#### 16th February 2021

# Emerging Evidence: Coronavirus and children and young people's mental health

**Issue 6 Research Bulletin** 



Anna Freud National Centre for Children and Families



The coronavirus pandemic continues to affect populations around the world. In issues 1-5 of this series, we presented evidence about the impact of the pandemic on children and young people's mental health emerging over the period January to August 2020. In the current issue, we summarised key findings from a rapid review of evidence emerging between September and November 2020.<sup>a</sup>

Mairi Jeffery, Tanya Lereya, Julian Edbrooke-Childs, Jess Deighton, Nick Tait, Melissa A. Cortina



<sup>a.</sup> This bulletin outlines results of a rapid review of research identified in literature searches between 7th September and 1st November 2020. Search terms included words associated with COVID-19, children and young people, and mental health. We limited searches to reports available in the existing literature on the topic, and only articles published in English. A quality assessment of papers was not carried out.

# 1. What is the mental health impact on the general population?

Evidence of considerable negative mental health impacts during the pandemic continues to emerge. However, impact varies across different populations and some positive impacts have also been seen during this period.

- Longitudinal studies are showing an increase in psychological distress, loneliness and probable mental disorders among children and young people (UK).<sup>1,2</sup>
- One longitudinal study showed a parent-reported reduction in pre-school children's restlessness and attentional difficulties in a one-month period between April and June 2020, and for boys' (but not girls') behavioural difficulties. Parents and carers who were employed, but not those who were unemployed, reported a decline in children's restlessness and attentional difficulties. There was no substantial change in these children's emotional problems over the period (UK).<sup>3</sup>
- Children reported feeling sad, scared, bored, lonely, nervous and angry, but also calm, safe and happy with their families during the lockdown (Spain).<sup>4</sup>

# 2. What is the impact on children with pre-existing health and education needs?

Overall, children and young people with preexisting health and education needs appear to be experiencing elevated mental health challenges.

- Children and young people with Attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) had worse mental health outcomes in relation to emotional symptoms and hyperactivity, and decreased prosocial behaviours when compared with a neurotypical control group (UK).<sup>5</sup>
- Children and young people aged 4-18 with chronic lung disease and their parents and carers had higher levels of coronavirus-related anxiety than a control group without any health conditions, but depression symptoms were not significantly different between the child/ young person groups (Turkey).<sup>6</sup>
- In young people aged 12-24 living with Type 1 diabetes, moderate stress was reported in more than half of cases. Females were found to have significantly higher stress scores compared with males (India).<sup>7</sup>
- Children with conditions such as asthma, allergies and other pre-existing physical health conditions had greater declines in self-reported mental health and higher rates of internalising disorders (such as depression and anxiety) compared to those without pre-existing conditions (Canada).<sup>8</sup>
- Young people with a previous psychiatric diagnosis were six times more likely to score above the clinical threshold for depression symptoms during the coronavirus pandemic, and four to six times more likely to have clinical levels of anxiety and post-traumatic stress (PTSD) symptoms, compared to those without a previous diagnosis (USA).<sup>9</sup>



# 3. Are any other groups of children and young people disproportionately affected?

There is evidence that some groups of children and young people have been disproportionately affected by the pandemic in terms of their mental health. These include children who were previously psychologically maltreated, children and young people of colour, children from low income households, children in care and LGBTQ+ children and young people.

#### Children and young people of colour

- Children of colour aged 7-11 were significantly less likely than those who identified as 'White Welsh or British' to say they felt happy 'most of the time' and safe 'most of the time'. Children who identified as 'Asian Welsh or British' were the least likely to say they felt happy 'most of the time' (UK).<sup>11</sup>
- Chinese American children experienced poorer mental health, including anxiety, as a result of coronavirus-related racism and racial discrimination (USA).<sup>12</sup>

#### Low income households

- During the early stages of the first national lockdown in April 2020, children from low income households had higher levels of emotional and attention difficulties (along with behaviour difficulties in primary school aged children) compared to children from higher income households (UK).<sup>13</sup>

- In families who were classified as atrisk on the Socioeconomic Risk Index, children showed more negative emotional reactions during the pandemic. However, there was also a protective effect of parental involvement in children's negative emotionality that was not seen in noneconomically disadvantaged families (Italy).<sup>14</sup>
- Children's mental health during the lockdown was significantly associated with the socioeconomic status of their family, the area (size) of their house and number of children in the family (India).<sup>15</sup>

#### **Children in care**

- Children in residential care reported feelings of fear, hopelessness, sadness and worry because of the coronavirus, along with frustration at the lockdown (South Africa).<sup>16</sup>
- Children in residential care, foster care or kinship families, and families who receive assistance to avoid separation, had worse psychological health than a 2017 sample from the general population (Spain).<sup>17</sup>



