



What's weighing us down: closing the gap between the global burden of eating disorders and their representation

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Eating disorders (anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED) and other specified feeding and eating disorder-OSFED) are common psychiatric disorders that affect ~ 1 in 10 individuals [1] and have a peak of onset in adolescence [2]. Despite their prevalence and onset at a crucial stage in development eating disorders remain far below other psychiatric disorders in relation to papers published [3] and research funding [3, 4]. Eating disorders are also underrepresented at major psychiatric conferences and in major psychiatric journals. A reflection of stigma, some authors suggest, and likely due to many other factors. For example, the evolving diagnostic landscape—two ‘new’ diagnoses have only been included in recent revisions of diagnostic manuals; a growing but still limited critical mass of researchers, and a landscape of research groups/centres researching eating disorders that has only recently become more geographically diverse. These factors, coupled with limited funding for research in eating disorders, and limited visibility of research in eating disorders in top psychiatry journals and conferences maintains a vicious cycle.

This bleak picture of under-representation of eating disorders on the worldwide ‘scene’ clearly clashes with scientific evidence on prevalence and impact of eating disorders. There is good evidence that eating disorders affect individuals across cultures and sexes, and that their adverse effects are visible across physical and social outcomes worldwide; although studies that investigate the global impact of eating disorders are few and far between.

This month sees the publication of an interesting paper from J Piao and colleagues [5] with secondary analyses from

the Global Burden of Disease data including data on disease (including mental health disorders) from 1/01/1990 to 31/12/2019 for 204 countries, territories, and selected sub-national locations. The authors focus on the prevalence, incidence, disability-adjusted life-years (DALYs), years of life lost (YLLs), and years lived with disability (YLDs) across 12 mental health disorders, including eating disorders, in children and adolescents < 20 years old in 1990 and 2019.

Across the 12 mental health disorders studied, eating disorders show the second highest absolute increase in incidence (age standardized rate from 175.83 in 1990 to 216.02 in 2019 per 100,000) second only to depressive disorders, and the highest percentage increase in incidence (an increase of 22.9%). According to the authors, this increase was mostly due to an increase in the incidence of bulimia nervosa (BN).

Findings on the burden of ED in the article by Piao and colleagues [5] are striking. ED were the only mental health disorder associated with mortality in children and adolescents. In 2019, YLL attributable to AN were 1674.95 and to BN 245.69. The global burden of eating disorders increased across all countries, independent of levels of socio-demographic index. From 1990 to 2019 DALYs increased for ED across all world regions, especially in South, East, and Southeast Asia.

Whilst this study sheds some light on how the epidemiology of ED has changed over time and how it affects children and adolescents across different world regions and sexes, due to the diagnostic manuals used by the GBD [6] this is a gross underestimation, given that in 2019, it was still the case that only AN and BN are included as causes of burden in GBD. In fact the prevalence of eating disorders triples if other common eating disorders such as BED [7] and other specified feeding and eating disorder (OSFED) are included [8]. The newest addition to diagnostic manuals avoidant and restrictive food intake disorder (ARFID), was not even included in the latter estimation. BED, OSFED and ARFID are likely to account for high levels of morbidity in eating

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disorders. The estimation by Santomauro and colleagues [8] highlights that a large proportion of the burden that can be ascribed to eating disorders is not accounted for, if OSFED and BED are excluded. Santomauro and colleagues [8] also highlight another vicious cycle in eating disorders research, that is the difficulty in obtaining precise estimates of prevalence and incidence, due to the lack of systematic assessment of eating disorders in epidemiological surveys, leading to underestimations of eating disorder prevalence and burden.

Lastly, given the clear effects of the COVID-19 pandemic on prevalence and incidence of eating disorders, as well as other mental health disorders [9, 10] it remains to be seen what the global burden of eating disorders will look like some years down the line. We can only hypothesise a likely increase in incidence and burden due to eating disorders.

As researchers and clinicians in the field of eating disorders, we have a duty to address the gaps highlighted above and facilitate collaborative, open, and global research in eating disorders that will break the vicious cycles highlighted above. Increasing diversity and encouraging equality across disorders also means giving eating disorders as much ‘space’ as all other mental and physical disorders.

References

1. Micali N, Solmi F, Horton NJ et al (2015) Adolescent eating disorders predict psychiatric, high-risk behaviors and weight outcomes in young adulthood. *J Am Acad Child Adolesc Psychiatry* 54(8):652-659.e1
2. Micali N, Hagberg KW, Petersen I, Treasure JL (2013) The incidence of eating disorders in the UK in 2000–2009: findings from the General Practice Research Database. *BMJ Open* 3(5):e002646
3. Solmi F, Bould H, Lloyd EC, Lewis G (2021) The shrouded visibility of eating disorders research. *Lancet Psychiatry* 8(2):91–92
4. Schmidt U, Adan R, Bohm I et al (2016) Eating disorders: the big issue. *Lancet Psychiatry* 3(4):313–315
5. Piao J, Huang Y, Han C et al (2022) Alarming changes in the global burden of mental disorders in children and adolescents from 1990 to 2019: a systematic analysis for the Global Burden of Disease study. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-022-02040-4>
6. Diseases GBD, Injuries C (2020) Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet* 396(10258):1204–1222
7. Kjeldbjerg ML, Clausen L (2021) Prevalence of binge-eating disorder among children and adolescents: a systematic review and meta-analysis. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01850-2>
8. Santomauro DF, Melen S, Mitchison D, Vos T, Whiteford H, Ferrari AJ (2021) The hidden burden of eating disorders: an extension of estimates from the Global Burden of Disease Study 2019. *Lancet Psychiatry* 8(4):320–328
9. Kauhane L, Wan Mohd Yunus WMA, Lempinen L et al (2022) A systematic review of the mental health changes of children and young people before and during the COVID-19 pandemic. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-022-02060-0>
10. Panchal U, Salazar de Pablo G, Franco M et al (2021) The impact of COVID-19 lockdown on child and adolescent mental health: systematic review. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01856-w>