Beyond eating disorders:

Towards a formulation-based approach

Marie Reid[1] & Amy Wicksteed[2]

[1]Department of Psychology, University of Hull, m.reid@hull.ac.uk

[2]Sheffield Health and Social Care NHS Foundation Trust, Amy.Wicksteed@shsc.nhs.uk

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Summary

Eating disorders (EDs) overlap with each other and many other psychological issues. Criteria for the most common diagnosis, OSFED, are quite vague. Addressing eating concerns is salient for many clients who do not have an eating disorder. Perhaps eating 'issues' should replace 'disorders'.

Eating disorders are commonly perceived as highly specialised problems that preferably should be referred to specialist services (Reid et al., 2008: NICE,2020), which have limited capacity in many areas. This can lead to hesitancy and delay regarding their treatment in primary care, including uncertainty regarding recognition of signs and symptoms and how to diagnose (Johns et al., 2019). Should a diagnosis be made, then the most likely outcomes are referral, often to a long waiting list, or, often limited, primary care treatment for people not meeting the specialist service's severity criteria. Due to lack of capacity, these can include current serious physical morbidity, such as being critically underweight.

In primary care, patients who do not appear to have an eating disorder, but have health issues related to eating behaviour, such as being obese, tend to be offered dietary advice by generalist staff, or a dietician or nutritionist. The psychological content of this is highly variable and advice can be insensitive or even stigmatising. People with eating disorders, and probably people with sub-diagnostic eating concerns, tend to want more psychological content to treatment (Johns et al., 2019; Reid et al., 2008). Health care professionals not considering psychological issues can be mystified and frustrated by patients' inability to follow simple and 'obviously' necessary dietary advice.

Eating disorders appear often stereotyped around the most well-known disorders especially anorexia nervosa and to some extent bulimia nervosa. Binge eating disorder and Other Specified Feeding or Eating Disorder (OSFED) are thought about less. As psychological interventions for eating disorders such as Cognitive Behavioural Therapy Enhanced (CBT-E, Fairburn, 2008) still tend to focus on physical outcomes, such as weight gain or reduced vomiting, the person's other complex psychological problems are sometimes treated as secondary, although this is improving with increased recognition of the complexity of the underlying psychological problems (Simpson & Smith, 2019). Outside eating disorders services, difficulties with eating as a common contributor to other psychological presentations seems to be rarely considered (Fursland & Watson, 2014).

The paper will first summarise the evidence that the diagnostic approach to eating problems is inadequate, because eating disorder diagnoses are not discrete from each other or other psychological concerns, nor do they cover the full range of people for whom eating and feeding issues are problematic or maladaptive. Next, the paper will discuss the possible format of including eating issues in formulation, suggesting that eating and feeding behaviours should be a routine part of psychological assessments both by clinical psychologists and other specialists, and by generalist health care professionals.

Diagnoses are problematic

Eating disorder diagnoses are not discrete from each other. OSFED, also known as EDNOS (eating disorder not otherwise specified), is diagnosed entirely on there being some form of distress or impairment related to feeding or eating which does not meet criteria for any other eating disorder (American Psychiatric Association, 2013). Unfortunately, OSFED is not a rare, residual, category, but the most common class of eating disorders (Galmiche, Dechelotte, & Lambert, 2019). One way of thinking about OSFED is to suggest that the range of psychological concerns involving feeding or eating is much wider than can be captured by specific diagnoses.

Disordered eating, as measured by self-report questionnaires in research, also tends to sustain across the lifespan (Neumark-Sztainer et al., 2011); many people who are recovering from anorexia nervosa continue to have notable eating-related symptoms despite no longer being underweight. Some now meet criteria for bulimia nervosa and some have atypical anorexia nervosa or some other OSFED. Their diets and their body weight can also vary, both over time and between people. Figure 1 (after Cooper, 2017) shows the typical transitions through various diagnostic categories by those presenting with eating issues.

******Insert Figure 1 about here

There also appear to be people recovering from an eating disorder who develop self-harming behaviour, an anxiety disorder, or another psychological problem. Evidence is limited because research participants are skewed towards younger women, who are

the most likely to be clients of an eating disorder service. Nonetheless it appears that over the life course eating concerns do not tidily divide into an eating disorder or no diagnosable problem.

