

STARVING TO BE THIN:

ANOREXIA NERVOSA AND BULIMIA NERVOSA IN ADOLESCENTS



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Case 1

A 14-year-old female is brought to you by her mother. You have been looking after this family for the past 10 years. The mother is concerned about her daughter's dieting behaviour and weight loss. She is also concerned about the four-month absence of her daughter's period.

Case 2

Parents of a teenage female are concerned about her eating habits. In addition, they are worried about her risk-taking behaviour that includes staying out late at night, partying with friends, and possibly being sexually active with her boyfriend.

This article concentrates on anorexia and bulimia nervosa and how these disorders affect teenagers and their families. Eating disorders are heterogeneous, complex illnesses, best understood when conceptualised under the umbrella of the biopsychosocial model. The reported prevalence of anorexia nervosa in adolescent females 15 to 19 years old is 0.48%, making it the third most common chronic health condition after obesity and asthma. As for bulimia nervosa, the estimates vary between 1% to 5%, depending on factors, such as population surveyed, age group, and diagnostic criteria.¹

HOW DO I DIAGNOSE?

A common belief among health-care providers is that patients struggling with eating disorders are often in "denial" and do not acknowledge their symptoms. This belief has not been the case in our experience. It is true that the younger age group (11 to 15 years) may not acknowledge some features of the disorder, such as a fear of being overweight or the pursuit of being thin, especially when brought to your attention by their parents (Table 1). Once a sense of respect and

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Table 1

What is Anorexia/Bulimia Nervosa?

According to The Diagnostic and Statistical Manual of Mental Disorders by the American Psychiatric Association, the following are characteristics of anorexia/bulimia nervosa:

Anorexia Nervosa

- Intense fear of weight gain associated with fear of fatness and a persistent pursuit of thinness.
- Usually associated with either restrictive eating patterns or compensatory behaviours like exercising or self-induced vomiting.
- These patients are below their standard body weight or are not able to make weight gains when developmentally expected, like during puberty.

Bulimia Nervosa

- An intense preoccupation with body weight and shape linked to binge eating and followed by compensatory behaviours.
- For these adolescents, weight is usually in the normal range or above it by virtue of the unhealthy eating practices.³

trust has been established with the patient and family, these issues become less relevant.

HOW DO I ESTABLISH A SENSE OF TRUST?

Once the issue of a possible eating disorder has been identified, take the time to review the concepts of consent to treatment and confidentiality with the young person and his/her parents. They

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vary according to legislation in different provinces. It is my practice to clarify these concepts from the beginning. I clarify any misperceptions and then proceed to acknowledge their views. In doing so, I am setting the stage for, what I expect will be, clear and open communication.

THE FAMILY MEETING

Time is one of the most precious commodities in Canadian health care. Busy office practices contribute to a sense of anguish and stress that patients and families struggling with this disorder deal with on a daily basis. Allotting 45 minutes to an hour for an initial assessment is imperative in the early stages of the process. In my clinical experience, if this basic and fundamental principle is not followed, it may set the stage for further "non-co-operative interactions" between the health-care provider and the young person and family (Table 2). In our overall experience, working with teenagers and families struggling with either anorexia or bulimia nervosa, there is a sense of fear, anguish, guilt, blame, and shame, compounded by sadness, anger, and uncertainty. By setting up an initial family meeting, you begin the process of identifying some of these feelings. Also, the meeting helps to define and

Practice Pointer

How do I conduct the initial interview and followup visits?

A calm, confidential environment coupled with a non-judgmental approach from the health-care provider will provide the patient and family with a sense of respect that may help the therapeutic alliance.

enhance parental authority, which in many cases has been “apparently shifted” towards the young person due to the chaotic nature of the crisis. Ideally, all members of the household should be present in the meeting.

MEETING WITH THE YOUNG PERSON

A health-care provider who treats adolescents must be willing to take a developmentally appropriate psychosocial history. Dr. Cohen While, a fellow at the Los Angeles Children's Hospital, refined a system for organising the psychosocial history that was developed in 1972 by Dr. Harvey Berman of Seattle. The system has been used successfully around the world in the adolescent health-care field. This method structures questions so as to facilitate communication and to create a sympathetic, confidential, respectful environment where adolescents may be able to attain adequate health care. The approach is known as the acronym HEADSS (Home, Education/employment, peer group Activities, Drugs, Sexuality, and Suicide/depression).⁴ By using this particular format, we have been able to identify health risk behaviours the adolescent

Table 2

The Office Approach

1. Initial assessment: Initial meeting with patient and parent

Introduce the concepts of consent to treatment and confidentiality.

2. Full Assessment with patient and family: (30 minutes)

By setting up an initial family meeting, you begin the process of defining and enhancing parental authority with regards to the management of the crisis.

3. Individual assessment: (30 minutes)

Obtain a detailed history from the adolescent.

