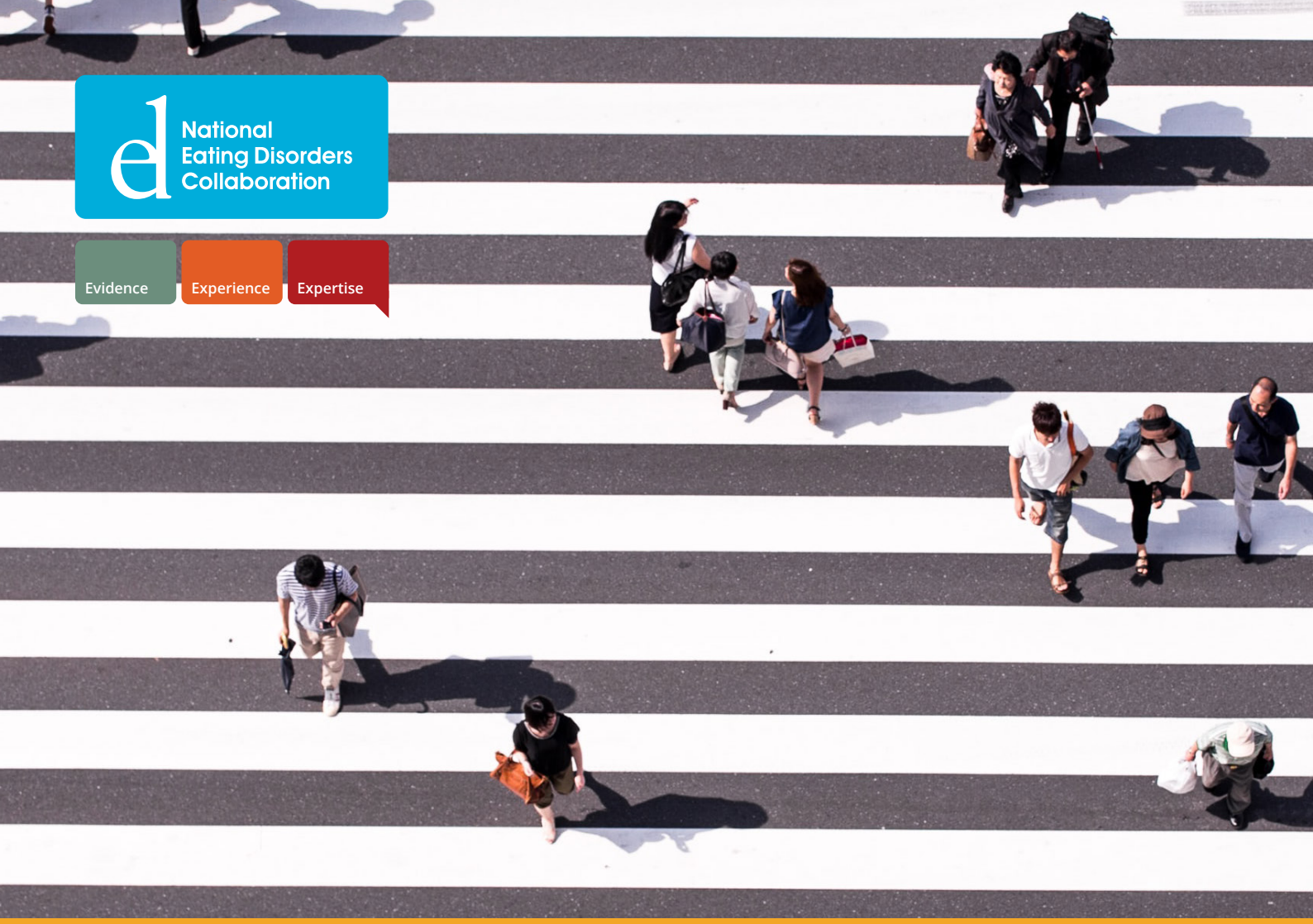
National Eating Disorders Collaboration

Evidence Experience Expertise



Eating Disorders in Australia

The National Eating Disorders Collaboration (NEDC) is funded by the Australian Government Department of Health.

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Evidence Experience Expertise

Contents

What is an eating disorder?

