



## Mental ill-health among children of the new century

### Trends across childhood, with a focus on age 14

#### Introduction

In recent years, there has been a growing policy focus on children's mental health. The government has repeatedly stated its commitment to improving access to specialist mental health services. At the same time, there is widespread concern that staff at schools and colleges lack the resources and skills to help improve pupils' emotional wellbeing.<sup>1</sup> Demand for specialist services is growing with recent evidence that child and adolescent mental health services (CAMHS) are,

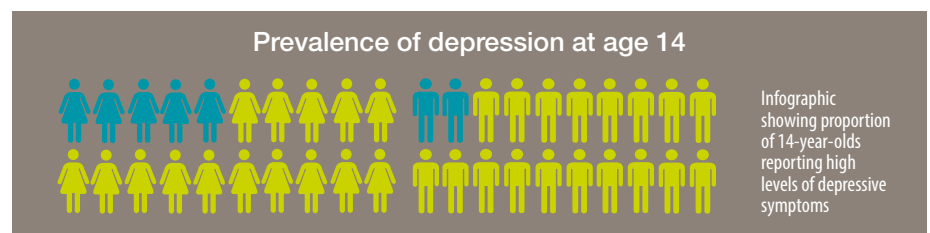
on average, turning away nearly a quarter of children referred to them for treatment by concerned parents, GPs, teachers and others.<sup>2</sup> Half of all cases of adult mental illness start by the age of 14<sup>3</sup>, meaning prevention and early support for children is vital.

This briefing paper summarises the prevalence of mental health problems among children taking part in the Millennium Cohort Study (MCS), which is a representative group of children born in the UK

at the start of this century. The report explores the prevalence of poor mental health amongst these children based on surveys of their parents at ages 3, 5, 7 and 14. It then examines in more detail, including by gender, income and ethnicity, the data on depressive symptoms reported by 14-year-olds themselves in the latest survey. The report also compares 14-year-olds' perceptions of their mental ill-health with their parents' perceptions.

#### Key findings

- Average levels of emotional symptoms, such as feeling depressed and anxious, increased from early childhood through to mid-adolescence. From ages 3 to 11 years similar proportions of girls and boys suffered from emotional problems as reported by their parents. However, between age 11 and 14 years prevalence in boys stayed the same (around 12%), but for girls it increased from 12% to 18%.
- Difficulties related to conduct and disruptive behaviour, reported by parents, decreased from infancy to mid-childhood and then slightly



- increased from mid-childhood to adolescence. At every age, prevalence of behaviour problems was slightly higher in boys than in girls.
- At age 14, when children reported their own symptoms, 24% of girls and 9% of boys were suffering from high symptoms of depression.

- 14-year-olds from poorer socioeconomic backgrounds were more likely to report greater symptoms compared to those from better-off families.
- Emotional symptoms of 14-year-olds often differed depending on whether they were reported by themselves or their parents.

## About the Millennium Cohort Study

The Millennium Cohort Study (MCS) is following the lives of 19,517 children born across England, Scotland, Wales and Northern Ireland in 2000-01. The MCS provides multiple measures of the cohort members' physical, socio-emotional, cognitive

and behavioural development over time, alongside detailed information on their daily life, behaviour and experiences. Alongside this, rich information on economic circumstances, parenting, relationships and family life is available from both resident parents. There have been six sweeps of MCS to date. The next sweep will take place in 2018 when

the cohort members are aged 17.

Given the rich data available in the study about the cohort members, their families and wider school and social contexts, researchers can utilise these data to understand the antecedents, development and consequences of mental ill-health using a range of statistical approaches.

### Method overview

Assessments have been carried out with children and their parents at ages 9 months, 3, 5, 7, 11 and 14 years in the Millennium Cohort Study.

At ages 3, 5, 7, 11 and 14 parents reported on their children's difficulties in four areas, using the Strengths and Difficulties Questionnaire: emotional symptoms<sup>4</sup> (feelings of low mood and anxiety); conduct problems (behaviour difficulties, acting out, disobedience); hyperactivity