4. Formulate:

Short-term plan.
Long-term plan.

5. Summary: Therapeutic manoeuvres

1. Greeting the family.
2. Taking a history of the impact of the eating disorder on the family.
3. Creating a sense of the severity of the illness and the need for action.
4. Separating the illness from the patient.
5. Summarise the session and empower both patient and family.

Followup Visits

Regular weekly followup visits from medical, nutritional and psychosocial support should be scheduled for the patient and one family member for eight to 10 sessions.

may be engaged in and, at the same time, learn the strengths and protective factors that the

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Table 3

SCOFF Questionnaire

- Do you make yourself Sick because you feel uncomfortably full?
- Do you worry that you have lost Control over how much you eat?
- In a recent three-month period, have you lost Over 6.5 kg or 15 lbs?
- Do you believe yourself to be Fat when others say you are too thin?
- Would you say that Food dominates your life?

One point for every "yes" (a score of greater than or equal to two indicates the possibility of an eating disorder).

The BMJ publishing group, Morgan JF, Reid F, and Lacey JH: The SCOFF questionnaire: assessment of a new screening tool for eating disorders. BMJ 1999; 319 (7223):467-8.

patient and family share. This information may be used to increase the therapeutic alliance and to foster resiliency in a "developing fragile self-esteem system" for the young patient.

HOW DO I SCREEN FOR AN EATING DISORDER?

A variety of tools have been developed to screen for a possible eating disorder, including the Eating Attitudes Test (Eat-26). This self-administered instrument comprises 26 itemised questions and may take five to 10 minutes to complete.⁵ Another method, the SCOFF questionnaire, was developed in 1999.⁶ This particular screening tool asks five eating-related questions, and awards one point for every positive response, with more than two points indicating the possibility of an eating disorder (Table 3).

The clinical presentation of young people with eating disorders is different from adults. For younger adolescents, between 11- and 15-years-old, there appears to be a wider range of eating problems better conceptualised as eating disturbances. Linear growth, puberty, and bone accretion are some of the biological develop-

mental milestones that may be impaired in this particular age group. Cognitive ability and aspects of the thought processes need to be considered as well when diagnosing young people with these particular chronic health conditions. Lastly, the role of the family in the recovery process is impor-

tant. To date, the current diagnostic criteria do not fully encompass these issues.⁷

WHAT TO DO?

Malnutrition is a common feature of adolescence affected by anorexia nervosa. One of the remarkable characteristics of these patients is that blood tests tend to be "normal" despite the weight loss. Electrolytes, complete blood count, renal function, minerals, and liver function tests may show minor abnormalities or are in the normal range. These results possibly reflect the adaptative mechanism the systems go through when malnutrition is present. It is important to clarify; for example, a normal blood urea nitrogen in a malnourished adolescent almost invariably represents intravascular volume contraction. Some other common abnormalities include: decreased bone accretion and osteopenia, hormonal changes with a picture of sick euthyroid syndrome, and amenorrhea often secondary to hypothalamic dysfunction. Some of these changes appear to be reversible with nutritional rehabilitation and weight restoration (Table 4).

Ambivalence is an expected trait of patients struggling with these disorders. Health-care

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Table 4

Medical complications in children and adolescents with eating disorders

Complications	Anorexia Nervosa	Bulimia Nervosa
Fluid and Electrolytes	Electrolytes are usually normal but may show low sodium, chloride, potassium and hypophosphatemia due to refeeding syndrome.	Hypokalemic, hypochloremic, and metabolic alkalosis with dehydration and vomiting. Also, hyponatremia, diarrhea with laxative abuse, and rarely, mineral changes.
Metabolic	Fasting hypoglycemia, increased free fatty acids with hyper/hypocholesterolemia and osteopenia with decreased bone mineral density.	The same as anorexia nervosa, but with low zinc levels.
Cardiovascular	Bradycardia and hypotension with orthostatic changes. Also, electrocardiogram changes, with T wave, ST- segment and QT _C abnormalities. Other complications include sudden cardiac death, mitral valve prolapse, pericardial effusions, congestive cardiomyopathy, refeeding edema.	Same, Ipecac cardiomyopathy, Pedal edema.
Pulmonary	Rib fractures, subcutaneous emphesema and pneumomediastinum.	Aspiration pneumonitis.
Gastrointestinal	Constipation, delayed gastric emptying, acute gastric dilatation, and dyspepsia. Also, transaminitis and decreased alkaline phosphatase. Other complications include superior mesenteric artery syndrome and pancreatic dysfunction.	Parotid swelling, palate lacerations, impaired taste, enamel erosion, increased caries and periodontal disease. Also, gastroesophageal reflux, gastric and duodenal ulcers, esophageal tearing and perforation, and acute gastric dilatation. As well as hyperamylasemia and pancreatitis. Other complications include paralytic ileus, constipation, cathartic colon, rectal bleeding and gall bladder stones.
Renal	Abnormal renal function test with elevated urea and creatinine, changes in urinary concentration, decreased glomerular filtration rate and polyuria.	The same as anorexia nervosa with kaliopenic nephropathy, pyuria and hematuria.
Endocrine	Amenorrhea, low luteinizing hormone, follicle stimulating hormone, estradiol, thyroid stimulating hormone, triiodothyronine (T ₃) and thyroxine, as well as increased reversed T ₃ . Also, high cortisol and growth hormone levels, and erratic antidiuretic hormone secretion.	Menstrual irregularities and polycystic ovaries.

