Creating positive outcomes for patients with eating disorders

in a paediatric inpatient setting

It's a Friday afternoon and the phone rings. The call is to tell you that a young person with an eating disorder has just been admitted to the ward and needs a meal plan. This was a typical occurrence at our hospital in South Somerset.

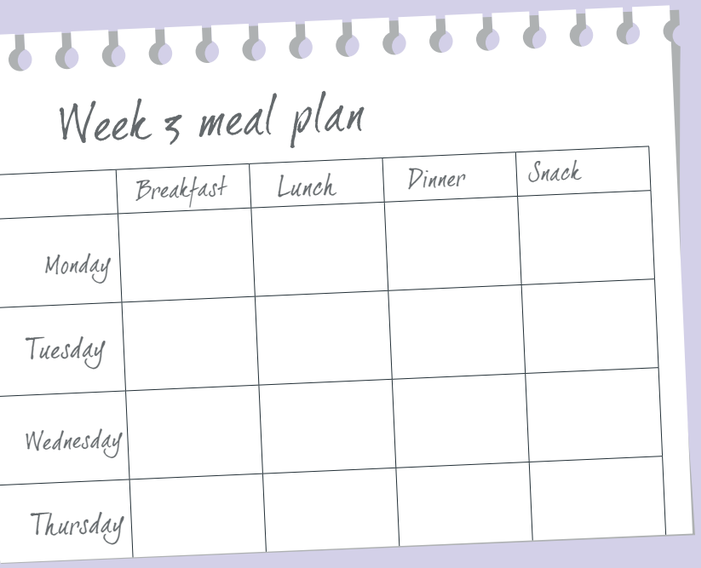
Previously, the dietitian would create an individualised meal plan for each young person admitted with a diagnosis of an eating disorder. As well as being time consuming and requiring multiple consultations each week, it was confusing for ward staff and would result in additional requests for dietitian review or advice on meal plans. Patients would want to negotiate their meal plan down to the last detail. It was impractical for dietitians trying to manage a busy caseload.

Parents remained involved throughout the admission and would supervise meals from the offset, often leading to collusion and resulting in reduced portion sizes, incomplete meals, and compromised nutritional intake. Patients would usually stay in hospital for between 8-11 weeks, gaining on average 500g per week.

Although below the national average hospital stay of 18 weeks[1], this was a lengthy admission for a young person and not conducive to their recovering journey. To overcome this, we developed a structured eating disorder admission, which, alongside the introduction of a Community Eating Disorder (CEDs) Paediatric service in 2017, changed the way we delivered our service.

Developing the service

With the introduction of the CEDs team, young people would arrive on the ward as a planned admission. The length of admission was agreed to be 3 weeks, in line with other services locally in the South West and proven to be effective.[2] From analysis of the hospital menu, a colour coded meal plan was created based on the macronutrient content of each item. This allowed lower energy meals to be safely introduced during the initial days of admission, reducing risk of refeeding syndrome. Higher energy meals and snacks would then gradually be introduced during the weight restoration phase of admission. →



Expectations of admission would be clearly explained to patients and parents, including physical activity and bed rest, behaviour and compliance to meal plans. Young people would be expected to complete all meals and snacks given. Meals that were refused or not completed within the allocated time frame would be replaced with a set volume of 1.5kcal/ml oral nutritional supplement (ONS). If they were unable to take the full ONS volume orally, it would be administered via a nasogastric tube (NG). This would be agreed on admission with parents, providing they consent for nasogastric usage. In our trust a new nasogastric tube is placed each time one is required. We have found that this encourages oral intake and reduces usage of a nasogastric tube.

Initially, the ward Health Care Assistants (HCAs) would choose meals for a young person, however we then trialled selection of meals by the patient's parents. This proved extremely successful and supports a Family Therapy for Anorexia Nervosa (FT-AN) approach, with parents being supported in their role of helping the young person and simultaneously strengthening their relationship.[3,4] It also reduced the need to identify 'fear' foods versus genuine food preferences, as parents, who knew their child's likes and dislikes, were the ones choosing the meals. Further benefits included parents being able to choose a typical meal pattern that would be seen in the family home e.g. if the young person would have a cold meal at lunch and a cooked meal in the evening.[3]

For the initial 1-2 weeks of admission, meal times would be supervised by ward staff. This was to ensure that boundaries for mealtimes were maintained, such as completing meals within allocated time and avoiding deliberate wasting of food. It also allowed patients to be treated with compassion and be supported through meal times. Supervising staff would employ distraction techniques to help reduce meal time anxiety, such as gentle conversation, playing card games and completing puzzles. In the second half of admission, parents would be supported in supervising meal times and the patient would have periods of home leave to include eating in the home environment.

Having a standardised care plan significantly reduced the need for multiple dietetic reviews and enabled ward staff to safely implement care plans at weekends when dietetic cover was not available. It also allowed dietitians more time to empower parents to continue care at home. Towards the end of the admission, parents would be advised on appropriate foods and portion sizes and provided with a guidance meal plan. This would enable a return to typical family foods, whilst ensuring that the diet is nutritionally balanced and allowed for continued weight restoration or weight maintenance. In the year following introduction of structured admissions, patient length of stay had only exceeded the 3-week admission period twice, once by only 3 days and once by an extra week. We saw an average weekly weight gain of 600g and more patients being discharged home rather than to a Tier 4 unit.