Eating disorders are serious, complex mental illnesses accompanied by physical and mental health complications which may be severe and life threatening. They are characterised by disturbances in behaviours, thoughts and feelings towards body weight and shape, and/or food and eating.

Eating disorders do not discriminate and can occur in any person, at any stage of their life.

Approximately one million Australians are living with an eating disorder in any given year (1).

Types of eating disorders

Eating disorders are classified into different types, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Fifth Edition (2). Classifications are made based on the symptoms and how often these occur.

Binge eating disorder (BED)

BED is characterised by recurrent episodes of binge eating, which involves eating a large amount of food in a short period of time. During a binge episode, the person feels unable to stop themselves eating, and it is often linked with high levels of distress. A person with BED will not use compensatory behaviours, such as self-induced vomiting or overexercising after binge eating.

Bulimia nervosa

Bulimia nervosa is characterised by recurrent episodes of binge eating, followed by compensatory behaviours, such as vomiting or excessive exercise to prevent weight gain. A person with bulimia nervosa can become stuck in a cycle of eating in an out-of-control manner, followed by attempts to compensate for this, which can lead to feelings of shame, guilt and disgust. These behaviours can become more compulsive and uncontrollable over time, and lead to an obsession with food, thoughts about eating (or not eating), weight loss, dieting and body image.

Anorexia nervosa

Anorexia nervosa is characterised by restriction of energy intake leading to significantly low body weight accompanied by an intense fear of weight gain and body image disturbance. Changes that happen in the brain because of starvation and malnutrition can make it hard for a person with anorexia nervosa to recognise that they are unwell, or to understand the potential impacts of the illness.

Atypical anorexia nervosa is a subtype of OSFED (see OSFED, Page 4). A person with atypical anorexia nervosa will meet all of the criteria for anorexia nervosa, however, despite significant weight loss, the person's weight is within or above the normal BMI range. Atypical anorexia nervosa is serious and potentially life threatening, and will have similar impacts and complications to anorexia nervosa.

Other specified feeding or eating disorders (OSFED)

A person with OSFED may present with many of the symptoms of other eating disorders such as anorexia nervosa, bulimia nervosa or binge eating disorder but will not meet the full criteria for diagnosis of these disorders. This does not mean that the eating disorder is any less serious or dangerous. The medical complications and eating disorder thoughts and behaviours related to OSFED are as severe as other eating disorders.

Avoidant/restrictive food intake disorder (ARFID)

ARFID is characterised by a lack of interest, avoidance and aversion to food and eating. The restriction is not due to a body image disturbance, but a result of anxiety or phobia of food and/or eating, a heightened sensitivity to sensory aspects of food such as texture, taste or smell, or a lack of interest in food and/or eating. ARFID is associated with one or more of the following: significant weight loss, significant nutritional deficiency, dependence on enteral (tube) feeding or supplementation, and a marked interference with psychosocial functioning.

Unspecified feeding or eating disorder (UFED)

UFED is a feeding and eating disorder that causes significant distress and impairment in social, occupational, or other important areas of functioning, however, it does not meet the full criteria for any of the other feeding and eating disorders. This category is used in situations in which the clinician chooses not to specify the reason that the criteria are not met for a specific feeding and eating disorder, and includes presentations in which there is insufficient information to make a more specific diagnosis (e.g., emergency room setting).

Pica

Pica is characterised by persistent eating of non-nutritive, non-food substances, which is inappropriate to the development level of the individual.

Rumination disorder

Rumination disorder is characterised by the repeated regurgitation of food. The repeated regurgitation cannot be associated with another medical condition or occur exclusively in the course of another eating disorder diagnosis.

Prevalence

Eating disorders are common

- Approximately one million Australians are living with an eating disorder in any given year; that is, 4% of the population (1).
- Of people with an eating disorder, 3% have anorexia nervosa, 12% bulimia nervosa, 47% BED and 38% other eating disorders* (1).
- Many more people experience disordered eating (i.e., symptoms and behaviours of eating disorders, but at a lesser frequency or lower level of severity) that do not meet criteria for an eating disorder. Approximately a third (31.6%) of Australian adolescents engage in disordered eating behaviours within any given year (3).
- Eating disorder symptoms are on the rise with at least weekly binge eating increasing almost six-fold since the late 1990s and strict dieting increasing almost four-fold (3).