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Table 4 continued

Eating disorders in children and adolescents: Medical complications

Complications	Anorexia Nervosa	Bulimia Nervosa
Hematologic	Anemia, leucopenia, thrombocytopenia, bone marrow hypocellularity, and low erythrocyte sedimentation rate.	Anemia secondary to blood loss.
Immunologic	Decreased levels of complement factors.	
Neurologic	Computed tomography, magnetic resonance imaging, and positron emission tomography scan abnormalities. Metabolic encephalopathy with seizures.	Metabolic seizures.
Dermatologic	Brittle hair, nails, hair loss, yellowish skin due to hypercarotenimia, dry skin, lanugo hair.	Russell's sign, muscle weakness.

providers need to be particularly sensitive to this ambivalence around recovery, and to the parents' or guardians' possible feelings of anxiety, self-

blame, despair, and helplessness. For some practitioners, this ambivalence may translate into feelings of frustration when confronted with an apparently unmotivated adolescent struggling with an eating disorder. Understanding the adolescent's readiness and motivation to change is pivotal in the process of establishing a therapeutic alliance. Much has been written in this regard starting with the work by Prochaska and DiClemente, initially pioneers in substance abuse literature, named the transtheoretical model of change. Freedman and Leichner produced an excellent reference, "Establishing therapeutic alliance with adolescents suffering from eating disorders." This particular publication provides insights into the previously described concepts.^{8,9}

Table 5

Admission Requirements

Some of the widely accepted admission criteria for outpatient programs include:

1. Medical instability supported by bradycardia and orthostatic hypotension, among other findings.
2. Severe malnutrition, depending on the age of the young people, may vary with potential for delaying pubertal development and stunting growth.
3. Electrolyte problems related to eating disorder behaviours, such as intractable purging behaviour with metabolic abnormalities.

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Practice Pointer

The following sample statement illustrates a scenario that may be used in the setting of an adolescent interview:

“To me as a physician and a health-care provider, confidentiality is a privilege; we may discuss some personal issues, and, as such, I will do my best to ensure that the information you share with me remains between us. At the same time, it is my responsibility to ensure your welfare and safety. If I were worried about you harming yourself or someone else, or I learn that you have been abused in some way, I may have to discuss this information with your parents (when appropriate), caregivers, or others (health-care providers, authorities, Ministry of Children and Families). Again, I would like to emphasise that my goal is to provide you with an environment where you feel free to explore some personal issues.”

WHEN SHOULD A PATIENT GO TO A SPECIALIST?

Once you have done an assessment based on the particular needs of the teenager and family, you may consider following the patient in your practice or referring the patient to a specialised treatment centre (sites are listed in the reference section). When a physician follows a young person and family in their practice, it is advisable to ascertain support from other health-care professionals, namely dietitians and mental health staff (social worker, psychologist, psychiatrist). A collaborative approach with knowledgeable health-care providers will enhance and facilitate the recovery

process for this adolescent and family. Over the past several years, there has been a move towards outpatient treatment of this condition. In our institution, we have an intensive treatment program that currently accommodates up to 10 patients. This setting is supported by an outpatient program where approximately 90 patients and families are followed yearly. Different programs have different admission criteria for specialised treatment (Table 5).

References

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8. Freedman G., Leichner P: Establishing therapeutic alliance with adolescents suffering from eating disorders. *Patient Care* 2001; 12(5):26-8.
9. Vitousek K, Watson S, Wilson G: Enhancing motivation for change in treatment resistance eating disorders. *Clin Psych Rev* 1998; 18(4):391-420.

Suggested Web sites

1. American Psychiatric Association: Practice guidelines for the Treatment of Patients with Eating Disorders. www.psych.org/clin_res/guide.bk42301.cfm
2. Bioethics for Clinicians: A cross cultural ethics series from the Canadian Medical Association. http://www.cmaj.ca/misc/bioethics_e.shtml
3. Eating Attitudes Test (EAT-26). Self reported test, that may be scored by yourself. www.healthplace.com/Communities/Eating_Disorders/concernedcounseling/eat/index.htm
4. National Eating Disorders Information Center (NEDIC). Provides information and resources to patients, families and health-care providers. www.nedic.ca

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5. Eating Disorders Treatment Centers.
<http://www.mirror-mirror.org/centers.htm>