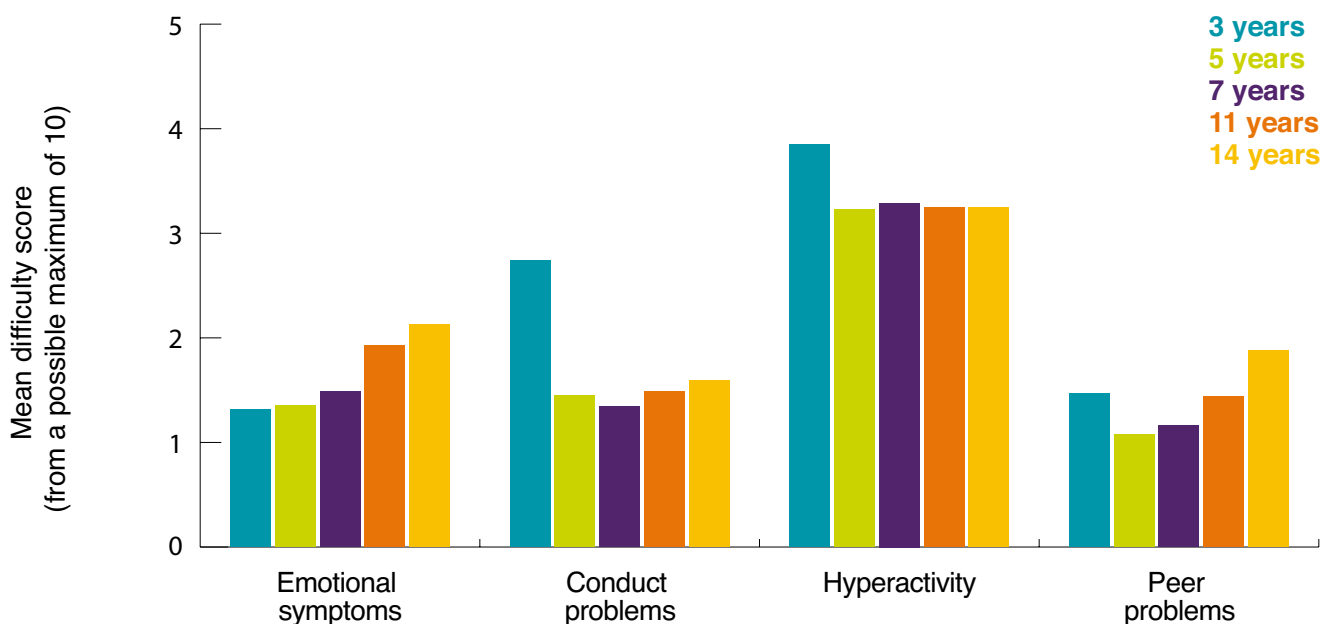
(inattentive, fidgeting, unable to focus); and problems getting along with other children (having few friends, being bullied). In more than 9 out of 10 cases the respondent was the child's mother. For each of these domains, each child obtains a 'difficulty score', and a score higher than a certain threshold is indicative of significant levels of difficulty in the area.<sup>4</sup>

In the most recent sweep of the study, at age 14, young people answered questions about their mental health difficulties for the first time. They completed the Short

Moods and Feelings Questionnaire which assesses symptoms of depression.<sup>5</sup> This measure assess feelings or behaviours in the previous fortnight (e.g. I felt miserable or unhappy). Scoring higher than the established threshold is indicative of suffering from depression.

Data presented in this report are from all available responses to these questionnaires at each sweep, and the prevalences have been weighted to provide nationally representative estimates.<sup>6</sup>

FIGURE 1:  
Mean SDQ difficulty scores for each difficulty subscale from ages 3 to 14 years



## Mental ill-health from ages 3 to 14

Parents reported on their children's difficulties at ages 3, 5, 7, 11 and 14 in four areas – emotional symptoms, conduct problems, symptoms of hyperactivity and problems getting along with peers [see Figure 1]. These represent developmental patterns in average symptoms through childhood. The data on average difficulty scores across all children for each type of difficulty show that:

- Emotional symptoms increase year on year through childhood into adolescence, almost doubling from early childhood to age 14.
- Conduct problems are highest at age 3, decrease considerably between 3 and 7 and then increase slightly between ages 7 and 14.
- Hyperactivity symptoms are highest at age 3, they then reduce and are similar from ages 5 to 14.
- Peer problems decline from age 3 to 5 but then increase steadily year on year through childhood and into adolescence. Between 11 and 14 years they almost double.

### Gender differences

At each age we investigated the prevalence of significant emotional and conduct problems separately for boys and girls (based on scoring higher than an established threshold). These findings are presented in Figures 2 and 3.

