Mental health among young people: longitudinal evidence from the UK

Emla Fitzsimons
22nd October 2020
Mental health among young people in the UK

Over half of all mental ill-health disorders start before the age of 14, with 75% by 24 years of age.

Major impacts on people’s lives and society as a whole →

*provision for early support and intervention essential*
Mental health among young people in the UK

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Major impacts on people’s lives and society as a whole →

*provision for early support and intervention essential*

Despite recent targeted increases, child and adolescent mental health accounts for less than 10% of the overall mental health budget

- which equates to just under 1% of the NHS budget
Mental health among young people in the UK

Significant levels of unmet need in children and young people’s mental health care

- Specialist services turning away one in four of the children referred to them by their GPs or teachers for treatment

- Over 338,000 children were referred to CAMHS in 2017; less than a third received treatment within the year

- 75% of young people experiencing a mental health problem are forced to wait so long their condition gets worse or are unable to access any treatment at all
Mental health among young people in the UK

Widespread concerns about the impact of COVID-19, associated periods of lockdown and isolation, and uncertainty about the future on children and young people’s mental health
Mental health

Extensive evidence that

(a) the majority of adult mental health problems start/are rooted in childhood

(b) long shadow is cast by childhood mental health problems on adult life, e.g. on:
   education, employment and earnings, physical health, relationship stability, social mobility…
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E.g. large impacts of childhood psychological problems on family income, reaching peak of 28% lower net family income by age 50 y.

Contributing factors - reduced conscientiousness, lower probabilities of being married, being at work. Experience of adult psychological problems a major pathway through which effects occur (Goodman et al 2011)
Mental health

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Origins and consequences of mental ill-health are complex and multi-faceted → multi-disciplinary approach

Understanding the scale of the problem and how it changes over time is important

+ Having rich data on several aspects of life, and following people over time, key to understanding origins of developmental difficulties and lasting inequalities → large scale birth cohort studies unique
What we do at the Centre for Longitudinal Studies (CLS)

- We run four major national longitudinal studies, which follow people throughout life: scientific development, and design of the studies

- We are funded by ESRC as a ‘resource centre’ – to provide data to the wider scientific and policy community

- Research – strong multi-disciplinary group
Centre for Longitudinal Studies: we follow people across life

- National Child Development Study 1958
- 1970 British Cohort Study
- Next Steps (formerly LSYPE)
- Millennium Cohort Study data has been deposited. Age 22 survey scientific development underway in 2021
### MCS timeline and content at a glance

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Cohort member

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Also: consent to link administrative records - health, education, economic, crime

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Mental health during childhood: the evidence
Prevalence of mental health problems: parent-reports

**Parental reports** on their children’s difficulties in 4 areas, via Strengths and Difficulties Questionnaire

- emotional; conduct; hyperactivity; peer relationships
- score > a certain threshold is indicative of high levels of difficulty in the area
Behaviour problems, ages 3-14
Emotional problems, ages 3-14

![Bar chart showing emotional problems by age and gender.](chart.png)
Cohort members answered questions about mental health difficulties for the first time at age 14.

Short Moods and Feelings Questionnaire, which assesses symptoms of depression:
- assesses feelings or behaviours in previous fortnight (e.g. I felt miserable or unhappy)
- score > established threshold is indicative of suffering from depression
Mental health at age 14

Almost 1 in every 4 girls (24%) at age 14 report high levels of depressive symptoms, compared with almost 1 in 10 (9%) boys.

Equates to around 67,000 boys and 166,000 girls nationally...

...of total population in this cohort of 730,000 boys and 696,000 girls.
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 general mental health services. At the same time, there is growing evidence that school and college staff lack the resources and skills to help improve young people’s mental well-being. Demand for specialist services is growing with recent evidence that childhood 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. Half of all cases of self-harm among young people are by the age of 14, meaning prevention and early support for children is vital.

This briefing paper examines the prevalence of mental health problems among children being part in the Millennium Cohort Study (MCS), which is a representative group of children born in the UK at the start of the century.

This report analyses the prevalence of poor mental health amongst children based on surveys of their parents at ages 5, 7, 11, and 14. It then examines in more detail, including by gender, income and ethnicity, the data on symptoms reported by 14-year-olds themselves in the blood survey. The report also compares 14-year-olds’ perceptions of their mental health with their parents’ perceptions.

Key findings

- Average levels of emotional symptoms such as feeling depressed or anxious increased from early childhood through to late adolescence, from ages 5 to 11 years. However, proportions of girls and boys who suffered from emotional problems reported by their parents increased, however, between age 11 and 14 years prevalence in both boys and girls was around 12%, but for girls increased from 10% to 18%.

- Difficulties related to conducting and staying in school were reported by parents, students, and teachers to increase between age 5 and 11 years.

- At age 14, when children reported they were physically or emotionally in pain, boys were more likely to report symptoms of mental health problems compared to their parents’ reports.

- Emotional symptoms at age 14 were more likely to be reported by the children themselves than by the children’s parents.

