

# "What changes would you like to make to the field of Eating Disorders to help patients and carers better?"

## *Introduction*

The management and prognosis of eating disorders (ED) have come a long way since they were first described, yet still, the mortality rate for EDs ranges from 1.92-5.86 (Arcelus et al. 2011) and have long term impairments in a variety of social and occupational measures (Schmidt et al. 2016). There are three main areas that need to be further developed and considered to improve outcomes and help both patients and carers: improving public health interventions, implementing earlier identification and intervention, and facilitating more comprehensive research.

## *Earlier Identification, Earlier Intervention*

One of the simplest ways to implement earlier intervention for patients with EDs is to identify the problem at an earlier stage. There is currently an average 5.6 year discrepancy between the onset of ED symptoms and initial assessment. The longer the gap between symptom onset and assessment, the poorer the outcome for the patient (Ackard et al. 2014), which makes this a crucial area for improving ED services.

Identification of EDs is a shared responsibility amongst all healthcare specialties. A specialist in psychiatry would be expected to identify any physical problems, such as new-onset jaundice as a red flag for liver disease, equally a specialist in any other field is similarly expected to identify the red flags of EDs. As such, it is evidently an important topic to be covered in teaching in medical schools as well as residency, with ample opportunities to gain experience in this area as well. However, when individuals with ED present to healthcare professionals, the disorder is often unrecognised (Hart et al. 2010), suggesting that the education physicians receive on EDs may not be adequate.

All core and specialty level training builds on a physician's knowledge from foundation and medical school training, but unfortunately, EDs are not explicitly covered during foundation training, and the average number of hours spent teaching about EDs in UK medical schools is 1.2 hours (Aytton and Ibrahim 2018). There are eight EDs currently outlined in the DSM-V (APA 2013): anorexia nervosa, avoidant restrictive food intake disorder, binge eating disorder, bulimia nervosa, other specified feeding or eating disorders, pica, rumination disorder and unspecified feeding or eating disorder. In core training for psychiatry, only anorexia nervosa and bulimia nervosa are explicitly mentioned as EDs that can be assessed. Although these two EDs are the most common, it is disappointing to see how few of the EDs are explicitly covered and assessed at core training for psychiatry.

This limited ED teaching is not limited to psychiatry and has been demonstrated across a range of disciplines. Of all the residency programmes, 80.7% did not offer any rotations in ED. Formal scheduled or elective rotations in ED for residents were low across a variety of specialties as shown in Figure 1 (Mahr et al. 2015). Additionally, it has also been shown that rates of EDs being included in a list of differential diagnoses in a child with eating problems and weight loss are low, particularly by primary care physicians (Bryant-Waugh et al. 1992).

