Childhood psychopathology at age 8 predicts antidepressant use by age 24

QUESTION

**Question:** Does childhood psychopathology predict lifetime use of antidepressants?

**Population:** 5547 individuals from a nationwide Finnish birth cohort born in 1981. Of the entire birth cohort (n=60 007), 6017 children were selected to participate in 1989 at age 8. Individuals whose data could not be linked to the prescription database were excluded.

**Setting:** General population, Finland; 1981–2005.

**Prognostic factors:** The main prognostic factor assessed was childhood psychopathology (assessed at age 8 by validated parent and teacher Rutter’s Questionnaire composed of a conduct scale, a hyperkinetic scale and an emotional scale, and the validated self-reported Children’s Depression Inventory). Individuals were described as having problems if they scored above the 90th percentile on any of the psychopathology scores. Other factors assessed were parental education level and family structure (defined as intact if living with two biological parents and non-intact if otherwise).

**Outcomes:** Reimbursed antidepressant purchase between age 13 and 24 (ie, between 1994 and 2005), identified from the Nationwide Prescription Register.

**METHODS**

**Design:** Cohort study.

**Follow-up period:** 16 years.

**MAIN RESULTS**

For the entire sample, 8.9% of males and 13.8% of females made at least one antidepressant purchase between the ages of 13 and 24. For males as well as females, antidepressant use between age 13 and 24 was predicted by living in a non-intact family structure at age 8 (male HR 1.4, 95% CI 1.02 to 1.9, p=0.049; female HR 1.5, 95% CI 1.1 to 1.9, p=0.004), having emotional problems (male HR 1.4, 95% CI 1.01 to 2.0, p=0.04; female HR 1.5, 95% CI 1.1 to 2.0, p=0.01) or having problems with depressive symptoms (male HR 1.8, 95% CI 1.3 to 2.5, p<0.001; female HR 1.6, 95% CI 1.2 to 2.2, p=0.001). For males only, antidepressant use between age 13 and 24 was additionally predicted by having conduct problems (HR 1.9, 95% CI 1.4 to 2.7, p<0.001). Hyperkinetic symptoms at age 8 did not predict later antidepressant use in males or females in multivariate analyses. Highest risk for antidepressant use among males was associated with conduct, with 17.5% of males with conduct problems at age 8 later purchasing antidepressants, as compared with 8.4% of males without conduct problems at age 8. The highest risk among females was associated with self-reported depressive scale scores, with 20.4% of females with problems with depressive symptoms at age 8 later purchasing antidepressants, as compared with 13.0% of those without such problems.

**CONCLUSIONS**

Several measures of child psychopathology at age 8, including emotional, conduct and depressive problems, predict purchase of antidepressants later in childhood/early adulthood. The types of psychopathology that predict later antidepressant use vary between males and females. Living in families that did not include both biological parents at age 8 also predicted antidepressant purchases later in life.

**ABSTRACTED FROM**

Gyllenberg D, Sourander A, Niemelä S, et al. Childhood predictors of use and costs of antidepressant medication by age 24 years: findings from the Finnish nationwide 1981 Birth Cohort Study. J Am Acad Child Adolesc Psychiatry 2011; 50:406–15, 415.e1. Correspondence to Dr David Gyllenberg, Department of Child Psychiatry, University of Helsinki, PO Box 22, 00014 Helsinki, Finland; david.gyllenberg@helsinki.fi Sources of funding National Social Insurance Institution of Finland, the Medical Society of Finland and the Child Psychiatric Research Foundation.

**REFERENCES**