Brief communication
Cumulative prevalence of personality disorders between adolescence and adulthood


Objective: To investigate the cumulative prevalence of personality disorder (PD) among adults in the community, based on prospective longitudinal data from a series of psychiatric interviews.

Method: Psychiatric interviews were administered to a regionally representative community-based sample of 568 individuals in 1983 (mean age = 14), 1985–1986 (mean age = 16), 1991–1993 (mean age = 22), and 2001–2004 (mean age 33).

Results: The point prevalence of any current DSM-IV PD, including depressive PD and passive-aggressive PD, varied between 12.7% and 14.6% across the four diagnostic assessments. The cumulative prevalence of PD increased at each of the follow-up assessments. At mean age 33, the estimated lifetime prevalence of PD was 28.2%.

Conclusion: The cumulative prevalence of PD, based on a series of interviews conducted during adolescence and adulthood, may be substantially higher than the point prevalence of current PD based on a single assessment interview.

Significant outcomes
- This study is the first to investigate the cumulative prevalence of personality disorder (PD), based on a series of assessments during adolescence and adulthood.
- The cumulative prevalence of PD increased steadily at each of three follow-up assessments.
- The findings suggest that some PDs may not become evident until during early adulthood.

Limitations
- Fully structured interviews were administered at mean ages 14–22, and a semi-structured clinical interview was administered at mean age 33, contributing to method variance.
- The first three assessments were based on interviews of respondents and their mothers. The fourth assessment was based on an interview of the respondent, increasing method variance.
- Twenty-seven per cent of the baseline sample completed ≤2 of the three follow-up assessments.

Introduction
There has been considerable progress in the epidemiology of personality disorder (PD) in the past two decades. Several investigations have provided data regarding the prevalence of current PD in the general population, with estimates ranging from approximately 7% to 15% of the adult population, depending on the diagnostic procedures used and the range of PD assessed (1). However, the cumulative prevalence of PD has received relatively little investigation. Research has indicated that the age of onset of PD is somewhat variable, and that PD tends to be moderately, rather than highly, stable over time (2). In some cases, PD is evident by mid-adolescence, undergoing remission by early
adulthood, and in other cases, PD does not become evident until early adulthood (3). Cross-sectional PD prevalence studies tend to assess current PD, and remitted cases are not usually identified as having a history of PD. Thus, cross-sectional data regarding the current prevalence of PD may underestimate the cumulative prevalence of PD in the general population.

Prospective longitudinal comparisons of point prevalence and cumulative prevalence data have suggested that retrospective and single-wave cross-sectional studies may tend to underestimate the prevalence of anxiety, mood, and other disorders in the population over time (4–8).

Aims of the study

We present findings from the Children in the Community Study, a 20-year community-based longitudinal investigation, regarding the point and cumulative prevalence of PD across a series of psychiatric assessments conducted during adolescence and adulthood.

Material and methods

Participants

The present findings are based on data from 568 individuals from two counties in the State of New York who completed a series of psychiatric interviews in 1983, 1985–1986, 1991–1993, and 2001–2004. Seven hundred seventy-eight respondents (mean age = 13.7; SD = 2.8) were interviewed in 1983. There was gradual attrition in the sample in 1985–1986 (n = 776; mean age = 16.3; SD = 2.8), 1991–1993 (n = 714; mean age = 22.1; SD = 2.7), and 2001–2004 (n = 678; mean age 33.1; SD = 2.8). The 568 respondents in the present report were those who completed all four interviews, and whose mothers completed corresponding interviews, in 1983, 1985–1986, and 1991–1993. Maternal interviews were also conducted, in 1975 (mean offspring age 5.5; SD = 2.8), after the families had been randomly sampled on the basis of residence in Albany and Saratoga counties. During the maternal interviews, detailed information was obtained regarding one randomly sampled child from each family. The participating families were demographically representative of families in the sampled region (9). The participants in the present report did not differ significantly from the remainder of the baseline sample with regard to PD prevalence. The study procedures were approved in accordance with institutional guidelines and have been approved by the Institutional Review Boards of the Columbia University College of Physicians and Surgeons and the New York State Psychiatric Institute. A National Institutes of Health Certificate of Confidentiality has been obtained for these data. Written informed consent or assent was obtained from all participants after the interview procedures were fully explained. Additional information regarding the study methodology is available from previous reports,(3, 9) and on the study website (http://nyspi.org/childcom).