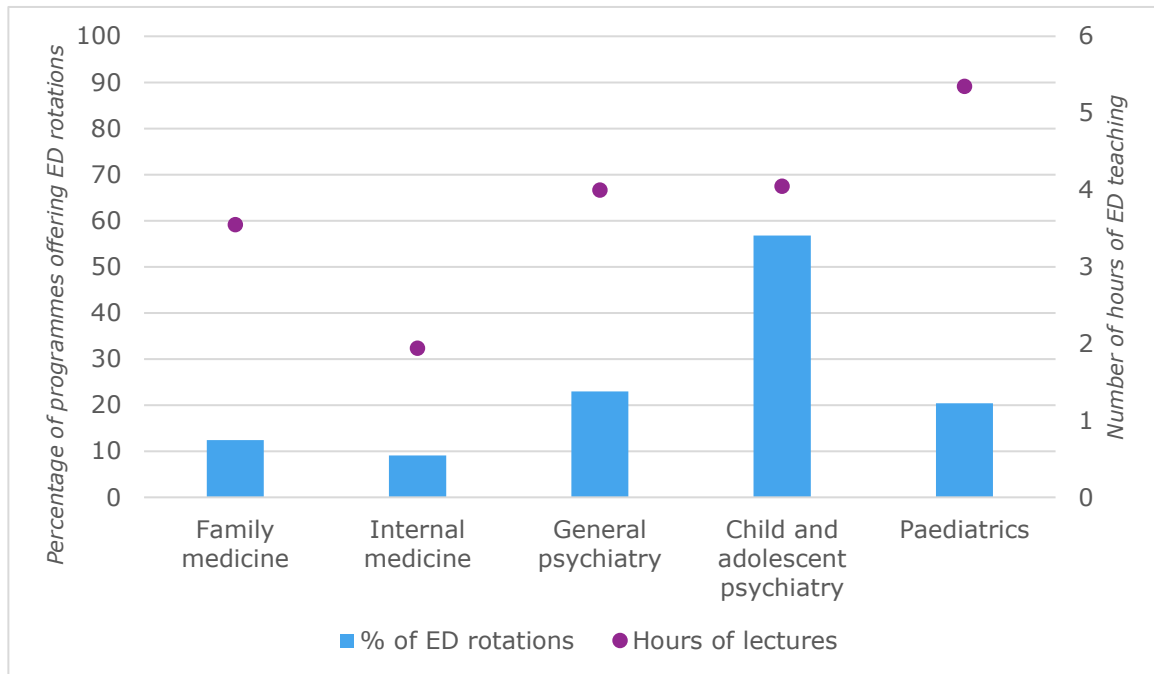


Figure 1 – Graph representing the percentage of programmes offering scheduled or elective rotations in ED as well as the number of hours each residency spent teaching about ED. Data from Mahr et al. 2015.

Overall, these studies show that training physicians and medical students are offered very low levels of teaching and clinical experience on EDs and their management. Following training in EDs, primary care physicians showed a significant increase in knowledge of the assessment and management of EDs as well as identifying this in practice ( $p=0.01$ ) (Gurney and Halmi 2001). The results of this study suggest that ED training programmes for healthcare professionals can improve the detection and intervention in a primary care setting. This demonstrates the necessity of a good curriculum to be developed covering EDs in detail to allow better identification of the signs and symptoms in all disciplines, which will help improve support for patients with EDs.

## Comprehensive Research

Despite EDs first being described in 1689 (Pearce 2004), this group of disorders remain remarkably under-researched (NICE 2017). The low number of papers produced may be linked to the poor funding ED research receives. On average, around £1.2 million is dedicated to ED research out of the £124.3 million allocated to mental health conditions. Mental health research is notoriously underfunded, but this low proportion appointed to EDs is surprising, especially given the high cost of ED treatment totalling around £3.9 billion annually (BEAT 2015).

Since 2020, several new research projects have begun, research particularly the aetiology and risk factors of EDs (EDGI 2021; UKRI 2021), which is a good step to better understanding EDs, but unfortunately, won't be enough to make the significant improvements necessary to improve care for individuals with EDs. For this to happen, ED research needs funding of at least £13 million (up to 9 times what it currently is) which is an ambitious and challenging sum of money to receive. However, without this crucial funding, the slow development in understanding EDs will only perpetuate the stigma and result in continued low funding (BEAT 2015).