As shown in Figure 2, there is an increase in prevalence of emotional

FIGURE 2:  
Prevalence of emotional problems

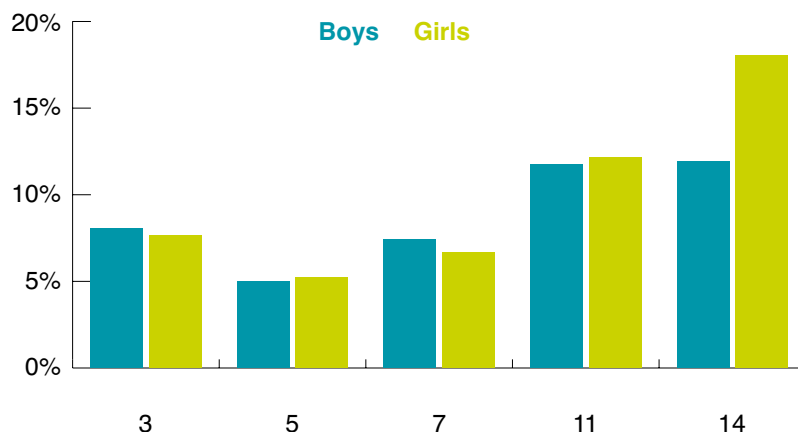
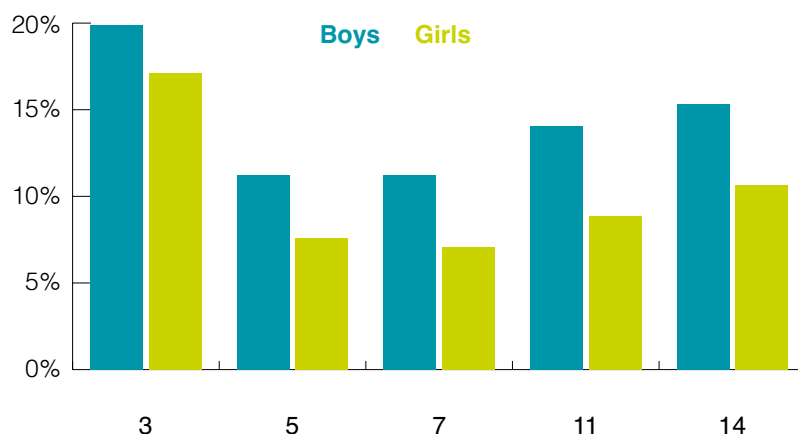


FIGURE 3:  
Prevalence of behaviour problems



problems for both sexes from ages 7 to 11 from around 7% to 12%. As they enter adolescence, for boys, the prevalence of emotional problems at ages 11 and 14 is similar at around 12%, but for girls, however, we observe an increase from 12% to 18%. Age 14 is the first time a substantial gender difference in emotional problems is observed.

Figure 3 focuses on behaviour problems. We observe that at all ages boys show more behaviour problems than girls. At age three, almost 20% of boys have these problems. This then decreases to 11% at age 5 but then increases to 15% by age 14.

**The proportion of girls identified as having emotional problems based on their parents' reports increased from 12% at age 11 to 18% at age 14. In boys there was no corresponding increase**