Evolving Practice

The role of the dietitian in training, developing guidelines and addressing catering issues is highlighted in Medical Emergencies in Eating Disorders (MEED).[4] Since the implementation of structured admissions we have continued to seek feedback from ward staff as to how to improve patient and staff experience. In a review of eating disorder admissions, staff reported that gradually increasing portion sizes in the initial week of admission was often susceptible to error. There was also a desire to have more training in communicating with patients and supporting meal times, especially for new members of staff.

To simplify meal provision, particularly in the refeeding phase of admission, meal plans were adapted to gradually increase the number of meal times, rather than increasing portion size. On the first day of their meal plan, a young person is given three meals, plus an evening supper, which gradually increases to also include 2 desserts and a mid-morning and mid-afternoon snack by day 6 of admission. Both ward staff and our catering team have found this to be a more practical approach. The refeeding admission continues to follow a three week structure involving a refeeding phase, consolidation of the meal plan and preparation for discharge. MEED[4] suggests 1400-2000kcals. Both MEED and its predecessor Junior MARSIPAN, suggest increases of 200kcal every 1-2 days with a final average figure of 2400kcal being acknowledged. Furthermore, the ONS used to replace refused food was changed to 2.4kcal/ml to decrease replacement volumes and time taken to administer, benefiting both the patient and staff time.

In response to feedback from ward staff regarding communicating with young people with eating disorders, we worked alongside our Mental Health Liaison Nurses to produce guidance for new ward staff, explaining the 3-week admission and how to best support the young person on their journey. Prior to the COVID-19 pandemic this was also provided as regular training on ward.

> *"Since the start of the COVID-19 Pandemic we have experienced an increase in the number of eating disorder admissions."*

Over the past four years, a patient experience book has been created on the ward. Young people are able to write to future patients, including their experiences and messages of support. Our patients have found it helpful to read entries from peers who have gone through a similar journey and how they had felt during their stay. Following the success of this, we are hoping to also create a parent experience book.

Effect of COVID-19 on eating disorder admissions

Since the start of the COVID-19 pandemic we have experienced an increase in the number of eating disorder admissions (yearly average was 13 during 2018-2019 vs 33 in 2021) to our Children's unit. Young people are also admitted at a lower median %BMI; in 2018, only two patients had a median %BMI <80% vs 58% in 2021. Within this group, 9% of patients had a median %BMI <70%. We continue to discharge the majority of our young people home after a planned admission. However, we have seen an increase in patients requiring re-admission, who also often require an increased length of stay.

What's next?

Alongside an increase in eating disorder admissions, we have also seen an increase in the number of young people admitted with Avoidant Restrictive Food Intake Disorder (ARFID) over the last 12 months. We hope to develop further care plans for patients with diagnosis of ARFID, taking into account sensory aspects of the diet, which may be part of the reason for food refusal. Cases of eating disorders are also more complex, often in combination with other mental health conditions or diagnosis of autism. For these patients we recognise that care plans may need adapting and will require collaboration with multidisciplinary teams. →

TAKE-HOME POINTS

1. Structured starter plans can be easily implemented and bring benefits to patients and staff.

2. Since the COVID-19 pandemic eating disorder admissions have increased by 250%.

3. As eating disorder presentations become more complex, our practice must evolve in order to best support these patients.

We have also noticed a reduction in average age of patients admitted for refeeding admission. In 2018, the average age was 16.5 years, vs 14.3 years in 2021. According to Petkova et al.,[5] the average age of children with a diagnosed eating disorder in 2015 was 14.6 years and diagnosis in children under the age of 12 had increased over the past 10 years. In response to this we have decided to introduce an adapted meal plan with portion sizes appropriate for patients under 12 years.

Additionally, the increasing popularity in following a vegan diet means it is likely that more young people will present having adopted a vegan lifestyle before becoming unwell with an eating disorder. For these patients we endeavour to develop our menu plans to provide more choice and variety, whilst ensuring nutritional requirements are met.

Summary points

As diagnosis of eating disorders among young people increases, and more require hospital admission for refeeding, the need for dietetic care as part of their treatment plan remains fundamental and continues to be advocated for.

Eating disorder treatment is far from being 'one-size-fits-all'. However, we have found structured starter plans to be paramount in enabling staff to commence meal plans out of hours and in providing consistent high-quality care. By also maximising available dietetic time, dietitians are more able to provide support, education and resources to patients and families so that they can continue to work towards positive outcomes.

References

1. *Royal College of Psychiatrists. Junior MARSIPAN: Management of Really Sick Patients under 18 with Anorexia Nervosa. 2012.*
2. *Street K, et al. Structured, supported feeding admissions for restrictive eating disorders on paediatric wards. Arch Dis Child. 2016;101(9):836-38.*
3. *British Dietetic Association. Clinical guidelines for dietitians treating young people with anorexia nervosa: family focused approach. 2019.*
4. *Royal College of Psychiatrists. Medical Emergencies in Eating Disorders: Guidance on Recognition and Management. 2022.*
5. *Petkova H, et al. Incidence of anorexia nervosa in young people in the UK and Ireland: a national surveillance study. BMJ Open. 2019;9(10):1-9.*

Continued Professional Development

1. Promoting starter plans that can be easily implemented can benefit both patients and staff. What other plans could be required when considering changes in culture, different dietary requirements and the influence social media has on what we choose to eat?
2. When deciding on which oral nutritional supplements to give, which factors need to be considered?
3. Consider the benefits and risks of bolus versus continuous NG feeding, and keeping an NG tube in situ versus frequent repassing in this patient group.

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