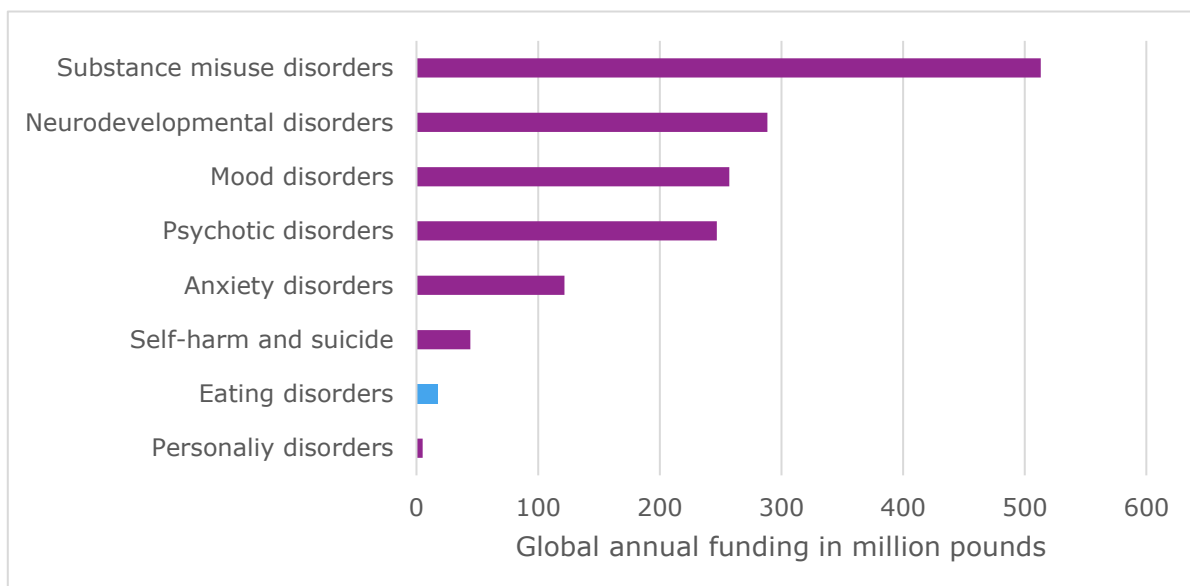


Figure 2 – Bar chart representing the funding allocated each year globally to groups of psychiatric conditions. Data adapted from IAMHRF (2020).

Additionally, the research that is carried out is less likely to be published in higher impact factor journals. When analysing all of the papers submitted to the top psychiatry journals in 2018, only 0.7% were on EDs, in comparison to 20.1% on schizophrenia (Solmi et al. 2021). To better understand this comparison, one must consider that the lifetime prevalence of EDs worldwide is considered to be 8.4% (Galmiche et al. 2019), in comparison to 0.48% for schizophrenia (Simeone et al. 2015). This is further evidence supporting that the funding for ED research is most different to the economic burden of the illnesses (Insel 2015).

ED research is underfunded and has low visibility, and changing this is a vital improvement to be made to the field of EDs in order to improve screening, assessment, management and support for individuals with EDs. The research should focus on aetiology, factors influencing the duration of recovery, most effective treatments and treatment settings as these areas are the most important that have lacked research in previous years (Chaturvedi 2016). It is also important to investigate how carers of individuals with EDs can be better supported, as research has shown that time spent caring for an individual with an ED is twice as long than in cancer and dementia (Viana et al. 2013).

## Public Health Interventions

Support for patients and carers need not only originate from within psychiatric and psychological fields: there should be well-rounded support in the form of public health interventions also. There needs to be a better public health drive to improve perceptions of EDs, promote a supportive body culture and good body image as well as reducing poor attitudes towards food and dieting. These measures act to reduce the prevalence of EDs by reducing risk factors and acting as a preventative measure.

Public health initiatives have been shown to be effective in a variety of incidences already, with industry-specific rules and regulations brought into effect. For example, the increasing sale tax on cigarettes intended to reduce smoking rates (HMRC 2020). It has been suggested that the fashion, diet product and laxative industries as well as cosmetic surgery and advertising should be similarly targeted to help prevent EDs in the UK (Austin 2012). The process of implementing public health initiatives is shown in Figure 3.



Figure 3 – Demonstrating the process of development, maintenance and improvement of public health policy. Adapted from CDC (2020).

As with many public health interventions, schools can play an invaluable role in providing education, support and guidance alongside the industry regulations. It is important for schools to promote healthy lifestyles, including providing regular physical education lessons and access to cheap and healthy food offered in school lunches to help reduce disordered eating and obesity (Corsica and Hood 2011). Explicit education on EDs is also valuable, as was found in a Canadian study that found an ED curriculum significantly increased the understanding of EDs. The teachers and students both reported that the lessons were educational and enjoyable and learned how to recognise the signs of EDs in themselves and others (Moriarty et al. 1990). Educating both the students and staff at school could act as a preventative measure, but also aid in earlier identification of warning signs and symptoms of EDs, to help promote earlier intervention with a healthcare professional.

These public health interventions should provide clarity on previously stigmatised groups with EDs, particularly for men, who have long suffered from missed diagnoses and low levels of treatment. This is important to reduce the stigma many men feel when coming to terms with their ED and seeking treatment. It is important for the public to be aware of the differences in the presentation of EDs in men and women – for example, in men with EDs, it is more common to experience a desire for weight

gain (particularly muscle mass), in comparison to the desire for weight loss more commonly seen in women (Strother et al. 2012). Bulimia nervosa in particular shows stark gender differences: in women, vomiting or laxative abuse are common, whereas men are more likely to use excessive exercise as a bulimic compensatory behaviour (Weltzin 2005).