## Depressive symptoms at age 14

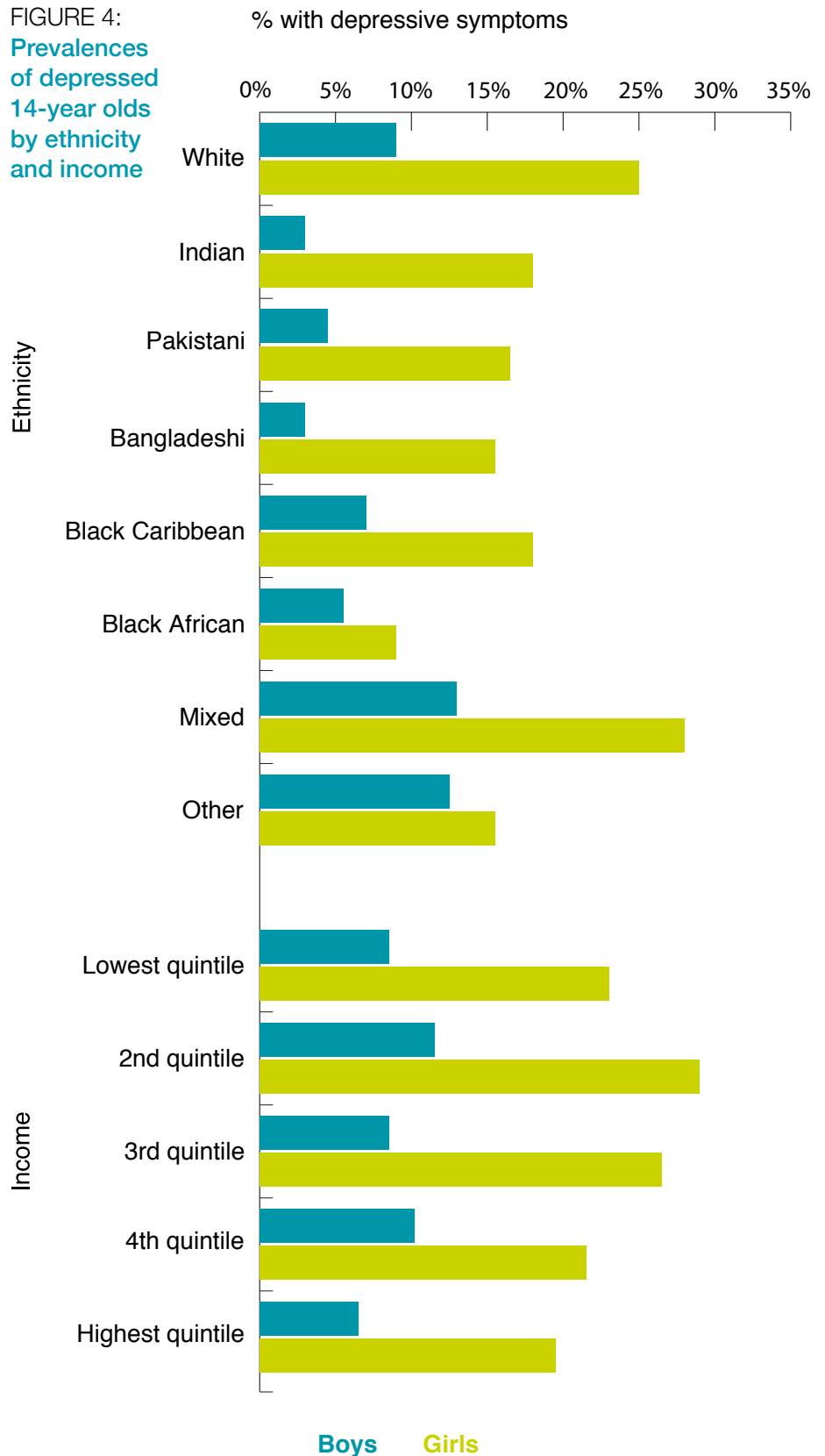
At age 14, children reported on their own mental ill-health using the Short Moods and Feelings Questionnaire. Based on this assessment, almost 1 in every 4 girls (24%) at age 14 report high levels of depressive symptoms, compared with almost 1 in 10 (9%) boys. This suggests that levels of depression amongst today's teenage girls are high. In this cohort of children born in 2000 and 2001, this equates to around 67,000 boys and 166,000 girls nationally.<sup>7</sup>

### Differences by ethnicity and family income

Girls from mixed and White ethnic backgrounds were the most likely to report high depressive symptoms. In contrast, Black African girls were least likely to report high depressive symptoms at this age. For boys, those from mixed and other<sup>8</sup> ethnic groups were at greatest risk of suffering from depressive symptoms. Bangladeshi and Indian boys were the least likely to suffer from these symptoms [see figure 4].

In general, children from poorer homes were more likely to suffer from high depressive symptoms compared with children from better off homes. This association seems to be more consistent at different levels of family income in girls (with the exception of girls from the poorest homes) than in boys.

FIGURE 4:  
Prevalences of depressed 14-year olds by ethnicity and income



**24% of girls and 9% of boys have high levels of depressive symptoms at age 14**

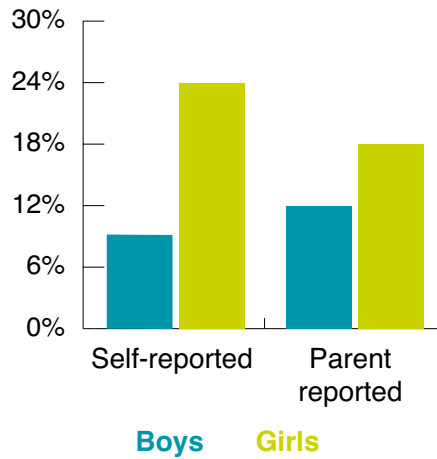
## Perspectives of parents and young people

The most recent data from the MCS include 14-year-olds reporting on their own mental ill-health. This means that for the first time since the study began, comparisons can be made between the symptoms and difficulties children themselves report and what their parents report.

Overall the association between parent and child reports of emotional or depressive symptoms is weak (correlation=0.27). Figure 5 shows that compared to 14-year-olds' own reports, parents identify more boys with depressive symptoms and fewer girls with these symptoms. The fact that such a high proportion of girls – 24% – suffers from high levels of depressive symptoms suggests that some parents may not be aware of their daughter's depression.

