Since the start of the coronavirus disease 2019 (COVID-19) pandemic, children’s wards in the UK have seen a significant increase in the number of admissions of children and young people with an eating disorder (BROOMFIELD et al 2021, SOLMI et al 2021, HUDSON et al 2022). A small number of these patients will be so severely malnourished that they will need to be fed via a nasogastric tube without their consent. Children’s nurses working on hospital wards may therefore care for children and young people who need to receive nasogastric tube feeding under physical restraint. This article offers an overview of eating disorders and their detrimental effects as well as practical advice for children’s nurses, supporting them to provide safe, compassionate and person-centred care to their patients.

Eating disorders
Definition, types and risk factors
Eating disorders are serious mental health conditions that are driven by an overevaluation of one’s body weight and body shape and characterised by abnormal eating patterns – either strict control or lack of control of eating (American Psychiatric Association (APA) 2013). There are various types of eating disorder (Box 1), one of which is anorexia nervosa. An individual with this condition has an intense fear of gaining weight and severely restricts their food intake, which often leads to severe malnutrition (APA 2013). Research has suggested that in the UK the incidence of anorexia nervosa peaks at the
age of 15 years in females and 16 years in males (Petkova et al 2019). Young people with this condition may require admission to a children’s ward for medical stabilisation and monitoring, notably to prevent refeeding syndrome. Refeeding syndrome is characterised by a sudden drop in electrolytes when the metabolism changes from a starved state to a fed state, which can have significant detrimental effects on the neurological and cardiovascular systems (Royal College of Psychiatrists (RCPsych) 2022).

Exactly what causes eating disorders is not known, but risk factors include having low self-esteem, being perfectionistic (Johnston et al 2018), being exposed to bullying (Lie et al 2019), having a family history of eating disorders (Bulik et al 2019) and being exposed to traumatic events such as a bereavement (Bakalar et al 2015). A clinical report on the interaction between obesity prevention and eating disorders in adolescents suggested that those who dieted were up to five times more likely to develop an eating disorder, and that those whose diet was considered extreme were 18 times more likely to develop an eating disorder, than those who did not diet (Golden et al 2016).

Since the start of the COVID-19 pandemic, the number of children and young people starting treatment for an eating disorder increased by almost two thirds (NHS England 2022). There appear to be many contributing factors to this increase, including lockdowns causing significant disruption to routines, for example because of school closures; food insecurity; social isolation; increased levels of anxiety; and exposure to public health messages promoting healthy eating and exercise (Branley-Bell and Talbot 2020).

Hospital admission
In young people with an eating disorder that causes weight loss, the aim of hospital admission is to re-establish regular eating to a level that promotes weight gain and medically stabilises the young person so that they can return home (Hudson and Chapman 2020). Referral to specialist inpatient mental health units is appropriate only in certain circumstances – for example, when intensive support in the community is ineffective or if the young person has co-morbidities such as obsessive-compulsive disorder or bipolar disorder.

Many people with an eating disorder who have developed malnutrition experience a deterioration in their mental and physical health – for example, increased anxiety, low mood and/or a fixation on food (RCPsych 2022). Research has suggested that young people do better when treated at home with their family supporting them (Gowers et al 2010, National Institute for Health and Care Excellence 2020), but some may require specialist inpatient mental health support, particularly if they present with self-harming behaviours or suicidal ideation.

Before the COVID-19 pandemic, there was already a limited number of beds available for young people with an eating disorder in specialist inpatient mental health units in the UK. During the pandemic, some units have had to reduce their capacity on account of social distancing measures. This lack of capacity means that many young people who need specialist mental health support have to stay on a children’s ward until a bed is available in a specialist inpatient mental health unit.

Furthermore, specialist inpatient mental health units are not equipped to manage the medical risks associated with severe malnutrition caused by an eating disorder. In such cases, it is the role of staff on children’s wards to ensure that the young person is medically stable before they can be transferred to a specialist inpatient mental health unit (RCPsych 2022).

Treatment without consent
The treatment for most of the markers of medical instability associated with malnutrition related to an eating disorder that restricts nutritional intake – which include bradycardia, hypotension, hyperthermia, abnormal electrocardiograph and abnormal biochemistry – is nutrition (RCPsych 2022). That treatment is, however, in direct conflict with the psychological presentation of some people with anorexia nervosa, which is characterised by fear of food and/or weight gain (APA 2013).