### LGBTQ+ children and young people

- Gay and bisexual teenage boys reported that the coronavirus pandemic has had a harmful effect on their mental health including increased stress, anxiety, and/or depression reported by over 30% of boys; with similar rates for those who were 'out' and 'not out' about their sexuality with an accepting parent or guardian (USA).<sup>18</sup>
- During the coronavirus pandemic, transgender college students were more likely to report frequent psychological distress than cisgender men and women, but this difference was not significant for cisgender women. Over 60% of surveyed LGBT students experienced anxiety, depression and mental distress and the prevalence was higher than for cisgender men and women (USA).<sup>19</sup>

# 4. Has there been a change in habits and behaviours during the coronavirus pandemic

Unsurprisingly, the pandemic has resulted in disruptions to physical activity, increased internet use and changes in personal habits such as eating and sleep, all of which are impacting children and young people's mental health. Parenting and coping strategies can help counteract some of the negative impacts on children and young people's mental health.

#### **Physical activity**

- During lockdown, boys aged 10-11 were found to have lower levels of physical activity and significantly higher levels of anger, fatigue, depression and confusion than girls (China).<sup>20,21</sup>
- Disruptions to usual levels of physical activity were found to be a substantial predictor of depression symptoms early on during the pandemic. However, resuming higher levels of physical activity was not associated with a subsequent reduction in depression (USA).<sup>22</sup>

#### **Internet use**

- Young people aged 15-24 reported increased daily internet usage during the pandemic, from 5.64 hours to 9.74 hours. Numbers of hours spent on the internet was positively associated with depression, anxiety, and stress (Oman, Saudi Arabia, Jordan, Iraq, UAE and Egypt).<sup>23</sup>
- Higher conduct problems among teenagers during lockdown was associated with excessive time spent on screens (Spain).<sup>24</sup>

#### Eating

 Among surveyed young women, 40% reported 'moderate' levels of emotional eating and 12% reported 'high' levels of emotional eating during the pandemic. Emotional eating was associated with stress, but decreased with an increase in family income (Saudi Arabia).<sup>25</sup>

#### Sleep

 Young children aged 2-5 experienced changes to their sleep timing and experienced difficulties following their daily routine. Children's psychological wellbeing was affected by a worsening of sleep quality (Italy).<sup>26</sup>

#### Self-harm

 Among pupils in school years 8-13, 1166 (9.9%) reported self-harming during the school closure period of May-July 2020 (UK).<sup>27</sup>

#### Impact of parenting

 Parenting distress was found to be a risk factor for children's behavioural difficulties (emotional problems, conduct problems and hyperactivity) during the lockdown.
Focused parenting practices (e.g. keeping the child informed about the pandemic) were found to have a positive effect on children's emotional problems, whilst structured parenting practices (i.e. maintaining routines in daily life) negatively affected children's emotional problems (Spain). There was a positive effect on children's prosocial involvement for those whose parents had structured, focused or soothing parenting practices.<sup>29</sup>

- Children's emotional regulation was negatively associated with higher levels of parenting stress (Italy).<sup>14</sup>
- Among younger adolescents, higher hyperactivity and inattention problems were associated with worse relationships with parents and carers and with certain adult behaviours, including arguments over homework and a lack of limit-setting (Spain).<sup>24</sup>
- Factors significantly associated with psychological maltreatment of children during the coronavirus pandemic included parental job loss and past psychological maltreatment. Younger children were more likely to have experienced psychological maltreatment during the week before completing the survey (USA).<sup>10</sup>

#### **Coping strategies**

 Keeping a daily routine, physical activity, positive reframing, acceptance and keeping in contact with family and friends were associated with reduced emotional distress among 22 year olds (Switzerland).<sup>30</sup>



## 5. Has there been a change in access Ret to services?

Some children and young people have experienced a lack of access to mental health services during the coronavirus pandemic.

- Children with a genetic disorder or a neurodevelopmental disorder, including developmental delay, epilepsy, intellectual disability and ASD, have experienced reduced access to psychiatric services and general counselling during the pandemic (USA and international).<sup>31</sup>
- There was a significant decrease in referrals to children and young people's mental health services during the first national lockdown.<sup>32,33</sup> However, a slightly higher number of CAMHS admissions were observed in one county (Leicestershire, UK). A drop in referrals could be due to a decreased healthcare workforce with staff self-isolating, delays to mental health assessments while awaiting coronavirus test results, or a reluctance from patients and their carers to seek care due to the risk.<sup>33</sup>

