

Correlates of being diagnosed with Depression or Anxiety problems in under 18 year olds - United States

Depression and anxiety in childhood and adolescence has been linked to adult depression, anxiety and personality disorders.¹⁻³ We describe gender, race, poverty level and educational attainment in the family associated with depression and anxiety problems in under-eighteen year old children in the United States of America, using data from the National Survey of Children's Health, 2003 (NSCH).⁴

The NSCH was conducted from January 2003 to July 2004; by the National Center for Health Statistics, and funded by the Maternal and Child Health Bureau of the Health Resources and Services Administration. NSCH was designed to produce national and state-specific estimates, using random-digit-dial sample of households with under-18 children. The respondent was either the parent or a family member of the child, and interviews were conducted using a computer-assisted telephone interviewing system. Affirmative response to the question "Has a doctor or health professional ever told you that the child has depression or anxiety problems?" was used to identify depression and anxiety cases. Design-based analysis with

STATA release 9.1 was done using Logistic Regression, and Odds Ratios (OR) were computed for the association of depression and anxiety, with various socio-demographic variables; data was downloaded from the website of National Center For Health Statistics.⁴

The overall prevalence of depression or anxiety problems was 4.1% with 95% Confidence Interval (CI) 3.9% - 4.4% (n = 90226). In males prevalence was 4.6% (95% CI 4.3% - 5.0%), while in females it was 3.6% (95% CI 3.4% - 3.9%). Compared to males, females were less likely to be diagnosed with depression or anxiety problems (OR 0.77, 95% CI 0.68 - 0.86). Race was assessed in the categories of White, Black, Multiple and Other. Compared to Whites, Black children were less likely to be diagnosed with ADHD (OR 0.62, 95% CI 0.49 - 0.77) as well as children in the other racial group (OR 0.45, 95% CI 0.32 - 0.63), while no statistically significant association was found with multiple race. Highest level of education attained by anyone in a house of the child was assessed in terms of less than high school high school, and more than high school

educational attainment. No statistically significant association was found with educational attainment and a child in the family diagnosed with depression or anxiety problems. Poverty level of the household was assessed in three categories; less than 150%, 150% to less than 300% and 300% plus, based on Department of Health and Human Services guidelines. Compared to children in households with the base category of less than 150% poverty level, children in the 150% to less than 300% and 300% plus category were less likely to be diagnosed with ADHD; i.e. (OR 0.65, 95% CI 0.55 - 0.77) and (OR 0.51, 95% CI 0.43 - 0.59), respectively.

In conclusion, male children were more likely, while children in families living in 150% or above poverty levels were less likely to have been told by a doctor or health professional that they have depression or anxiety problems.

References

1. Pine DS, Cohen P, Gurley D, Brook J, Ma Y. The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Arch Gen Psychiatry* 1998;55:56-64.
2. Kasen S, Cohen P, Skodol AE, Johnson JG, Smaites E, Brook JS. Childhood depression and adult personality disorder: alternative pathways of continuity. *Arch Gen Psychiatry* 2001;58:231-6.
3. Johnson JG, Cohen P, Brook JS. Associations between bipolar disorder and other psychiatric disorders during adolescence and early adulthood: a community-based longitudinal investigation. *Am J Psychiatry* 2000;157:1679-81.
4. National Survey of Children's Health. <http://www.cdc.gov/nchs/about/major/slaits/nsch.htm>. (Assessed July 14, 2005)

Masood Ali Shaikh, Irshad Ali Shaikh

Chester Health Department, Chester City Hall, 1 Fourth Street Chester, PA 19013, United States of America.