Other groups at-risk for bias and stigma include individuals with large body habitus. Significant weight loss is often defined as between 5-10% (Forney et al. 2017), but individuals with this weight loss and a BMI of 18.5 or above may be overlooked by primary care providers (Sim et al. 2013). Better education and awareness that EDs affect all body types and all genders are important in the early identification of EDs in the general population and it is important to consider when designing these curricula.

The public health interventions outlined above could help prevent EDs by promoting a healthier relationship with food and body image at a younger age. These interventions wouldn't only prevent new cases, they could help pre-existing patients and their carers also. Improving the understanding of EDs and reducing the stigma would help the patients come to terms with their diagnosis and potentially feel more comfortable speaking to peers and healthcare professionals about it. The education provided by schools would also allow individuals struggling with EDs to know where to seek guidance and help. Lastly, creating a more body-positive environment with better attitudes towards dieting could also create a more helpful environment for recovery.

## *Conclusion*

All the suggestions above would benefit patients with ED as well as their carers, but in order to improve the field of EDs, this needs to be a multidisciplinary approach targeting all of these areas simultaneously. An improvement generating more comprehensive research into causes and treatments is useless unless there is a diverse healthcare system that is confident in identifying the key risk factors of EDs to implement the changes. Equally, good identification and management of EDs clinically are fruitless unless there is also public health policy aiming and preventing cases to begin with. It is only with a combination of these strategies and communication across disciplines can we truly begin to fully support individuals with EDs.

The final step in making these recommendations as useful as they can be is to consult patients with or recovering from EDs when creating these changes. No individual who has not experienced an ED or been in treatment for an ED can fully understand the challenges and struggles these patients face. Patients have a practical experience of the healthcare system and how they have been supported and unsupported throughout their journey, and as such are invaluable sources of information for improving the service and support they receive. Much like the "No decision about me, without me" campaign strove to include patients in making shared clinical decisions about their own care, these patients need to also be included to help guide wider decisions on the management of other individuals with ED. This could be achieved by consulting a board of patients to advise and give feedback on proposed changes to ED support.

## Bibliography

Ackard, D., Richter, S., Egan, A. and Cronemeyer, C. 2014. Poor outcome and death among youth, young adults, and midlife adults with eating disorders: An investigation of risk factors by age at assessment. *International Journal of Eating Disorders* 47(7), pp.825-835.

American Psychiatric Association. 2013. *Diagnostic and statistical manual of mental disorders*. 5<sup>th</sup> ed. Washington, DC.

Arcelus, J., Mitchell, A. and Wales, K. 2011. Mortality Rates in Patients With Anorexia Nervosa and Other Eating Disorders: A Meta-analysis of 36 Studies. *Archives of General Psychiatry* 68(7), pp.724-731.

Austin, S. 2012. A public health approach to eating disorders prevention: It's time for public health professionals to take a seat at the table. *BMC Public Health* 12, pp.854.

Ayton, A. and Ibrahim, A. 2018. Does UK medical education provide doctors with sufficient skills and knowledge to manage patients with eating disorders safely? *Postgraduate Medical Journal* 94, pp. 374-380.

Beating Eating Disorders. 2015. The costs of eating disorders. Social, health and economic implications. Available at: [https://www.basw.co.uk/system/files/resources/basw\\_54403-3\\_0.pdf](https://www.basw.co.uk/system/files/resources/basw_54403-3_0.pdf) [Accessed: 23 September 2021]

Bryant-Waugh, R., Lask, B., Shafran, R. and Fosson, A. 1992. Do doctors recognise eating disorders in children? *Archives of Disease in Childhood* 67; pp.103-105.

CDC. 2020. 10 Essential Public Health Services. Available at: <https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html> [Accessed: 23 September 2021]

Chaturvedi, S. 2016. Top 10 research priorities for eating disorders. *The Lancet* 3, pp.706-707

Corsica, J. and Hood, M. Eating Disorders in an Obesogenic Environment. *Journal of the American Dietetic Association* 111(7), pp.996-1000.