# A note on our use of language

This review discusses emerging evidence of the impacts of the coronavirus pandemic by race and ethnicity. We have referred to children and young people of colour as a broad category however we recognise there are difficulties with this categorisation. Where possible, we have further specified racial and ethnic groups according to the terms given in the source literature. We have discussed as a unit as to how to carefully and consciously use language in addressing issues relating to race and ethnicity. This reflects an ongoing area of enquiry and concern for us. Please see Our commitment to equity, diversity and taking an anti-racist stance which is available online at: https://www.ucl.ac.uk/evidence-basedpractice-unit/sites/evidence-basedpractice-unit/files/ebpu\_equity\_and diversity\_statement\_august\_2020\_0.pdf

# References

- Niedzwiedz, C. L. et al. Mental health and health behaviours before and during the initial phase of the COVID-19 lockdown: longitudinal analyses of the UK Household Longitudinal Study. J. Epidemiol. Community Health jech-2020-215060 (2020). doi:10.1136/jech-2020-215060
- 2. NHS Digital. Mental Health of Children and Young People in England, 2020: Wave 1 follow up to the 2017 survey. (2020).
- 3. Pearcey, S., Shum, A., Dodd, H. & Lawrence, P. *Co-SPYCE Report 03: Changes in pre-school children's emotional and behavioural difficulties through lockdown.* (2020).
- Idoiaga, N., Berasategi, N., Eiguren, A. & Picaza, M. Exploring Children's Social and Emotional Representations of the COVID-19 Pandemic. *Frontiers in Psychology* 11, 1952 (2020).
- Nonweiler, J., Rattray, F., Baulcomb, J., Happé, F. & Absoud, M. Prevalence and Associated Factors of Emotional and Behavioural Difficulties during COVID-19 Pandemic in Children with Neurodevelopmental Disorders. *Children* 7, (2020).
- Ademhan Tural, D. *et al.* Psychiatric and general health effects of COVID-19 pandemic on children with chronic lung disease and parents' coping styles. *Pediatr. Pulmonol.* 55, 3579–3586 (2020).
- Agarwal, N., Harikar, M., Shukla, R. & Bajpai, A. COVID-19 pandemic: a double trouble for Indian adolescents and young adults living with type 1 diabetes. *Int. J. Diabetes Dev. Ctries.* 40, 346–352 (2020).
- 8. Hawke, L. D. *et al.* Impacts of the COVID-19 pandemic on youth mental health among youth with physical health challenges. *Early Interv. Psychiatry* (2020).
- Liu, C. H., Stevens, C., Conrad, R. C. & Hahm, H. C. Evidence for elevated psychiatric distress, poor sleep, and quality of life concerns during the COVID-19 pandemic among U.S. young adults with suspected and reported psychiatric diagnoses. *Psychiatry Res.* 292 (2020).
- Lawson, M., Piel, M. H. & Simon, M. Child Maltreatment during the COVID-19 Pandemic: Consequences of Parental Job Loss on Psychological and Physical Abuse Towards Children. *Child Abuse Negl.* 104709 (2020). doi:https://doi.org/10.1016/j.chiabu.2020.104709
- 11. Children's Commissioner for Wales. Coronavirus and Me: Experiences of children from Black, Asian and minority ethnic groups in Wales.
- Cheah, C. S. L. *et al.* COVID-19 Racism and Mental Health in Chinese American Families. *Pediatrics* 146, e2020021816 (2020).
- Pearcey, S., Shum, A., Waite, P., Patalay, P. & Creswell, C. Co-SPACE Report 05: Changes in children and young people's mental health symptoms and 'caseness'' during lockdown and patterns associated with key demographic factors'. (2020).
- Spinelli, M., Lionetti, F., Setti, A. & Fasolo, M. Parenting Stress During the COVID-19 Outbreak: Socioeconomic and Environmental Risk Factors and Implications for Children Emotion Regulation. *Fam. Process* (2020).
- 15. Sama, B. K. *et al.* Implications of COVID-19-induced nationwide lockdown on children's behaviour in Punjab, India. *Child. Care. Health Dev.* (2020).