Arguably one of the most valued aspects of a process of 'diagnosis' within eating disorder service provision is highlighting the risks, and importance of change, for people whose thoughts about their weight, shape, and dietary intake are clouded by distress and distortions. Being told that their presentation 'meets criteria for a diagnosis of…….' can provide a platform for challenging these thoughts and taking brave steps forward. However, those who do not meet diagnostic criteria, or the threshold for acceptance into services, may be demoralised and demotivated by this, which can further fuel the destructive cycle and even tempt some to lose more weight in order to be eligible for specialised services. Potentially, formulation of eating issues, including increased education and assessment of the effects of inadequate nutrition can motivate equally well. Nonetheless, it remains essential that guidance relating to the medical management of the risks associated with starvation and the management of risks associated with the initial refeeding phase following significant starvation continue to be followed. Guidance is currently MARSIPAN (Management of Really Sick Patients with Anorexia Nervosa, Royal College of Psychiatrists, 2014) and clearly equivalent guidance remains essential regarding blood test monitoring, initial feeding schedules and supplementation in instances of acute starvation. As will be discussed below, with less intensive biological monitoring better nutrition and more regular meals is also a useful intervention for many people with mental health concerns.

Comorbidities are very common

Those presenting with eating difficulties commonly display comorbidity with other psychological problems including depression, anxiety, PTSD, personality disorder issues and underlying schemas & modes, self-harm, psychosis and substance use problems (Godart et al., 2002; Herzog et al., 1996; Hughes, 2012; Kerr-Gaffney et al., 2018; Mills et al., 2006; Goddard, Reid, Hammersley, in press). It may be more appropriate to consider the entire individual complex of a person's concerns, as discussed in the Power Threat Meaning Framework (Johnstone et al., 2018).

Childhood trauma and maltreatment can be a frequent causal factor in eating disorders (Reid et al., 2020) and all the other psychological problems listed above. Some in recovery have been found to describe receiving effective treatment for the physical symptoms and behaviours of their disorder, but feel adjunct psychological problems were less effectively treated (Williams & Reid, 2010). Formulation driven work which address these broader issues can be beneficial in reducing the risk of eating disorder behaviours being replaced other problematic means of coping such as self-harm or substance abuse, or a neurotic axis disorder.

Nonetheless, diagnoses matter for the establishment and resourcing of specialist mental health services, and for making decisions about referring patients to those services. However, sometimes the first or most obvious problem the person presents transforms during transit along referral pathways into the 'primary diagnosis.' For example, it is not that unusual for women with histories of childhood maltreatment to have eating issues, substance abuse issues, self-harm issues, major mood problems and interpersonal issues. How they are diagnosed and treated probably depends upon individual referral pathways. Eating disorder services tend to be aware of such other issues. Other specialist services may be less aware of eating problems, may not assess them and, if they do, may see them as secondary to the referred problem. Alternatively, another service may refer clients on to an eating disorder service rather than, or as a pre-requisite to, working with them, although for more complex cases all psychological interventions should consider all the above issues.

More commonly, in clinical practice, clients with low mood may neglect their feeding, which worsens mood, interferes with sleep and hinders mood enhancing activity. A more regular and healthier diet high in fruit and vegetables and fish can improve mood (Martins et al., 2021) and inadequate carbohydrate intake can impact on tryptophan levels, lowering mood (Kate et al., 2003). Whether or not dietary assessment occurs may depend in part on the clinician's perception of the severity of the client's other problems. More severe problems, such as drug injecting, suicide attempts, or aggression, will understandably tend to be given clinical priority over

monitoring diet. Yet, dietary changes can be a tractable method of improving mood, even when other problems are severe, as will be discussed further below. For example, a consistent diet can be part of interpersonal and social rhythm therapy for mania (Frank, Kupfer et al., 2005).