Some young people admitted to a children’s ward can tolerate oral nutrition of a level that promotes weight gain and medical

Key points

- Eating disorders are serious mental health conditions characterised by abnormal eating patterns
- Anorexia nervosa presents as an intense fear of food and/or weight gain, and can lead to severe malnutrition
- Some young people with an eating disorder have to be admitted to hospital for weight gain and medical stabilisation
- When a young person is at risk of death from malnutrition caused by an eating disorder, nasogastric tube feeding under restraint may be required
- The distress associated with the administration of feeds under restraint can be minimised by practical measures
- Understanding the psychological effects of eating disorders can help nurses to deliver compassionate, person-centred care to their patients

Box 1. Types of eating disorder

- Anorexia nervosa – the individual has an intense fear of gaining weight and severely restricts their food intake, which often leads to severe malnutrition
- Bulimia nervosa – the individual eats a large amount of food (bingeing), then attempts to compensate for this by fasting, exercising, making themselves sick or taking medicines to manipulate their weight (purging)
- Binge eating disorder – the individual experiences a loss of control over how much they eat without adopting purging behaviours to offset their food intake
- Other specified feeding or eating disorders – these diagnoses can be given to individuals whose symptoms do not meet the exact criteria for anorexia nervosa, bulimia nervosa or binge eating disorder

(Adapted from American Psychiatric Association 2013)
Stabilisation. Others are unable to eat an amount of food that is sufficient to promote weight gain and medical stabilisation but can tolerate the intake of nutritional supplement drinks. For some, the fear of food and/or weight gain is so great that they require feeding via a nasogastric tube for a short period with their consent (RCPsych 2022). When a young person’s physical health is so compromised by malnutrition caused by an eating disorder that there is a risk of death, nasogastric tube feeding without their consent and under physical restraint may be required as a lifesaving intervention. That intervention is likely to be traumatic (Kodua et al 2020).

The decision to deliver nasogastric tube feeding to a young person without their consent requires multidisciplinary involvement and discussion with the young person, their family, child and adolescent mental health community eating disorder service staff and the paediatric team. The complex ethical and legal aspects of nasogastric tube feeding under restraint on children’s wards are beyond the scope of this article, which focuses on the practical aspects of the intervention. More information on ethical and legal aspects can be found in Fuller et al (2022).

Psychological effects of eating disorders

The psychological effects of eating disorders can compromise young people’s mental capacity to make decisions about treatment and their ability to cooperate with treatment that involves food intake and/or weight gain. It is important that children’s nurses are aware of this and that they do not assume that treatment refusal is necessarily capacitous (Tan et al 2003a, 2003b). Box 2 lists common psychological effects of eating disorders – particularly anorexia nervosa – some of which can result in a loss of mental capacity to make decisions.

Young people with severe anorexia nervosa may experience distortion of thoughts that suggest they do not want to recover (Tan et al 2006, Hope et al 2011). Box 3 shows examples of distortion of thoughts experienced by young people with a severe eating disorder.

The psychological effects of eating disorders and the strong drive to lose weight and ‘obey’ the disorder – seen especially in anorexia nervosa – can result in conflicts between the young person and those around them who are concerned about their health, such as parents, teachers and healthcare professionals. Box 4 lists some of the issues that can arise when a young person is admitted to a children’s ward for the management of an eating disorder that may involve treatment without their consent. The information in Box 4 is mainly based on the authors’ clinical experience.

Understanding the psychological effects of eating disorders and the issues that can arise when a young person with an eating disorder is admitted to a children’s ward can help children’s nurses to provide compassionate, person-centred care to their patients. The authors of this article recommend that nurses seek to address each young person’s fears directly but gently and attempt to understand their fears about, or barriers to, consenting to treatment. Not all young people will be able to talk about these issues. Where possible, nurses need to take time to develop a trusting relationship with the young person and use collaborative problem-solving to identify ways to deliver treatment and care in ways that are acceptable to them.

