Intermittent explosive disorder is common, has an early age of onset and is associated with the development of other mental disorders in the US population

Kessler RC, Coccaro EF, Fava M, *et al*. The prevalence and correlates of DSM-IV intermittent explosive disorder in the national comorbidity survey replication. *Arch Gen Psychiatry* 2006;**63**:669–78.

Q How common is intermittent explosive disorder in the US population?

METHODS

Design: Cross sectional study.

Setting: General population, US; recruitment February 2001 to April 2003.

Population: 9282 people taking part in the National Comorbidity Survey Replication. Exclusions: <18 years old; or diagnosis of bipolar disorder.

Assessment: A fully structured diagnostic interview was carried out to assess participants for anxiety disorders, mood disorders, substance disorders, oppositional defiant disorder, conduct disorder, attention deficit/hyperactivity disorder and intermittent explosive disorder (IED). Lifetime IED was defined as three or more anger attacks that resulted in serious assault or destruction of property. Twelve-month prevalence was defined as three lifetime attacks and at least one attack in the last month. Cross-tabulations were used to calculate prevalence estimates, the acturial method was used to calculate age at onset curves and logistic regression analysis was used to analyse association with comorbid DSM-IV disorders and sociodemographic characteristics.

Outcomes: Prevalence of intermittent explosive disorder (WHO Composite International Diagnostic Interview for DSM-IV disorders).

MAIN RESULTS

The 12-month prevalence of IED was 3.9% and lifetime prevalence was 7.3%. Mean age of onset of IED was 15 years. Interpersonal violence and threatening interpersonal violence were common in people with lifetime IED (interpersonal violence: 71%; threatening interpersonal violence: 15%). Most people with lifetime IED had at least one other mental disorder (82%). The risk of developing lifetime IED was higher for men, young people, people with low education, people with low income, or races other than non-Hispanic black, non-Hispanic white or Hispanic (see table). Many people with IED received treatment for emotional problems (60%), however less than half of these people were treated for IED (29%).

Characteristics that increase the risk of developing lifetime IED in the US population

	OR (95% CI)
Male	1.7 (1.3 to 2.1)
Aged 18–29 years	4.3 (2.1 to 9.0)
Aged 30–44 years	2.9 (1.3 to 6.3)
Education 0–11 years	2.0 (1.4 to 3.0)
Education 12 years	1.4 (1.0 to 1.8)
Education 13–15 years	1.6 (1.2 to 2.2)
Race other than non-Hispanic black, non-Hispanic white or Hispanic	1.9 (1.2 to 3.0)
Low income	1.5 (1.1 to 2.0)

IED, intermittent explosive disorder; OR, odds ratio; CI, confidence interval.

CONCLUSIONS

IED is prevalent in the US population, occurs at a young age and is associated with the development of other mental disorders later in life.

NOTES

Data on onset and course of IED were collected retrospectively. The authors acknowledge that this and the fact that the diagnostic interview schedules had unknown reliability and validity are weaknesses of the study.

Commentary

The paper by Kessler *et al* reports a high prevalence (7.3% lifetime) of intermittent explosive disorder (IED), being widely distributed in the population and associated with interpersonal problems. This DSM-IV diagnosis reflects the extremes cases from a normally distributed basic emotion or trait: anger. Anger has been thoroughly studied with temperament measures, such as the novelty seeking traits. High novelty seeking and anger traits are commonly observed, particularly in patients with some psychiatric disorders, such as bipolar disorders, substance use, cluster B and paranoid personality disorders. These findings have led to the hypothesis that high anger traits are the shared characteristic between these disorders, which would explain their high ''comorbidity'' and their somewhat similar response to anticonvulsant mood stabilisers and antipsychotics, which may share ''anti-anger'' effects.[1]

Accordingly, Kessler *et al* found IED was commonly comorbid with mood, anxiety, impulse control and substance use disorders, even with bipolar disorder as a post hoc exclusion criteria. Interestingly, this paper shows an early age of onset of anger attacks, with mean age at onset 13.5 years, over 90% of cases with onset before 20 years. As high anger expression emerged before other DSM-IV disorders, this strongly indicates that high anger traits are a primary or secondary risk factor for a variety of mental disorders. Unfortunately, even patients with clear IED seldom received specific treatment for their anger. This has important implications, as identification and treatment of high anger traits might prevent its burden later in life as anger per se, and by preventing the emergence or attenuating the expression of mental disorders. Anger is a worthy clinical target for future research, but this means we should shift our clinical evaluation from the categorical diagnoses people have to how people are dimensionally.

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1 Lara DR, Pinto O, Akiskal K, *et al*. Toward an integrative model of the spectrum of mood, behavioral and personality disorders based on fear and anger traits: I. Clinical Implications. *J Affect Disord* 2006;**94**:67–87.

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