Measures

Items used to assess current PD at the first three assessments were adapted from instruments including the Personality Diagnostic Questionnaire (10) and the Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II) (11). The items selected from these instruments, developed to assess DSM-III-R diagnostic criteria, were combined using algorithms developed by consensus among one psychiatrist and two clinical psychologists (12). Following the publication of DSM-IV, the items selected from the study protocol were modified to maximize correspondence with DSM-IV diagnostic criteria and to permit assessment of depressive PD. PDs were identified as being present during adolescence only if the diagnostic criteria were met at mean ages 14 and 16, or if the criteria were met at one assessment and the number of PD symptoms was within one criterion of meeting the diagnostic criteria at the other assessment. PD symptoms were identified as being present if the interview data indicated that they were enduring traits. Antisocial PD was only assessed among participants who were ≥18 years old. Research has supported the reliability and validity of the interview items and diagnostic algorithms (12–15). PD traits, assessed using these items and algorithms, were moderately stable during adolescence and early adulthood (13). The concurrent validity of the assessment procedure was supported by findings indicating that PDs were associated with current impairment, distress, and Axis I disorders (12). The predictive validity of the assessment was supported by findings indicating that adolescent PDs were associated with elevated risk for Axis I disorders, criminal or violent behavior, and suicidal behavior during early adulthood (14, 15). Current PD was assessed at mean age 33 using the DSM-IV version of the SCID-II (15), which was administered by experienced mental health professionals. PD was identified as present among respondents with clinician-rated impairment that met the DSM-IV diagnostic criteria. Research has supported the reliability and validity of the SCID-II (16–18).
Analyses

Frequency distributions of the point (current) prevalence and cumulative prevalence of PD at each of the four assessments were computed. In accordance with the DSM-IV stipulation that PD onset takes place during adolescence or early adulthood, specific PDs were not considered present at mean age 33 unless ≥2 corresponding PD symptoms were evident by mean age 22. Depressive PD and passive–aggressive PD, which are included in DSM-IV Appendix B, were included in the computation of the composite variable ‘≥1 PD.’

Results

Findings regarding the point prevalence of PD at each of the four assessments are presented in Table 1. The point prevalence of any current DSM-IV PD, including depressive PD and passive–aggressive PD, varied between 12.7% and 14.6% across the four assessments. Findings regarding the cumulative prevalence of PD are presented in Table 2. The cumulative prevalence of ≥1 PD increased at each of the follow-up assessments. At mean age 33, the cumulative prevalence of ≥1 DSM-IV cluster A, B, or C PD was 26.6%, and the cumulative prevalence of any DSM-IV PD, including depressive PD and passive–aggressive PD, was 28.2%.

Discussion

The present findings suggest that the cumulative prevalence of PD may be substantially higher than the current prevalence of PD among adults in the community. Our findings suggest that approximately 28% of the adults in the studied population may have a history of DSM-IV cluster A, B, or C PD. The present findings are consistent with prior research indicating that retrospective and cross-sectional studies may underestimate the cumulative prevalence of psychiatric disorders in the general population (4–8). The findings of the present study are of particular interest because they suggest that, due to cases of PD remission and cases in which PD does not meet the diagnostic threshold until early adulthood, the cumulative prevalence of PD may tend to increase gradually between adolescence and the transition to adulthood. The differences between the point prevalence of current disorder and the cumulative prevalence of disorder are likely to be attributable to factors including temporal and contextual variability in symptom severity. Recognizing that prior epidemiologic findings regarding PD prevalence have varied, due to the use of a range of methodological approaches, it will be of interest for future research to investigate the cumulative prevalence of PD in other populations, using DSM-IV and International Classification of Diseases diagnostic criteria.

Acknowledgements

This research was supported by NIMH grants MH-36971, MH-49191, and MH-60911 to Dr. Cohen, and by NIH grant DA-03188 from the National Institute on Drug Abuse to Dr. Judith Brook.

References


