

Changing diabetes®

Diabetes and eating disorders: Insulin omission and the DSM-5

Jacqueline Allan, *Diabetics with Eating Disorders and Birkbeck University, London*; Dr Jen Nash, *Diabetes Wellbeing Service, Hillingdon Hospital and Positive Diabetes*

The fact that eating disorders are more prevalent in young women with type 1 diabetes has been well documented (Affenito et al, 1997; Rodin et al, 1986; Rydall et al, 1997; Pinar, 2005). The omission of insulin in order to promote weight loss is much less understood and researched, however. This article describes the current clinical picture of diabetes-associated eating disorders and outlines the work of the charity Diabetics with Eating Disorders (DWED), which was established to support individuals with the condition.

Defining insulin omission

The practice of insulin omission for weight loss purposes is commonly named diabulimia; however, it should be noted that this is a label given by the media. Among some academics, the nomenclature eating disorders in diabetes mellitus type 1 (ED-DMT1) is used to denote the spectrum of disturbed eating behaviour found within this specific demographic.

Insulin omission as a DSM diagnostic category

Unlike anorexia, bulimia and binge eating disorder, insulin omission is not named as a mental health condition in its own right in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM). Instead, insulin omission appeared in the DSM-IV subsumed under the criteria for bulimia (American Psychiatric Association, 2000):

“Individuals with diabetes mellitus and bulimia nervosa may omit or reduce insulin doses in order to reduce the metabolism of food consumed during eating binges.”

This reference has been built upon only slightly in the recently published DSM-5 by the additional inclusion of insulin omission under the criteria for anorexia nervosa (American Psychiatric Association, 2013):

“Individuals with anorexia nervosa may misuse medications, such as by manipulating dosage, in order to achieve weight loss or avoid weight gain. Individuals with diabetes mellitus may omit or reduce insulin doses in order to minimize carbohydrate metabolism.”

Although another mention of insulin omission as clinically relevant is a welcome addition to the DSM-5, the position of DWED is that the failure to identify chronic insulin omission as a mental health condition in its own right is problematic. Under these diagnostic criteria, one may ask: “what is the difference between people with diabetes and anorexia and those with diabetes and bulimia?” Simply put, the answer is weight; however, determining eating disorder severity by weight is not relevant to people with type 1 diabetes who omit insulin. The measure of severity for this demographic would more accurately be HbA_{1c}. Furthermore, these diagnostic criteria propagate the idea that one simply has anorexia or bulimia with diabetes as a footnote. We know that there are diabetes-specific environmental factors that contribute to the development of diabulimia and, perhaps more importantly, that eating disorder treatment programmes that do not address the diabetes-related factors fail abjectly (Rodin et al, 1991; Smith et al, 2008; Ismail et al, 2010).

A treatment model that works

Currently, individuals who are identified as omitting insulin are usually referred to their local eating disorder service. The difficulty is that eating disorder professionals are not experts in diabetes or the psychological implications of diabulimia, often seeing the problem as one of food alone rather than one of food, insulin and all the other stresses of the diabetes regimen. This leads to inappropriate use of NHS resources and, therefore, increased costs, not only in the initial ineffective treatment, but also in the costs of dealing with people with seriously uncontrolled diabetes over the long term. There is also an impact on the individuals themselves, which include failure to maintain employment, reliance on benefits, deterioration in mental wellbeing and relationships and, at its worst, death.

A person with type 1 diabetes who has an eating disorder, particularly insulin omission, cannot be dealt with in isolation by an eating disorder team. What DWED has observed to be effective is the patients’ DSNs being proactive in collaborating with both the individuals and their eating disorder teams to guide and educate them as to how diabetes can be managed whilst the eating disorder is being treated. A multidisciplinary approach is the only effective way to

**Type 1 Diabetes and
ED-DMT1**
Deliberate insulin omission/manipulation and disordered eating

Small words... BIG PROBLEM

Signs and Symptoms

- High HbA1c
- Frequent hospitalisations for DKA/Hyperglycaemia/Hypoglycaemia
- **Lack of BS testing/Reluctance to test**
- Assigning moral qualities to food (good for sugars/bad for sugars)
- **Loss of appetite/Eating More and Losing Weight**
- Severe Fluctuations in weight
- **Injecting in private/Insisting on injecting out of view**
- Fear of injecting/Extreme distress at injecting
- **Avoidance of Diabetes Related Health Appointments**
- Anxiety/distress over being weighed at appointments
- **A fundamental belief that insulin makes you fat**
- Frequent Requests to switch meal plans
- **Frequent trips to the Toilet**
- Frequent episodes of thrush/urine infections
- **Nausea and Stomach Cramps**
- Drinking an abnormal amount of fluids
- **Dental Problems**
- Early onset Diabetic complications
- **Delay in puberty or sexual maturation**
- Irregular menses/amenorrhoea
- **Co-occurrence of depression/anxiety/Borderline Personality Disorder**