Practical guidance on nasogastric tube feeding under restraint

Legal framework

In the UK, young people who need to receive nasogastric tube feeding without their consent have to be detained under the relevant mental health legislation, most commonly the Mental Health Act 1983 (Department of Health (DH) 2015), since this intervention cannot be provided based on parental consent only. Under section 63 of the Mental Health Act 1983, medical treatment for a mental disorder can be given to patients detained under the act without their consent if the treatment is by or under the direction of the approved clinician in charge (DH 2015).

The Mental Health Act 1983 requires adherence to five principles: least restrictive option and maximising independence; empowerment and involvement; respect and dignity; purpose and effectiveness; and
efficiency and equity (DH 2015). These principles must guide all nursing care of patients detained under the act. However, nasogastric tube feeding without consent is likely to require the use of restraint, which contradicts the first principle of the act (least restrictive option and maximising independence). The act specifies that ‘any restrictions should be the minimum necessary to safely provide the care or treatment required having regard to whether the purpose for the restriction can be achieved in a way that is less restrictive of the person’s rights and freedom of action’ (DH 2015).

The following subsections offer practical guidance on nasogastric feeding in young people without their consent and under restraint. This guidance is largely based on the authors’ clinical experience and adheres to the five principles of the Mental Health Act 1983.

**Administration**

Nasogastric tube feeding has been shown to be safe and feasible in young people with an eating disorder who have consented to treatment (Hindley et al 2021). On children’s wards, nasogastric tube feeds, which may be used for a range of conditions, are commonly administered enterally either through pump feeding or gravity feeding. In young people who have not consented to treatment, administering nasogastric tube feeds in that manner can require the use of restraint several times a day for long periods at a time to ensure the required volume of feed is given.

To reduce the likely distress associated with a high number and long duration of feeds under restraint, children’s nurses can adapt their practice as follows (Falcoski et al 2020, Fuller and Philpot 2020):

- **Bolus feeds** can be administered using 50mL syringes rather than an enteral pump, pushing the plunger through in the same way as when giving a water flush before and after nasogastric tube feeding. This enables the feed to be delivered more quickly, therefore reducing the length of time the young person is restrained.

- The number of daily feeds can be reduced to one or two, thereby decreasing the number of times the young person is restrained and giving them more time to recover.

- If the number of daily feeds is reduced, larger volumes of feed may be required. The administration of 1,000mL of feed has been shown to be safe in specialist eating disorder units for patients with no medical contraindications, such as gastrointestinal problems.

**Preparation**

Nasogastric tube feeding under restraint must be undertaken in a treatment room or other suitably private space, not at the bedside, to preserve the young person’s dignity. Before bringing the young person into the room, the nurse should draw up all the feed into 50mL syringes and cover the syringes so that the young person does not see them upon entering the room. This may reduce their distress. The treatment couch needs to be placed in a position that will enable the nurse to administer the feed from behind, so that the young person is less likely to be able to see the feed being administered. Again, this may reduce their distress.

A specific time of day should be set for the intervention and communicated to the young person to help them manage their anxiety. Delivering the intervention at the set time of day should be considered a priority, since any delay could increase the young person’s anxiety and subsequently their distress during the intervention. Furthermore, it is important...
to discuss with the young person, at an appropriate time before the intervention, distraction techniques that could support them during the intervention. Some young people will feel calmer if they can look at their phone, listen to music or talk to another person during the intervention. Others will not want any distraction technique.

**Communication**

It is important that the young person should feel that they are listened to and understood, and that they have a degree of control over the situation. This can be achieved through sensitive communication, avoiding phrases that can be counterproductive and using language that is more likely to be perceived as supportive (Box 5).

**Restraint**

There are various levels of restraint. Restraint can range from one member of staff holding the young person’s hands to several members of staff holding the young person’s arms, legs and/or head, so that the young person cannot interrupt the insertion of the nasogastric tube or pull it out once it has been inserted.

The level of restraint should be negotiated with the young person before the intervention. Everyone involved in delivering the intervention should strive to use the least restrictive practice possible while ensuring the young person’s safety. If a feed has started and becomes unsafe because of the young person’s intensity of resistance, it must be stopped and the level of restraint re-evaluated. Only once the young person is safely restrained can the feed be restarted.