- Social difficulties are more common among children with a parent who has a mental illness.
Quarter of 14-year-old girls 'have signs of depression'

By Michelle Roberts
Health editor, BBC News
10 September 2017

[Image of two girls smiling]

One in four girls have depression by the time they hit 14, study reveals

Data from government-funded research prompts fresh questions about effect of social media and school stresses on young people's mental health

[Image of a girl looking at a phone]

Depression risk for bright girls and those in poor families

Dr Danes Campbell
Exclusively

Bright girls require special attention from young people's mental health services, a study has found. The research, which surveyed 1,200 girls aged 14 to 15, showed that those with higher IQ scores were more likely to have signs of depression. The findings suggest that schools and health services need to be more aware of the mental health needs of brighter girls.

[Image of a girl looking at a computer screen]

Yotam Ottolenghi's charred seabass Anna Jones's feta parcels Felicity Cloake's sausage taste test

[Image of a girl cooking]

On the eve of a wedding, whose run-up has been several shades of toxic, we must ask: what do we want of these people?

Marina Hyde

[Image of a wedding cake]

The Times
Impact

- No other national data source at that time that could provide nationally representative prevalence figures of this kind

- First evidence to emerge in UK in over a decade – and showed dramatic increase

- Embedding of information within a longitudinal study makes it all the more powerful for understanding drivers of mental health, including from very early in life

- Timed for release just ahead of Govt Green Paper on Children and Young People’s Mental Health Provision

Claire Murdoch, NHS England’s national mental health director: ‘After decades in the shadows, children’s mental health is finally in the spotlight’
Wellbeing

We drew attention to important yet much overlooked distinction between mental ill-health and mental wellbeing in young people:

debate around whether the two constructs represent two ends of same spectrum of mental health or two distinct domains that overlap

We found that absence of mental health difficulties does not necessarily equate to positive wellbeing
→ important to measure both to get full picture and best support young people

We also found that parent and child reports of emotional or depressive symptoms have weak correlation
→ child-reports important
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→ child-reports important

→ Inform a review by Public Health England of existing metrics within the Children and Young People’s Mental Health and Wellbeing profile and to consult on the best measures to use for young people’s population mental wellbeing
Wellbeing

We also compared a wide range of predictors of children’s mental ill-health and subjective wellbeing in the same sample

→ highlighting that their risk and protective factors can differ, and setting out concrete areas for policy action
Children’s mental illness and wellbeing at age 11

Findings from the Millennium Cohort Study

Factors associated with mental illness:
- Above average cognitive ability
- Engaged with school
- Bullying by siblings
- Bullying by peers
- Spends time with friends outside of school
- Doesn’t feel safe in local neighbourhood
- Doesn’t feel safe in local neighbourhood
- Like school
- Bullying by friends
- Arguments with parents
- Problems getting along with peers
- Single parent family
- High family income
- Chronic illness
- Parents have poor mental health
- Communication difficulties
- Special educational needs
- One sibling
- Two siblings
- Three or more siblings

Factors associated with wellbeing:
- Overweight
- Likes school
- Argues with friends
- Argues with parents
- Problems getting along with peers
- Single parent family
- Richest fifth
- Second richest fifth
- Third richest fifth
- Richest fifth
- Second richest fifth
- Third richest fifth
- High family income
- Parents have poor mental health
- Special educational needs
- One sibling
- Two siblings
- Three or more siblings

All factors included in the infographic are statistically significant at (at least) the 5% level. *Findings from Patalay, P. and Fitzsimons, E. (2018) Correlates of mental illness and wellbeing in children: are they the same? Journal of the American Academy of Child and Adolescent Psychiatry 57(9), pp. 771-783.

**Percentile difference** is the change in rank position between 1 and 100 away from the median or reference category.
These findings helped to clearly communicate the case for a whole system response to children and young people’s mental health.”

Public Health England
Factors affecting mental ill-health in childhood
Factors affecting mental ill-health in childhood

Risk factors for mental health problems include common occurrences in young people's lives, e.g. poverty, long-term physical illness, bereavement, family breakdown…

Essential to understand potential triggers and risk factors, to help policy and prevent longer-term mental health issues from developing.

Research on instability in childhood, in three areas:

**Poverty** - entering poverty, exiting poverty, persistent poverty

**Parental mental health** - improving, deteriorating, staying the same

**Family structure** - parental separation/divorce
Poverty dynamics and parental mental health: Determinants of childhood mental health in the UK

Emla Fitzsimons a, b, Alissa Goodman a, b, Elaine Kelly b, James P. Smith c
Poverty fluctuations

Considerable evidence that poverty matters for mental ill-health

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<th>Emotional</th>
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But what about fluctuations in poverty?
Poverty fluctuations

Persistent poverty worse at early ages; fluctuations in poverty (adverse income shocks) worse in later childhood:

- Living in persistent poverty throughout early childhood strongly predictive of poor mental health by age 5; poverty transitions during early childhood not predictive of poor mental health by age 5

- Poverty transitions, specifically moving into poverty, more strongly predictive of poor mental health by age 11 than living in persistent poverty throughout childhood
Persistent poverty worse at early ages; fluctuations in poverty (adverse income shocks) worse in later childhood:

- Living in persistent poverty throughout early childhood strongly predictive of poor mental health by age 5; poverty transitions during early childhood not predictive of poor mental health by age 5

- Poverty transitions, specifically moving into poverty, more strongly predictive of poor mental health by age 11 than living in persistent poverty throughout childhood

By age 11 children more aware of economic transitions taking place? Only looking at current poverty, as most research does, is missing an important dimension of economic circumstances
Parental mental health an important correlate of childhood mental health

We look at how changes in parental mental ill-health during childhood affect their children’s mental health.