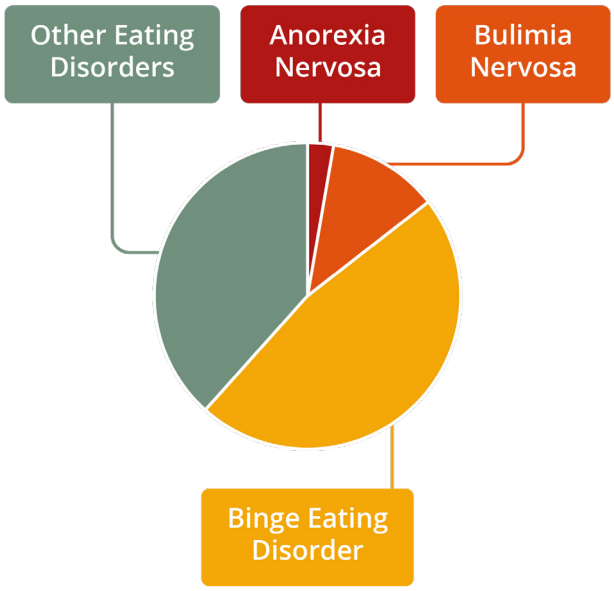

Figure 1: Prevalence of eating disorders by diagnosis

*Other Eating Disorders includes all other eating disorder diagnosis excluding anorexia nervosa, bulimia nervosa and BED.

Age

While a person can experience an eating disorder at any age, eating disorders remain more prevalent among adolescents and young people, with the average onset for eating disorders between the ages of 12 and 25 years (4, 5). Adolescence is a high-risk time for developing an eating disorder.

Gender

8.4% of women and 2.2% of men are estimated to experience an eating disorder at some point in their lifetime (6).

While women comprise approximately 80% of people with anorexia nervosa and 70% of people with bulimia nervosa, recent data suggests that the prevalence of BED may be nearly as high in men as in women (7).

The actual percentage of men among people with eating disorders may be higher as their experiences may be overlooked or misdiagnosed by clinicians (8).

While research on the prevalence of eating disorders/disordered eating in gender non-binary and transgender people is limited, emerging research suggests that gender non-binary and transgender people have a two to four times greater risk of eating disorder symptoms or disordered eating behaviours than their cisgender counterparts (9-12).

Warning signs

Psychological

Psychological warning signs may include:

- Preoccupation with eating, food (or activities relating to food), body shape and weight
- Intense fear of weight gain
- Heightened anxiety or irritability around mealtimes
- Feeling of being 'out of control' around food
- Extreme body dissatisfaction or negative body image
- Rigid 'black and white' thinking (e.g. thoughts about food being 'good' or 'bad')
- Heightened sensitivity to comments or criticism (real or perceived) about body shape or weight, eating or exercise habits
- Mood fluctuations (e.g., increased irritability, low mood and/or anxiety as well as self-harm and/or suicidality)
- Low self-esteem (e.g., feelings of shame, guilt and self-loathing)
- Using food as self-punishment or to regulate emotions (e.g. refusing to eat or binge eating due to depression, stress or other emotional reasons)

Physical

Physical warning signs may include:

- Sudden weight loss, gain or fluctuation
- In children and adolescents, an unexplained decrease in growth curve or body mass index (BMI) percentiles
- Sensitivity to the cold (e.g., feeling cold most of the time, even in warm environments)
- Delayed onset, loss or disturbance of menstruation, or infertility (not due to fluctuations with puberty onset or menopause)
- Signs of vomiting (e.g., swollen cheeks or jawline, calluses or bumps on knuckles, bad breath, damage to teeth)
- Fine hairs covering the body or face (lanugo)
- Fatigue or low energy
- Fainting or dizziness
- Hot flashes or sweating episodes
- Digestive issues (e.g., reflux, bloating, constipation, nausea, feeling full)
- Weak and fragile bones (e.g., osteoporosis or osteopenia)

Behavioural

Behavioural warning signs may include:

- Constant or repetitive dieting behaviour (e.g., fasting, counting calories/kilojoules, skipping meals, avoidance of certain food groups)
- Evidence of binge eating (e.g., disappearance of large amounts of food, hoarding of food in preparation for binge)
- Evidence of vomiting or laxative use for weight-control purposes (e.g., frequent trips to the bathroom during or after meals, regular purchasing of laxatives)
- Compulsive or excessive exercise patterns (e.g., exercising in bad weather, continuing to exercise when sick or injured, failure to take regular rest/recovery days, experiencing distress if exercise is not possible)
- Patterns or obsessive rituals around food, food preparation and eating (e.g., eating very slowly, cutting food into very small pieces, insisting that meals are served at a certain time, rigid repetitive meal content, inflexible use of crockery and cutlery)
- Changes in food preferences (e.g., claiming to dislike foods previously enjoyed, sudden obsession with 'healthy eating')
- Avoidance of, or change in behaviour in social situations involving food (e.g., no longer eating family meals at home, bringing own food to social events, refusal of food in social settings)
- Avoidance of eating by giving excuses (e.g., claiming to have already eaten, claiming to have an allergy/ intolerance to particular foods)
- Social withdrawal or isolation from friends and family (e.g., avoidance of previously enjoyed activities)
- Changes in behaviour around food preparation and planning (e.g., shopping for food, preparing meals for others but not consuming meals themselves, taking control of family meals)
- Strong focus on weight and body shape (e.g., interest in weight loss or muscle building)
- Repetitive or obsessive body checking behaviours (e.g., pinching waist or wrists, repeated self-weighing, excessive time spent looking in the mirror)
- Changes in clothing style (e.g., wearing baggy clothes, wearing more layers than necessary for the weather)
- Covert or secretive behaviour around food (e.g., secretly throwing out food, hiding uneaten food, eating in secret)
- Inappropriate hydration behaviours (e.g., consuming little to no fluids, or consuming excessive fluids above requirements)
- Continual denial of hunger
- Applying rigid food rules (e.g., making lists of 'good' and 'bad' foods)
- Insulin misuse in diabetes (Type 1 or 2)

It is never advised to 'watch and wait'. If you or someone you know may be experiencing an eating disorder, accessing support and treatment is important. Early intervention is key to improved health and quality of life outcomes.

Risk factors

The factors that contribute to the development of an eating disorder will differ from person to person and involve biological, psychological and sociocultural factors. Any person, at any stage of their life, is at risk of developing an eating disorder. An eating disorder is a mental illness, not a choice that someone has made.

Impacts and complications

The medical and psychological complications associated with eating disorders are serious and potentially life-threatening.

Medical

Eating disorder behaviours are associated with specific medical complications. These include but are not limited to:

- **Restriction of food intake** may lead to low blood pressure, hormone imbalances, cold intolerance, poor concentration, digestive issues, fatigue and lethargy.
- **Binge eating** may lead to high blood pressure, Type 2 diabetes and hormone imbalances.
- **Vomiting** may lead to damage to the oesophagus, abdominal pain, bloating, diarrhoea, constipation, dental caries, and electrolyte imbalances resulting in irregular heart rate and dehydration.
- **Laxative misuse** may lead to dehydration, low blood sugar, and weakened muscles of the bowel.
- **Excessive exercise** may lead to injury, stress fractures, weak and fragile bones (e.g., osteoporosis or osteopenia), and hormone imbalances.

Psychological

There are many psychological impacts associated with eating disorders, including but not limited to:

- Body dissatisfaction
- Obsessive thoughts about eating, food, body shape and/or weight
- Feelings of shame, self-loathing, low self-esteem, guilt or failure
- Depressive or anxious symptoms
- Suicidal thoughts, plans or attempts
- Self-harm
- Substance misuse
- Social withdrawal

Comorbidities

A person with an eating disorder is at increased risk of experiencing another mental health or medical condition at the same time (known as a comorbidity). Comorbid conditions experienced by people living with eating disorders may be connected to their eating disorder symptoms and behaviours. For other comorbidities, the direction and mechanisms underlying any connection are unclear and a focus of future research.