- Haffejee, S. & Levine, D. T. 'When will I be free': Lessons from COVID-19 for Child Protection in South Africa. *Child Abuse Negl.* 104715 (2020). doi:https://doi.org/10.1016/j. chiabu.2020.104715
- Vallejo-Slocker, L., Fresneda, J. & Vallejo, M. A. Psychological wellbeing of vulnerable children during the COVID-19 pandemic. *Psicothema* 32, 501–507 (2020).
- Nelson, K. M., Gordon, A. R., John, S. A., Stout, C. D. & Macapagal, K. "Physical Sex Is Over for Now": Impact of COVID-19 on the Well-Being and Sexual Health of Adolescent Sexual Minority Males in the U.S. J. Adolesc. Heal. 67, (2020).
- Gonzales, G., de Mola, E. L., Gavulic, K. A., McKay, T. & Purcell, C. Mental Health Needs Among Lesbian, Gay, Bisexual, and Transgender College Students During the COVID-19 Pandemic. J. Adolesc. Heal. 67, (2020).
- 20. Kang, S. *et al.* Is Physical Activity Associated with Mental Health among Chinese Adolescents during Isolation in COVID-19 Pandemic? *Journal of Epidemiology and Global Health* (2020). doi:10.2991/jegh.k.200908.001
- 21. Zhang, X. et al. Association between Physical Activity and Mood States of Children and Adolescents in Social Isolation during the COVID-19 Epidemic. *Int. J. Environ. Res. Public Health* **17**, (2020).
- 22. Giuntella, O. & Kelly Hyde, Silvia Saccardo, S. S. Lifestyle and Mental Health Disruptions During Covid-19. *SSRN Electronic Journal* (2020). doi:10.2139/ssrn.3666985
- 23. Al Omari, O. *et al.* Prevalence and Predictors of Depression, Anxiety, and Stress among Youth at the Time of COVID-19: An Online Cross-Sectional Multicountry Study. *Depress. Res. Treat.* **2020**, 8887727 (2020).
- 24. Ezpeleta, L., Navarro, J. B., de la Osa, N., Trepat, E. & Penelo, E. Life conditions during COVID-19 lockdown and mental health in Spanish adolescents. *International Journal* of *Environmental Research and Public Health* **17**, 1–13 (2020).
- 25. Al-Musharaf, S. Prevalence and Predictors of Emotional Eating among Healthy Young Saudi Women during the COVID-19 Pandemic. *Nutrients* **12**, (2020).
- Di Giorgio, E., Di Riso, D., Mioni, G. & Cellini, N. The interplay between mothers' and children behavioral and psychological factors during COVID-19: an Italian study. *Eur. Child Adolesc. Psychiatry* (2020). doi:10.1007/s00787-020-01631-3
- 27. Mansfield, K., Jindra, C. & Fazel, M. *The OxWell School Survey 2020: Report of Preliminary Findings.* (2020).
- Morey, Y., Mellon, D., Dailami, N., Verne, J. & Tapp, A. Adolescent self-harm in the community: an update on prevalence using a self-report survey of adolescents aged 13–18 in England. *J. Public Health (Bangkok)*. **39**, 58–64 (2017).
- Romero, E., López-Romero, L., Domínguez-Álvarez, B., Villar, P. & Gómez-Fraguela, J. A. Testing the Effects of COVID-19 Confinement in Spanish Children: The Role of Parents' Distress, Emotional Problems and Specific Parenting. *Int. J. Environ. Res. Public Heal.* 17, (2020).
- Shanahan, L. *et al.* Emotional distress in young adults during the COVID-19 pandemic: evidence of risk and resilience from a longitudinal cohort study. *Psychol. Med.* (2020).

- Jeste, S. *et al.* Changes in access to educational and healthcare services for individuals with intellectual and developmental disabilities during COVID-19 restrictions. *J. Intellect. Disabil. Res.* 64, 825–833 (2020).
- 32. Public Health Scotland. Child and Adolescent Mental Health Services in Scotland: Waiting Times Quarter Ending 30 June 2020. (2020).
- 33. Tromans, S. *et al.* Patterns of use of secondary mental health services before and during COVID-19 lockdown: observational study. *BJPsych Open* (2020).



# **EBPU** Evidence Based Practice Unit

A partnership of



The Evidence Based Practice Unit (EBPU) is a child and youth mental health research and innovation unit based at UCL Faculty of Brain Sciences and the Anna Freud Centre. Founded in 2006, this collaboration bridges cutting-edge research and innovative practice in children's mental health. We conduct research, develop tools, provide training, evaluate interventions and disseminate evidence across four themes: **Risk | Resilience | Change | Choice** 

**Evidence Based Practice Unit (EBPU)** 4-8 Rodney Street, London N1 9JH Tel: 020 7794 2313 Correction Child Outcomes Research Consortium

The Child Outcomes Research Consortium (CORC) is the UK's leading membership organisation that collects and uses evidence to enable more effective child-centred support, services and systems to improve children and young people's mental health and wellbeing. We have over 15 years' experience in bringing together theoretical knowledge on outcome measurement and relating this to the insights and expertise developed by practitioners working with children and young people on the ground.

www.corc.uk.net/

www.ucl.ac.uk/ebpu

EBPU is a partnership of UCL and Anna Freud National Centre for Children and Families. Anna Freud National Centre for Children and Families is a company limited by guarantee, company number 03819888, and a registered charity, number 1077106.

#### Citation for this report

Jeffery, M., Lereya, T., Edbrooke-Childs, J., Deighton, J., Tait, N. & Cortina, M. A. (2020). Emerging evidence (Issue 6): coronavirus and children and young people's mental health. Evidence Based Practice Unit, London.

#### Acknowledgement

Thanks to Martha Reilly, Kate Dalzell and Lauren Garland for their support in the development of this review.