Trends in behavioural disorders in children in Brazil from 1993 to 2004: a cohort study

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Abstract

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Background Many reports have charted trends in child and adolescent psychological disorders but few from low-income and middle-income countries, and very few cover the pre-school period. We investigated changes in pre-school behavioural and emotional disorders in two birth cohorts born 11 years apart in Brazil.

Methods We did this cohort study of two birth cohorts from Pelotas, Brazil. In 1993 and 2004, all mothers giving birth to children who lived in the urban area of Pelotas were asked to have their children included in a birth cohort study. We included 4-year-old children born in 1993 (n=634) and 2004 (n=3750). We used the Child Behaviour Checklist, completed by participants' mothers, to assess any behavioural or emotional disorders.

Findings Response rates in these two cohorts were above 90%. Mean total score was 27.9 (SE 0.8) in 1993 versus 34.7 (SE 0.3) in 2004; 5.7 (0.2) versus 6.3 (0.1) for internalising scores, and 12.4 (0.4) versus 15.5 (0.1) for externalising scores. After adjustment for confounding variables (age, socioeconomic status, maternal and child characteristics, maternal employment, and maternal psychiatric problems), the largest increase from 1993 to 2004 was for the aggressive behaviour syndrome score (Cohen's $d \cdot 0.50$), followed by the externalising problem score (Cohen's $d \cdot 0.40$), and total score (Cohen's $d \cdot 0.36$). The increase was greatest for children from poorer families and those with less-educated mothers.

Interpretation Pre-school behavioural disorders have increased among children in Brazil up to 2004. Because of the potential long-term effects of childhood psychological disdorders, early identification of such problems should be a priority for mental health services.

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Contributors

AM had the idea for the study. AM, EM, AS, and CGV designed the study. AM and EM did the statistical analysis and wrote the first draft. All authors interpreted data, revised the abstract, and approved the submitted version.

Declaration of interests

We declare no competing interests.

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