Mental health comorbidities

Research suggests that over 80% of adults diagnosed with an eating disorder have at least one other psychiatric disorder (13).

The most common mental health comorbidities associated with eating disorders include:

- Mood disorders (e.g., major depressive disorder)
- Anxiety disorders (e.g., generalised anxiety disorder, social anxiety)
- Post-traumatic stress disorder (PTSD) and trauma
- Substance misuse
- Personality disorders (avoidant, borderline, obsessive compulsive)
- Sexual dysfunction
- Self-harm

Medical comorbidities

The following medical conditions have been shown to have an increased prevalence in people living with an eating disorder compared with the general population:

- Type 1 and 2 diabetes
- Polycystic ovarian syndrome (PCOS)
- Weak or fragile bones (e.g., osteopenia, osteoporosis)
- Low blood pressure (hypotension)
- Digestive issues (e.g., irritable bowel syndrome)
- Joint pains
- Headache and migraine
- Menstrual problems (e.g., loss of menstruation)
- Sleep problem

Treatment

Types of treatment

Access to evidence-based treatments has been shown to reduce the severity and duration of an eating disorder. Among people with a diagnosed eating disorder, only around 23% access appropriate treatment (4). Delivering treatment early in the course of illness provides the best chance of recovery from an eating disorder.

The evidence-based psychological therapies to consider for the treatment of eating disorders according to diagnosis include (14):

Anorexia nervosa

For *children and adolescents*, treatment models include:

- Family-based treatment (FBT) or family therapy for anorexia nervosa (parent focused and multi-family group also acceptable)
- CBT-ED with family involvement
- Adolescent-focused psychotherapy

For *adults*, treatment models include:

- Maudsley anorexia nervosa treatment for adults (MANTRA)
- Specialist supportive clinical management (SSCM)
- CBT-ED; eating disorder-focused focal psychodynamic therapy

OSFED

The specific treatment model chosen should be determined by the eating disorder that the eating problem most closely resembles.

Bulimia nervosa

For *children and adolescents*, treatment models include:

- Eating disorder-focused CBT (CBT-ED) with family involvement
- Bulimia nervosa-focused family therapy

For *adults*, treatment models include:

- Guided self-help CBT-ED
- CBT-ED
- IPT

BED

For *adolescents and adults*, treatment models include:

- Cognitive Behaviour Therapy Enhanced (CBT-E)
- Cognitive Behaviour Therapy – Guided Self Help (CBT-GSH)
- Interpersonal Therapy (IPT)

ARFID

ARFID is a relatively new diagnosis and the research is still growing around which treatments are effective.

Current evidence suggests Cognitive Behaviour Therapy (CBT) is an effective treatment for people with ARFID (15). Treatment may involve gradually exposing the person to feared foods, relaxation training, and support to change eating behaviours.

Responsive feeding therapy (RFT) has also been used for the treatment of ARFID in children, however the guiding principles of RFT could also be applied for adolescents and adults (16). Responsive feeding involves parents or carers establishing mealtime routines with pleasant interactions and few distractions, modelling mealtime behaviour, and allowing the child to respond to hunger cues (16).

Non-clinical supports

There are a number of non-clinical services which may provide valuable support to people undergoing treatment for an eating disorder, as well as their family and supports, such as individual peer support sessions or support groups.

Levels of treatment

Eating disorder treatment may be delivered in different settings across three different levels of intensity, depending on a person's individual needs. Some people may commence treatment at the lowest level of intensity, while others may commence at a higher level of intensity. People may need to move back and forth between these different levels as they work on their recovery.

The levels of treatment services available to a person with an eating disorder include:

Community-based Treatment

Community-based treatment refers to evidence-based treatment delivered in the community or outpatient setting, with coordinated access to a range of services as needed.

Treatment may be delivered by primary health care professionals, mental health professionals and dietitians in the community (private and public), and online for guided self-help.

Most people can recover from an eating disorder with community-based treatment. In the community, the minimum treatment team includes a medical practitioner such as a GP and a mental health professional.

Community-based Intensive Treatment

This refers to evidence-based treatment delivered in the community or outpatient setting at a higher level of frequency and intensity, for people who require more intensive therapy.