Eating disorders overlap with autism spectrum disorders (ASD)

ASD may share some complex psychological and neurological aetiology with eating disorders; there are overlapping cognitive deficits (Kerr-Gaffney, Harrison & Tchanturia (2019). Depression is also highly prevalent amongst people living with ASD, ED, or indeed obesity. Moreover, ASD, ED and obesity are all potentially isolating and stigmatised conditions, which may of themselves cause deficits in social cognition and depression.

The effects of starvation are well documented (Golden & Nagata, 2017) and also overlap in terms of cognitive functioning with those recognised within the ASD literature; including increased rigidity of thinking and an increase in detailed focused thinking. These thinking styles are recognised as maintenance factors by the some of the intervention models for the treatment of eating disorders including the Maudsley Model of Anorexia Nervosa Treatment for Adults (MANTRA) and CBT-E; and may be factors in explaining the increased prevalence and poorer outcomes of eating issues amongst people with ASD.

People living with ASD are nearly twice as likely to be obese than are controls (Zhen et al, 2017). Children with ASD are likely to have feeding problems, especially to be selective eaters (Sharp, Berry et al., 2013) often with a preference for foods that are predictable in taste, texture and appearance. Although selective eating in childhood is associated with lower body weight, rigid food preferences, over representation of processed foods and differences in appetite regulation can also contribute to weight gain. Rigid food preferences can also make widening food choices and including healthier items challenging. Formulation of these issues within the context of an individual's broader presentation is therefore key when developing tailored interventions.

Obesogenic society

Contemporary developed nations, and the more affluent sectors of developing ones, tend to be obesogenic (Townshend & Lake, 2017). Key features include the abundant availability of food, especially convenience food high in fat and fermentable carbohydrates, the marketing of food for profit rather than health, reduced activity levels due to motorised transport, well heated buildings, extensive sedentary screen use, and a contemporary media fixation with young, slim, attractive people, worsened by social media and manipulation one's online visual presentation of self (Pauli, 2019). Human physiological satiety mechanisms evolved during times when there were major risks of food shortage and famine, which continued beyond pre-history hunter-gatherer societies (see Tannahill, 2000), so weight gain in times of plenty was adaptive. Humans evolved to gain weight if there was more to eat than was required for the energy to obtain and process foodstuffs.

Given the prevalence of overweight and obesity, the media onslaught is mostly viewed by people who exceed healthy weight, so the media is not the primary cause of eating problems, despite concerns. However, people with eating disorders may value body image perfectionism more than the norm, which may include being more influenced by and oriented towards slim imagery, and they tend to take restraint to extremes.

Due to the obesogenic environment, socially normative diet and activity leads to overweight and obesity, with the majority of the UK adult population now above healthy weight (NHS, 2019). To maintain healthy weight, it is necessary to balance what you eat (Reid et al., 2005) and activity levels. In other words, a modicum of 'watching what you eat' is healthy. People with eating disorder issues can take restraint to extremes and often cycle through binging and near-starvation. The emergence of body dysmorphic disorder (Phillipou et al., 2019) and orthorexia, which is extreme dietary restraint due to making only putatively healthy or pure food choices (McComb & Mills, 2019), suggest that additional perfectionistic approaches to the body may be developing in overlap with eating disorders. The boundaries between

healthy dietary restraint to maintain healthy weight and unhealthy dietary restraint may not be distinct enough to classify discrete disorders.

Obesity and eating disorders (Fairburn & Brownell, 2005) may share an underlying binary conceptualisation of dietary behaviour that divides eating into (a) a highly restricted dieting process that requires motivation and willpower, and (b) unrestricted eating and drinking that focusses on pleasure. The former is in part a reaction to the excesses of the latter. This binary conceptualisation indeed also appears to be the common public perception of diet, as well as the underlying mechanism of Herman and Polivy's restraint theory of human feeding (Herman & Polivy, 1988). There is also a common tendency for the back-and-forth pattern to become more extreme and more unstable. Extreme restraint leads to extreme binges. Dieting to lose weight leads to regain of more weight than was lost, and so on. People who are more prone to restrained eating more readily become unrestrained, for example by distraction (Ogden et al., 2017).

