



London, UK

jane@janefeinmann.com

Cite this as: *BMJ* 2021;374:n1787<http://dx.doi.org/10.1136/bmj.n1787>

Published: 19 July 2021

## Eating disorders during the covid-19 pandemic

A spike in people seeking treatment for eating disorders during the covid-19 pandemic has revealed their global nature and severity. **Jane Feinmann** reports from the International Conference on Eating Disorders

Jane Feinmann *freelance journalist*

The story often starts in a positive way.

“At a consultation, kids tell us that when the pandemic started, they decided to eat healthier and begin exercising more,” said Ellen Rome, head of adolescent medicine at Cleveland Clinic, Ohio, USA. That positive start is the prelude to a tragic turn, however. “Then an adult will pick up the story and say, ‘The next thing we knew, she’d lost 10 kg’,” said Rome. “Other kids tell us that without a schedule they started eating when they were stressed or bored and ‘suddenly the weight balloons.’”

Rome was speaking at the International Conference on Eating Disorders in June. There were first-hand accounts of the problems faced by severely ill patients during the pandemic, with the closure or restriction of in-patient services being a major factor.

Carolyn, the Canadian mother of an adult with anorexia who relapsed in late 2019, described how she drove her daughter to the local emergency department over 10 times during the pandemic. “Each time, they discharged her as soon as she was stabilised,” Carolyn told the conference, explaining that her daughter’s relapse was continuing.

And while much media coverage came from Europe and North America, the pandemic has shown that disordered eating is a global epidemic.

“The belief that eating disorders are confined to high income countries is a dangerous myth that perpetuates health disparities,” says Cynthia Bulik, professor of eating disorders at the University of North Carolina. The picture is skewed, with the available literature coming from only a few affected countries, Ravi Rajkumar of the Jawaharlal Institute of Postgraduate Medical Education and Research in Pondicherry, India, told the conference.

In fact, children in many countries have developed eating disorders during the pandemic. “Uncontrolled food intake has characterised the lockdown,” said Huda Al Hourani, assistant professor at the Faculty of Applied Health at the Hashemite University in Jordan.

### Negative emotions

New research presented at the conference—attended by researchers, clinicians, and experts with lived experience from 56 countries—showed why previously healthy adolescents succumbed during the pandemic.<sup>1</sup>

In normal times, more than half of eating disorders begin during a particular time window in adolescence when peer-to-peer social comparison is an essential

part of development of body image, self-esteem, and social cognition, said Angela Favaro, head of the Department of Neuroscience at the Padova Neuroscience Centre in Italy. “Social avoidance” as well as inflexible thinking and negative emotions are key predictors in early onset eating disorders, she told the conference. Lockdowns and school closures have enforced social avoidance, leaving children “exposed to an absence of peer-to-peer social comparison at a crucial time in their development.”

Stefan Ehrlich, professor of psychological and social medicine at the Technical University of Dresden, said research has shown food restriction can lead to resistance to ghrelin, the “hungry hormone” produced by the gut that prompts people to seek food—a process “reinforced when adolescents are isolated from their peers.”<sup>2</sup>

In India, where one in four adolescent girls and one in five boys are estimated to have “disturbed eating habits and behaviours,” many of these suffered “increased anxiety as they came under constant supervision when families return to their villages, living in cramped conditions,” paediatrician Kritika Malhotra of Jawaharlal Nehru Medical College told the conference.

### Teens, adults, and doctors, too

Adults have also presented with eating disorders in record numbers during the pandemic—the conference heard reports of binge eating and purgative behaviour from Argentina and Lebanon.

A contributing factor, according to Jennifer Couturier of McMaster Children’s Hospital in Ontario, Canada, was “the bombardment of social media posts and messages about ‘inevitable’ weight gain related to staying at home.”

“It seems likely that exposure to the stress of the pandemic has pushed over the line those with an average genetic risk for an eating disorder that they might otherwise never have expressed,” Bulik told *The BMJ*.

Healthcare professionals are vulnerable to maladaptive eating behaviours, Mohsen Khosravi, from the University of Medical Sciences, Zahedan, Iran, said. “We know that negative emotions including anxiety, stress, depression, and anger trigger disordered eating behaviours,” Khosravi told *The BMJ*. “For healthcare professionals, the lack of medical equipment in the current crisis is accompanied by the intensification of negative emotions, triggering disordered eating.”