**Examples of phrases to avoid**

- ‘Well done!’ – This suggests that the young person is working with you, which can be the opposite of ‘what their eating disorder wants’ and may therefore be met with distress or anger.
- ‘It will be okay’. – In the mind of the young person, the situation will not be ‘okay’, since they are about to be ‘forced’ to ingest food, which is not ‘what their eating disorder wants’. They may experience significant guilt after the feed.
- ‘Do this for your family’. – Often this is not a motivator because of the young person’s psychological aversion to treatment. They may also be experiencing challenging relationships with their family.

**Examples of phrases to use**

- ‘I am here to support you during this procedure. How would you like me to do that?’ – This gives the young person an opportunity to express preferences and make their voice heard.
- ‘I am sorry we have to do this to you. We will not let you get more unwell. You still have the option of drinking this if you prefer.’ – Just because the young person has refused previous feeds, it does not mean that they will refuse this one.
- ‘I can see how difficult this is for you. Would you like to plan to do an activity or watch a movie once the feed is over?’ – This conveys empathy and acknowledges the distress the young person is likely to feel while giving them an opportunity to express a preference.

Only staff who are trained in the safe use of restraint techniques can participate in restraining patients. Participation in restraint by an untrained person could be regarded as assault, especially if the patient is injured in any way during the restraint. Hospitals ensure that there are staff who are trained in safe restraint, who often include security staff or porters. In extreme circumstances, if no appropriately trained healthcare professional is available to participate in restraining the young person, assistance from security staff or porters may be needed. Under no circumstances should parents be involved in restraining their child, since they are not trained and this would be a highly distressing situation.

**After the intervention**

To ensure that the young person retains the prescribed feed, used syringes must not be left unattended since there is a risk that the young person may attempt to use them to decant their feed (by attaching the syringe to the nasogastric tube and drawing out the feed they have just been given). The nurse may also want to restrict the young person’s access to the toilet or bathroom for one hour after the intervention to reduce the risk of the young person making themselves sick. In that case, the nurse will need to prompt the young person to use the toilet before the intervention. It can be helpful to offer the young person a post-feed distraction, such as spending time with family or the play therapy team, to assist in calming them and helping them to emerge from what is likely to be a state of high distress.

An incident report should be completed after each episode of nasogastric tube feeding under restraint. It needs to contain information about the nasogastric tube, a pH test result confirming that the feed has entered the stomach and not the lungs, which members of staff were involved in restraining the young person, what holds they used and how long the young person was restrained for. As explained earlier, medical treatment for a mental disorder can be given to detained patients without their consent under section 63 of the Mental Health Act 1983, but it is still advisable to document the intervention so that staff are protected in case of accusations of assault.

A staff debrief should be held after each episode of nasogastric tube feeding under restraint. It is important to acknowledge that the intervention can be distressing for the staff involved. Nurses who care for young people who need nasogastric tube feeding under restraint may require additional support, for example from occupational health.

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**Box 5. Phrases to avoid and phrases to use**

**Examples of phrases to avoid**

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- ‘I can see how difficult this is for you. Would you like to plan to do an activity or watch a movie once the feed is over?’ – This conveys empathy and acknowledges the distress the young person is likely to feel while giving them an opportunity to express a preference.
Conclusion

The number of young people admitted to hospital with an eating disorder is increasing. Children's nurses working on hospital wards may therefore care for young people who need to receive nasogastric tube feeding under physical restraint, which is distressing for everyone involved. Several practical adaptations can be made to this intervention to minimise the distress it is likely to cause. Understanding the psychological effects that eating disorders such as anorexia nervosa can have on young people, and why young people with an eating disorder may not always consent to a potentially lifesaving treatment, can support nurses to care for their patients in a safe, compassionate and person-centred way.

References


Broomfield AS, Rood J, Winckworth L (2021) 1225 Paediatric eating disorder presentations to a district general hospital prior to, and during, the COVID-19 pandemic. Archives of Disease in Childhood, 106, Suppl 2, A281-A282. doi: 10.1136/archdischild-2021-801489


MHSBS (2016) The internal ‘anorexic voice’: a feature or fallacy of eating disorders? Advances in Eating Disorders. 4, 1, 75-83. doi: 10.1080/21662630.2015.1116017