→ We consider movements from good to poor mental health (and vice versa), as well as persistent mental ill-health.
Parental mental health fluctuations

Key findings

- **Persistent** maternal mental ill-health in childhood is most detrimental to children, at both ages 5 and 11

- Effects of parental mental health on children’s mental health are typically larger for **mothers** than for fathers (caveat: maternal-reports of child mental health)

Important to support parents experiencing difficulties to maintain positive relationships
Father departure and children's mental health: How does timing matter?

Emla Fitzsimons\textsuperscript{a,b}, Aase Villadsen\textsuperscript{a,*}

\textsuperscript{1} UCL Institute of Education, London, UK
\textsuperscript{2} Institute for Fiscal Studies, London, UK
Family breakdown

Around 20% of families experience parental separation/divorce by the time child is age 14

We look at how effects on children’s internalising (emotional, peer) and externalising (hyperactivity, conduct) problems

We account for extensive range of other background factors (education, social class, ethnicity, parenting activities…), and find that family breakdown has a detrimental effect on children’s mental health, and importantly - the **timing of the breakdown** and **child gender** matter.
Family breakdown

Breakdown in early childhood (before age 5)
- no short- or medium-term effects on boys
- adverse effects on girls, which persist through childhood and early adolescence

Breakdown in mid/late childhood (ages 7-11)
- increases in boys’ internalising and externalising problems
- increases in girls’ internalising problems
Changing experiences across cohorts
Trends across cohorts: Affective symptoms at age 14-16

- NCDS - 1958
- 1970BCS
- ALSPAC - 1990
- MCS - 2000
Trends across cohorts: Conduct problems at age 14-16

- NCDS - 1958
- 1970BCS
- ALSPAC - 1990
- MCS - 2000
COVID-19 Survey in Five National Longitudinal Studies

Aim: To understand economic, social and health impacts of COVID-19 crisis, the extent to which it is widening or narrowing inequalities, and the lifelong factors which shape vulnerability and resilience to its effects.
Design

- **May 2020**: W1. Web-only
- **Sept 2020**: W2. Web-only
- **Jan 2021**: W3. Web plus telephone
Mental health during lockdown: evidence from four generations

Initial findings from the COVID-19 Survey in Five National Longitudinal Studies

By Morag Henderson, Emla Fitzsimons, George Ploubidis, Marcus Richards and Praveetha Patalay
Mental health is assessed using a set of common measures across cohorts in May 2020:

MENTAL ILL-HEALTH
PHQ-2 for depressive symptoms (range 0-6; score ≥3 indicates high symptoms)

GAD-2 for anxiety symptoms (range 0-6; score ≥3 indicates high symptoms)

LONELINESS
UCLA Loneliness 3 item scale for loneliness (range 3-9; score ≥6 indicates high loneliness)

WELLBEING
ONS life satisfaction question for life satisfaction (range 0-10; score ≤4 indicates low life satisfaction)
Mental health outcomes by sex

Figure 1: Prevalence of depressive symptoms, anxiety symptoms, loneliness and low life satisfaction in May 2020 in the four cohorts

Note: Proportions based on weighted survey responses; the bars (whiskers) reflect 95% confidence intervals using the Agresti-Coull method.
Figure 2: Psychological distress prior to and during lockdown for males and females

Note: The chart shows measures of psychological distress in each cohort, measured before and during the lockdown. The ‘before COVID-19’ measures were captured at 12, four and five years prior for age 62, age 50 and age 30 respectively. The age 62 and 50 cohorts both used the Malaise Inventory before and during the lockdown, and in Next Steps the GHQ-12 was used. To facilitate before-during comparisons on a common metric the mental health measures were first re-scaled (the Malaise Inventory total score was rescaled to the GHQ12 metric with linear stretching), and then were pooled, and standardised (Z-scores).
COVID-19 Survey in Five National Longitudinal Studies
Mental health during lockdown, selected press coverage

The Telegraph
Pandemic mental health: young women and millennials disproportionately affected

INDEPENDENT
Loneliness is public health issue linked to risk of early death, new study finds

talkRADIO
Dr Praveetha Patalay interviewed live by Julia Hartley-Brewer

Mail Online
Young women are the most likely to suffer depression, anxiety and loneliness in lockdown, study shows
What’s next?

- Findings from MCS age 17 in November 2020
- Next study sweep - being planned for age 22
Thanks to our funders and host institution

And thank you to MCS cohort members and their families
Thanks for listening!

Any questions?