Paulo Machado, head of the Eating Disorders Research Group at the University of Minho University in Portugal, told the conference that many with an existing diagnosis experienced a “worsening of their condition, especially if associated with difficulties in emotion regulation.”<sup>3</sup>

### Embracing technology

Online consultations, widely introduced during the pandemic, have proved an unexpected hit, however.

While more than half of surveyed patients with an eating disorder in the Netherlands and the US complained that their treatment had deteriorated when interviewed at the beginning of the pandemic,<sup>3</sup> a follow-up study, to be published soon, showed that fewer than one in four felt the same in May 2021. “Presumably, in that time, practitioners and patients have become more familiar with the technology,” lead researcher Christine Peat, assistant professor of psychiatry at the University of North Carolina, told the conference.

Portuguese patients regarded online services as “a lesser form of treatment when our clinic first stopped in-person consultations,” said Machado.<sup>4</sup> But now the clinic is open and many prefer to stay online, he said. In Israel, ultra-orthodox families, who mostly avoid technology, including the internet, “are allowing their daughters to participate in online clinics they wouldn’t want them to attend in person.”

The rise led to the first guidelines on virtual care of eating disorders in children, adolescents, and emerging adults, published in April 2021 and produced by a Canadian consensus panel as part of a project funded by the Canadian Institutes of Health Research.<sup>5</sup> Couturier, lead author of the guidelines, acknowledged they were based on the small amount of available evidence, but said the need for guidance was acute given that “the eating disorder population is particularly vulnerable and at significant risk of death should they not receive appropriate care.”

### Treatment questions

Couturier’s team also identified noticeable gaps in knowledge, notably around the role of virtual care in more intensive services such as virtual day hospitals. It echoes a demand for more research and funding from leading global specialists, made in *Lancet Psychiatry* in February.<sup>6</sup>

Stephen Touyz, professor of clinical psychology at the University of Sydney, told the conference that new treatments should incorporate the “wonderfully innovative technologies that are currently transforming healthcare.”

“The virtual reality sector has made spectacular advances and could now assist with body shape over-evaluation. Smartwatches that already allow live electrocardiogram data to be recorded could be developed to enable live streaming feedback at meal times, one of the greatest challenges for patients with eating disorders,” he told *The BMJ*. These could lead to better treatments that also take account of new findings in brain dynamics and genetics in eating disorders.

The need is urgent, says Khosravi. There is concern—based on evidence from previous global health disasters—that this pandemic will worsen the severity of symptoms of eating disorders. Recognising the global nature of these disorders and the impact of the pandemic is a start.

- 1 Monteleone AM, Cascino G, Marciello F, et al. Risk and resilience factors for specific and general psychopathology worsening in people with eating disorders during covid-19 pandemic: a retrospective Italian multicentre study. *Eat Weight Disord* 2021;Jan 10:1-10.
- 2 Bernardoni F, Bernhardt N, Pooseh S, et al. Metabolic state and value-based decision-making in acute and recovered female patients with anorexia nervosa. *J Psychiatry Neurosci* 2020;45:253-61. doi: 10.1503/jpn.190031 pmid: 32129584
- 3 Termorshuizen JD, Watson HJ, Thornton LM, et al. Early impact of COVID-19 on individuals with self-reported eating disorders: A survey of ~1,000 individuals in the United States and the Netherlands. *Int J Eat Disord* 2020;53:1780-90. doi: 10.1002/eat.23353 pmid: 32720399
- 4 Machado PPP, Pinto-Bastos A, Ramos R, et al. Impact of COVID-19 lockdown measures on a cohort of eating disorders patients. *J Eat Disord* 2020;8:57. doi: 10.1186/s40337-020-00340-1 pmid: 33292539
- 5 Couturier J, Pellegrini D, Miller C, et al. The COVID-19 pandemic and eating disorders in children, adolescents, and emerging adults: virtual care recommendations from the Canadian consensus panel during COVID-19 and beyond. *J Eat Disord* 2021;9:46. doi: 10.1186/s40337-021-00394-9 pmid: 33863388
- 6 Solmi M, Wade TD, Byrne S, et al. Comparative efficacy and acceptability of psychological interventions for the treatment of adult outpatients with anorexia nervosa: a systematic review and network meta-analysis. *Lancet Psychiatry* 2021;8:215-24. doi: 10.1016/S2215-0366(20)30566-6 pmid: 33600749

Competing interests: None declared.

Commissioned, not externally peer reviewed