However, further research is needed to understand why these differences are observed, what they mean and how they might predict later outcomes for these young people.

FIGURE 5:  
High depressive symptoms at age 14: parent and self-reported prevalences



## The agreement between self- and parent-reported emotional symptoms of 14-year-olds is weak

### Footnotes:

- 1 Education and Health Select Committees (May 2017) Report: Children and young people's mental health – The role of education.
- 2 Frith, E (2016). Centre Forum Commission on Children and Young People's Mental Health: State of the Nation.
- 3 Royal College of Psychiatrists. (2010) No health without public mental health. The case for action. Position Statement PS4/2010.
- 4 Details of the measure and the threshold scores are available at: <http://www.sdqinfo.com/>.
- 5 Thapar, A., & McGuffin, P. (1998). Validity of the shortened Mood and Feelings Questionnaire in a community sample of children and adolescents: a preliminary research note. *Psychiatry Research*, 81(2), 259-268.
- 6 The numbers of children the data in this report are based on are as follows: for the parent SDQs 14770 (age 3), 14745 (age 5), 13472 (age 7), 12975 (age 11) and 11394 (age 14); and for the depressive symptoms at age 14 years is 11190.
- 7 This is based on the ONS estimate of the number of 13 and 14-years-olds in 2014: 729676 boys and 696078 girls.
- 8 'Other' includes ethnicity groups not separately listed in Fig.4

### About NCB

NCB is a leading children's charity working to build a better childhood for every child. We listen to children and young people and work with those supporting them to develop evidence on what needs to be done to enable children to enjoy their right to be safe, secure and supported so they can flourish and fulfil their potential.

NCB hosts the Partnership for Well-being and Mental Health in Schools, a national network of more than 50 leading organisations, as well as the Anti-Bullying Alliance, the Sex Education Forum, the Childhood Bereavement Network, and the Council for Disabled Children. NCB has advised and contributed to the drafting of this report.

### Acknowledgements

The Millennium Cohort Study is supported by the Economic and Social Research Council and a consortium of government departments. This research would not have been possible without the important contributions of the Millennium Cohort Study cohort members and their families. We would also like to acknowledge the input of colleagues who contribute to the study and the teams collecting the data.

This research provides robust and up-to-date data on the prevalence of mental ill-health amongst today's children and adolescents. In recent years, there has been a dearth of nationally representative prevalence estimates of mental ill-health in children. Given the current political concern about children's mental health this report contributes to an informed debate about how we can improve children's mental health and wellbeing.

The report, based on data from the Millennium Cohort Study, shows that while the majority of 3-14-year-olds in the UK are not suffering from mental ill-health, a substantial proportion experience significant difficulties. A striking finding is the high prevalence of depressive symptoms reported by 14-year-olds: 24% of girls and 9% of boys.

The research provides insight into the changing nature of problems as children enter adolescence. Parent-reported emotional and peer problems increase between the ages of 5 and 14. There are some differences in the prevalence of mental ill-health in boys and girls. Boys of all ages have greater behaviour problems than girls. Prevalences of children with emotional problems, as reported by parents, increases in childhood at similar rates for both boys and girls, before increasing sharply for girls between 11 and 14.

Family income is associated with experiencing high depressive symptoms, with children from better off families less likely to experience high symptoms. We also find that high depressive symptoms are most common amongst mixed race and

White girls, and amongst boys who are White, mixed race or other<sup>8</sup> ethnicities.

This report is unique, in that it draws on data from 14-year-olds themselves, as well as their parents. Importantly, the research shows that children's perceptions of their mental ill-health may be different from their parents', with weak agreement between the two perspectives. Parents overall report more girls than boys with emotional problems at age 14 years. However, compared to prevalences based on 14-year-olds' own reports, parents identify more boys with high depressive symptoms and fewer girls. This highlights the importance of obtaining young people's own perspective of their mental ill-health, alongside other perspectives.

### Implications

- Policy makers should take into account the differences between boys and girls in their experiences of mental ill-health at different ages. The report shows that between the ages of 11 and 14 girls are significantly more likely than boys to experience poor mental health.

- Strategies to measure, prevent and respond to mental ill-health should take into account changes in needs and experiences as children move into adolescence.
- Policy makers should also consider the relationship between poor mental health and children's wider circumstances, including family income. The research showed an association between lower income and higher

prevalence of mental health difficulties.

- Children and young people should have the opportunity to speak directly to professionals and policy makers. The research shows that children's assessment of their own mental health often varies from their parents'. It is vital that both perspectives are heard and responded to.

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