suicidal ideation and near-term death by suicide is far less conclusive. This is an important distinction to make both in clinical practice and future research. Conclu-