DWED Diabetes with Eating Disorders  contact: www.dwed.org.uk

Eating disorders in diabetes mellitus type 1 awareness poster (Diabetics with Eating Disorders)

treat a person with type 1 diabetes and an eating disorder. Hopefully, the next revision of the DSM will differentiate diabulimia and reflect the need for this approach; certainly, DWED is working hard to raise awareness of the condition and establish treatment protocols that are effective. A large part of the work that DWED is undertaking involves training both diabetes teams and eating disorder teams in the best ways to support their patients with eating disorders.

Further information

Diabetics with Eating Disorders (DWED) is a Registered Charity in Scotland that was set up in April 2009 by Jacqueline Allan

following the death of a close friend. The organisation has grown from a grassroots support service to a well-established body involved in campaigning, training, raising awareness and advocacy. The trustee board consists of recognisable names in the fields of diabetes (Dr Stephen Thomas, Dr Miranda Rosenthal, Dr Jen Nash and Nicola Allen, DSN) and eating disorders (Prof Janet Treasure, OBE), as well as former patients and carers. DWED regularly advises and trains healthcare bodies (such as the Institute of Psychiatry, Royal College of Physicians and Royal College of Nursing), the UK Parliament, the Scottish Parliament, charities (such as Diabetes UK, the Juvenile Diabetes Research Foundation and Beat) and private clinics on eating disorders in type 1 diabetes. They have also been involved in the development of several intervention programmes, have delivered lectures internationally and are currently involved with bodies such as Healthwatch, NICE, Strategic Clinical Networks and NHS England and NHS London. To find out more about DWED, or to discuss how they can work with your team, please visit www.dwed.org.uk or email info@dwed.org.uk. ■

Affenito SG, Backstrand JR, Welch GW et al (1997) Subclinical and clinical eating disorders in IDDM negatively affect metabolic control. *Diabetes Care* **20**: 182–4

American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders* (4th edition, revised). APA, Arlington, VA, USA: 546

American Psychiatric Association (2013) *Diagnostic and Statistical Manual of Mental Disorders* (5th edition). APA, Arlington, VA, USA: 376

Ismail K, Maissi E, Thomas S et al (2010) A randomised controlled trial of cognitive behaviour therapy and motivational interviewing for people with type 1 diabetes mellitus with persistent sub-optimal glycaemic control: a Diabetes and Psychological Therapies (ADaPT) study. *Health Technol Assess* **14**: 1–101, iii–iv

Pinar R (2005) Disordered eating behaviors among Turkish adolescents with and without type 1 diabetes. *J Pediatr Nurs* **20**: 383–8

Rodin GM, Johnson LE, Garfinkel PE et al (1986) Eating disorders in female adolescents with insulin dependent diabetes mellitus. *Int J Psychiatry Med* **16**: 49–57

Rodin G, Craven J, Littlefield C et al (1991) Eating disorders and intentional insulin undertreatment in adolescent females with diabetes. *Psychosomatics* **32**: 171–6

Rydall AC, Rodin GM, Olmsted MP et al (1997) Disordered eating behavior and microvascular complications in young women with insulin-dependent diabetes mellitus. *N Engl J Med* **336**: 1849–54

Smith FM, Latchford GJ, Hall RM, Dickson RA (2008) Do chronic medical conditions increase the risk of eating disorder? A cross-sectional investigation of eating pathology in adolescent females with scoliosis and diabetes. *J Adolesc Health* **42**: 58–63



Changing diabetes® and the Apis Bull are registered trademarks for Novo Nordisk A/S.

Changing diabetes® is Novo Nordisk's global campaign to improve prevention, detection and care, and to put diabetes on the public and political agendas. The company's global advocacy to raise awareness of and spur action on diabetes supports the implementation of the UN Resolution on diabetes, adopted in December 2006, in recognition of diabetes as a major global health challenge and in respect of the human right to proper care. As part of this campaign, *Journal of Diabetes Nursing* now features articles under the banner of Changing diabetes® – welcoming submissions from you, our readers, outlining any UK-based initiative, research project, local idea, or personal opinion that relates to improving diabetes care in the UK. If you have any queries, or would like to submit your work for this feature, please email jdn@sbcommunicationsgroup.com or call 020 7627 1510.