Treatment services may be delivered through intensive outpatient programs and day programs.

Hospital Treatment

Hospital treatment is required for people needing medical and/or psychiatric intervention, or admission to a residential eating disorder program for people who are medically stable but require a high level of treatment and support.

This can occur in settings such as residential programs or medical and psychiatric inpatient units.

Recovery

It is possible to recover from an eating disorder, even if a person has been living with the illness for many years. The path to recovery can be long and challenging. Early identification and access to appropriate support and treatment strengthens the path to recovery. Some people may find that recovery brings new understanding, insights and skills.

Getting help

If you think that you or someone you know may be experiencing an eating disorder, it is important to seek help immediately. The earlier you seek help the closer you are to recovery. Your GP is a good 'first base' to seek support and access eating disorder treatment.

To find help in your local area go to NEDC Support and Services.

References

1. Deloitte Access Economics. Paying the price: The economic and social impact of eating disorders in Australia. Australia: Deloitte Access Economics; 2012.
2. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5®): American Psychiatric Pub; 2013.
3. Sparti C, Santomauro D, Cruwys T, Burgess P, Harris M. Disordered eating among Australian adolescents: prevalence, functioning, and help received. Int J Eat Disord. 2019;52(3):246-54.
4. Hart LM, Granillo MT, Jorm AF, Paxton SJ. Unmet need for treatment in the eating disorders: a systematic review of eating disorder specific treatment seeking among community cases. Clin Psychol Rev. 2011;31(5):727-35.
5. Volpe U, Tortorella A, Manchia M, Monteleone AM, Albert U, Monteleone P. Eating disorders: What age at onset? Psychiatry Res. 2016;238:225-7.
6. Galmiche M, Déchelotte P, Lambert G, Tavolacci MP. Prevalence of eating disorders over the 2000–2018 period: a systematic literature review. Am J Clin Nutr. 2019;109(5):1402-13.
7. Hay P, Girosi F, Mond J. Prevalence and sociodemographic correlates of DSM-5 eating disorders in the Australian population. J Eat Disord. 2015;3(1):1-7.
8. Strother E, Lemberg R, Stanford SC, Turberville D. Eating disorders in men: underdiagnosed, undertreated, and misunderstood. Eat Disord. 2012;20(5):346-55.
9. Gordon, A. R., Moore, L. B., & Guss, C. (2021). Eating disorders among transgender and gender non-binary people. In Eating Disorders in Boys and Men (pp. 265-281). Springer, Cham.
10. Diemer EW, Hughto JMW, Gordon AR, Guss CS, Austin B, Reisner SL. Beyond the Binary: Differences in Eating Disorder Prevalence by Gender Identity in a Transgender Sample. Transgender Health. 2018;3:1, 17-23
11. Giordano S. Eating yourself away: Reflections on the 'comorbidity' of eating disorders and gender dysphoria. Clinical Ethics. 2017;12(1):45-53. doi:10.1177/1477750916661977
12. Feder S, Isserlin L, Seale E, Hammond N, Norris ML. Exploring the association between eating disorders and gender dysphoria in youth. Eat Disord. 2017; Jul-Sep;25(4):310-317. doi: 10.1080/10640266.2017.1297112
13. Udo T, Grilo CM. Psychiatric and medical correlates of DSM-5 eating disorders in a nationally representative sample of adults in the United States. Int J Eat Disord. 2019;52(1):42-50.
14. Heruc G, Hurst K, Casey A, Fleming K, Freeman J, Fursland A, et al. ANZAED eating disorder treatment principles and general clinical practice and training standards. J Eat Disord. 2020;8(1):63.
15. Thomas JJ, Lawson EA, Micali N, Misra M, Deckersbach T, Eddy KT. Avoidant/restrictive food intake disorder: a three-dimensional model of neurobiology with implications for etiology and treatment. Current psychiatry reports. 2017;19(8):1-9.
16. Wong G, Rowel K. Understanding ARFID Part II: Responsive Feeding and Treatment Approaches National Eating Disorder Information Centre - Bulletin. 2018;33(4).

Building a safe, consistent and accessible system of care for people with eating disorders

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