Eating Disorders Genetic Initiative. 2021. Take Part in the Eating Disorders Genetics Initiative (EDGI). Available at: <https://edgiuk.org/> [Accessed: 23 September 2021]

Forney, J., Brown, T. and Carter, L. 2017. Defining "significant weight loss" in atypical anorexia nervosa. *International Journal of Eating Disorders* 50(1)

Galmiche, M., Déchelotte, P., Lambert, G., and Tavolacci, M. 2019. Prevalence of eating disorders over the 2000-2018 period: a systematic literature review. *American Journal of Clinical Nutrition* 109(5); pp.1402-1413.

Gurney, V. and Halmi, K. 2001. An Eating Disorder Curriculum for Primary Care Providers. *International Journal of Eating Disorders* 30; pp.209-212.

Hart, L., Granillo, M., Jorm, A. and Paxton, S. 2010. Unmet need for treatment in the eating disorders: A systematic review of eating disorder specific treatment seeking among community cases. *Clinical Psychology Review* 31(5), pp.717-735.

HM Revenue & Customs. 2020. Tobacco Duty Rates Autumn 2020. Available at: <https://www.gov.uk/government/publications/tobacco-duty-rates-autumn-2020/tobacco-duty-rates-autumn-2020> [Accessed: 23 September 2021]

IAMHRF. 2020. The Inequities of Mental Health Research Funding. Available at: [https://digitalscience.figshare.com/articles/report/The\\_Inequities\\_of\\_Mental\\_Health\\_Research\\_IAMHRF\\_/13055897](https://digitalscience.figshare.com/articles/report/The_Inequities_of_Mental_Health_Research_IAMHRF_/13055897) [Accessed: 23 September 2021]

INsel, T. 2015. The anatomy of NIMH funding. Available at: [https://web.archive.org/web/20180515232231id\\_/https://www.nimh.nih.gov/funding/funding-strategy-for-research-grants/white-paper\\_149362.pdf](https://web.archive.org/web/20180515232231id_/https://www.nimh.nih.gov/funding/funding-strategy-for-research-grants/white-paper_149362.pdf) [Accessed: 23 September 2021]

Mahr, F. et al. 2015. A National Survey of Eating Disorder Training. *International Journal of Eating Disorders* 48(4);pp.443-445.

Moriarty, D., Shore, R., and Maxim, N. 1990. Evaluation of an eating disorder curriculum. *Evaluation and Program Planning* 13, pp.407-413.

NICE. Eating disorders: recognition and treatment. Full guideline. Available at: <https://www-nice-org-uk.abc.cardiff.ac.uk/guidance/ng69/evidence/full-guideline-pdf-161214767896>. [Accessed: 23 September 2021]

Pearce, J. 2004. Richard Morton: Origins of Anorexia nervosa. *European Neurology* 52, pp.191-192.

Schmidt, U. et al. 2016. Eating Disorders: the big issue. *The Lancet* 3(4), pp.313-315.

Sim, L., Lebow,, J. and Billings, M. Eating Disorders in Adolescents With a History of Obesity. *Pediatrics* 132(4), pp.1026-1030.

Simeone, J., Ward, A., Rotella, P., Collins, J., and Windisch, R. 2015. An evaluation of variation in published estimates of schizophrenia prevalence from 1990–2013: a systematic literature review. *BMC Psychiatry* 15; pp.193

Strother, E., Lemberg, R., Stanford, S. and Turberville, D. 2012. Eating Disorders in Men: Underdiagnosed, Undertreated, and Misunderstood. *Eating Disorders* 20(5); pp.346-355

UK Research and Innovation. 2021. New projects to tackle eating disorders and self-harm. Available at: <https://www.medicalresearchfoundation.org.uk/news/new-projects-to-tackle-eating-disorders-and-self-harm> [Accessed: 23 September 2021]

Viana, M. et al. 2013. Family burden related to mental and physical disorders in the world: results from the WHO World Mental Health (WMH) surveys. *Brazilian Journal of Psychiatry* 35(2), pp.115-125

Weltzin, T. 2005. Eating disorders in men: Update. *Journal of Men's Health & Gender* 2; pp.186–193