Additionally, mild restraint-binge cycles seem to be normal human behaviours which are often considered socially and culturally appropriate, and there is a continuum between this pattern and severe restraint cycles as found in people diagnosed with eating disorders. For example, many generally careful, regular eaters over-indulge during major festivals such as Christmas (Díaz-Zavala, Castro-Cantú, et al, 2017) and Eid-al-Fitr (Tutumlu & Goktas, 2017).

Eating issues in general clinical psychology

A surprisingly wide range of client concerns appear to be worsened by erratic eating behaviour, which also tends to interact with other health behaviours including sleep hygiene (Wirz-Justice & Van den Hoofdakker, 1999), substance abuse, mood, non-optimal cognitive function, over-use of caffeinated drinks, and both emotional and cognitive difficulties at work or school. For example, skipping breakfast is associated with poorer mood and cognition in children and adults (Benton & Jarvis, 2007; Benton & Brock, 2010) and a long-term pattern of skipping breakfast is associated with mood disorders (Wilson et al, 2020). Moreover, reduced, or increased, appetite and/or

weight gain or loss are common symptoms of depression (e.g., APA, 2013), itself a common comorbidity of most other mental health problems.

A related common erratic eating pattern observed both clinically and in experimental participants' food diaries (e.g., Reid et al., 2014), is to be highly restrained during the day, skipping breakfast and having minimal lunch, then to overeat and drink at night. Some people exhibit an equivalent pattern across the week, with healthy eating Monday morning to Friday afternoon, then overeating and drinking at the weekend. Many clients can find improving and stabilising their diets a simple and tractable way of improving their overall psychological function. This ideally involves eating breakfast every day, eating more during the day, and not adopting severely restrained diets during the week with major lapses at weekends; not so different from guidance to reduce binge eating and bulimia nervosa. It may be useful to consider eating behaviour in many client formulations. For psychological wellbeing and mental health, a regular pattern of eating may be even more important than the nutritional adequacy of the diet.

Eating behaviour in formulation

People living with disordered eating issues and their families often remark that they only received help once their problems became visibly severe and critical. In primary care and mental health services, it is routine to ask about other health related behaviours including tobacco smoking, alcohol use, other drug use and sleep patterns. Currently, it is less common to ask about eating patterns and when this happens then the focus tends to be on biologically healthy eating rather than psychologically adaptive eating. Perhaps basic inquiries about meal patterns and dieting history should be a routine part of all assessments.

Control regarding food choices is important from very young (Brown & Ogden, 2004). Maladaptive over-control seems also to underlie the perpetuation of eating disorders (Williams & Reid, 2010), so perhaps maladaptive eating patterns can be markers of life challenges and mental health problems in general, which are easy to ask about.

When dietary advice is offered it tends to be aimed at physical health outcomes, rather than at managing psychological wellbeing. Yet, a more stable eating pattern, involving regular meals, a balanced diet of the 'eatwell' variety, and including breakfast and fewer restraint-binge cycles, is beneficial to mental health and a harmless intervention for almost everyone.

Within healthcare and the healthy living sector, assessments of eating tend to focus on dietary intake, aimed at assessing the nutritional quality of the person's diet. Indeed, there may well be effects of specific nutrients on mental health (Martins, Tibaes et al, 2021). However, assessing food patterns is much simpler and can be extracted by visual inspection of client food diaries to establish the timing of meals and snacks and their approximate content, without considering their precise nutritional content. The use of diaries can also empower clients to self-monitor their diet and eating patterns and make small sustainable adjustments.

Conclusions

The different eating disorder diagnoses are not clearly distinct from each other and the residual diagnosis OSFED is the largest class of concerns. The aetiology of eating disorders has a lot of overlap with other common mental health concerns and intriguing overlap with autism spectrum disorders. Restraint-binge cycles are common in the general population and affect the wellbeing of many who do not meet eating disorder diagnostic criteria. Eating behaviour patterns should be a routine part of psychological and primary care assessments, which should be incentivised like other health behaviours, with a focus on their psychological consequences as well as their biological ones. This might help with the early detection of eating related mental health concerns, while improved eating behaviour has potential as a straightforward intervention to improve many people's well-being.

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Figure 1: Prevalence of transitions between different types of eating disorder diagnosis (adapted from Cooper, 2017).