EuTEACH
European Training in Effective Adolescent Care and Health

Module B7: Eating Disorders

Entry scenario: The entry scenario addresses a variety of issues and problems associated with the module topic. It may be used in class to identify the needs and interests of the students, leading to the formulation of training objectives.

A 15 year-old girl comes to the clinic with her mother. She was referred by the school because her teachers noticed she has been losing weight for the past three months and that she is having concentration problems during class. She has been a high achiever in school. The mother says that her daughter has been eating alone in her room and refusing to have dinner with her family. The father is an engineer and the mother is a retired dancer. The girl started regular menses at 11, but she has had no bleeding for the last two months. She avoids fat and sweets, never eats breakfast and exercises five days a week. Her oldest brother teased her about being fat her when she was younger, around the time her periods started. She has few friends. From the school letter, you calculate a BMI of 16, which is under the 5th percentile for age and gender. The girl refuses to be either weighed or examined.

General Goals for Learners. By completing the module the participant will be able to:

I. Describe the normal range of adolescent body shape, and place in context of cultural and social influences on body image

II. Define common eating disorders and place in context of relevant epidemiological data and theories of causal factors

III. Assess and diagnose common eating disorders

IV. Develop a treatment plan for an adolescent with an eating disorder, and communicate effectively with all the people involved to implement it

V. Devise health promotion strategies that address body image, dieting and eating disorders

EuTEACH
European Training in Effective Adolescent Care and Health

Goal I. Describe the normal range of adolescent body shape, and place in context of cultural and social influences on body image

Training Objectives Key topics to be covered	**Training Tools**	**Activities, Issues and Questions**
A. Define the range of adolescent body shape - Weight, height and body mass index (BMI) - Normal variations in body build - Effects of gender and puberty on fat distribution and muscle mass	Preparatory reading Homework practice charts Group work (group 1 work on effect of puberty on girls and group 2 effect of puberty on boys) one reporter in each group	Review definitions of normal weight, height and BMI in adolescent boys and girls using weight, height and BMI charts. Review the differential effects of puberty in males and females on fat distribution, muscle mass and body shape.
B. Identify cultural influences on body image - Cultural norms - Media images - Dieting industry	Small group work with material (journals, computer, pictures)	Examine the portrayal of gender and body shape in advertisements, teen journals, MTV. What are the strongest influences of body image in participant's own culture? Assess the trend in dieting behavior in one's own country.
C. Increase health provider's awareness of adolescent concerns and complaints related to		**Discussion questions:** what is the prevailing body shape norm for differing cultures is it changing, and why? Identify pressures to conform to an ideal. Is there a shape that is considered "abnormal", and by whom? Discuss the particular vulnerability of adolescents to the pressures to

body image - Influence of body shape on self-image - Early versus late maturer - Peer comparisons - Emergence of sexuality	Group discussion Or use message triangle technique	conform. Describe the common questions and problems brought up by female and male adolescents about their bodies. Discuss the issue of health provider's time to deal with "small" concerns, pains, and fears.

Goal II: define common eating disorders and place in context of relevant epidemiological data and theories of causal factors

Training Objectives Key topics to be covered	**Training Tools**	**Activities, Issues, and Questions**
A. Define anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified using criteria of the DSM V and ICD 10	Fishbowl Mini-lecture	Review the diagnostic criteria for different eating disorders in DSM V and ICD 10 and the differences between the two classification systems (annex). Discuss why it is important to consider the context of adolescence in addition to the formal diagnostic criteria. (Ref 17).
- Physical indices - Behavioral and psychological symptoms	Class discussion	Using a clinical vignette, identify the thoughts, behaviors, and symptoms characteristic of eating disorders. Discuss the existence of "partial" or sub-clinical eating disorders that do not fulfill the classic criteria.
B. Assess the prevalence and gender-age distribution of eating disorders nationally and internationally	2 by 2 work	Students assess own country's statistics. What are the important trends?
C. Describe the physical complications of eating disorders	Read around	Use a review article on physical complications and split the article in parts assigned to small group to read and report to the whole group
- Endocrine disturbances - Cardiovascular effects - Growth problems -Brain distrurbances	Lecture Class discussion	Lecture issues: Explore the variability of the spectrum, depending on the disease and its management.

D. Describe psychological effects and co-morbidities of eating disorders, such as - Obsessive-compulsive disorder - Depression	Class discussion	Introductory mini-lecture if needed. Participants share knowledge gained from clinical experience with eating disorders. Acknowledge the importance of identifying a co-existing obsessive disorder or depression.
E. Examine current research on factors associated with the development of eating disorders - Sexual abuse - Family communication - Genetics - Personality factors - Dieting as risk factor - Fat deposits of puberty	Mini-lecture Class discussion	In discussion, include the prognosis of sub-clinical (partial) syndromes. Lecture topic: Review the most current evidence of risk factors and associations. Discussion question: what are the implications of research indicating an addiction may develop to an endorphin reaction to starvation?

EuTEACH
European Training in Effective Adolescent Care and Health

GOAL III. ASSESS AND DIAGNOSE COMMON EATING DISORDERS

Training Objectives Key topics to be covered	**Training Tools**	**Activities, Issues, and Questions**

A. Indicate the key items on patient history, and on physical and psychological assessment leading to the diagnosis of an eating disorder	Interactive lecture Case study	Case study: Parents bring in their 17 year-old daughter who, they suddenly realize, no longer eats with the family, complains about fatigue after swimming training, and has changed to wearing baggy clothes all the time. How would you take the history and which questions would you ask to whom? What signs would you look for on the physical examination? How would you perform a mental health exam? - Weight + nutritional status - Eating and exercising patterns -Body shape+ body image concerns
B. Identify clinical manifestations of eating disorders, including atypical forms, in very young adolescents and in males	Group discussion	Discuss fat phobia, selective eaters, food avoidant emotional disorders
C. Identify strategies commonly used to conceal the behaviors associated with eating disorders	Fishbowl or Small group discussion	Research indicated that UK doctors have a low index of suspicion for eating disorders and difficulty recognizing the possible disorder. What factors in addition to patient's concealment may contribute to this?
D. Demonstrate obtaining relevant information from an adolescent with a suspected eating disorder, and explaining	Small group work using role play followed by plenary review Simulated	Utilizing questions from case study in objective A, role-play the following cases. **<u>Case study 1</u>:** A very thin mother and her 12 year-old girl comes to the clinic because the mother feels concerned about the weight of her daughter. The girl did not want to come to the clinic and denies any change in her eating habits. She complains that her mother is very intrusive, and that she started serving the family too much fast food during weekends. The mother reveals a strong

findings to patient and his/her parents	patients	family history of both eating disorders and obesity. **<u>Case study 2:</u>** A 15-year old girl with a BMI of 18 wants to become a model. She feels fat and requests a dietary plan. **<u>Case study 3</u>:** A 14 -year old girl with normal weight presents to the emergency room with heartburn. The physician notices erosion of her teeth and calluses on the back of her hand. The girl will not admit to vomiting. Small groups explore the approaches that successfully open the communication. Also, formulate appropriate responses to a thin girl who insists she is fat.
E. Discuss healthcare provider's personal attitudes towards eating disorders	Self-reflection, and small group discussion VIPP card and group discussion	Discuss how the health provider's gender, own body size and personal diet and activity habits may influence his or her assessment and recommendation regarding diet and activity of an adolescent? What is the influence of provider's gender on his/her sensitivity to the issues of eating disorders? What are the issues for overweight health professionals in assessing eating disorders? Participants write attitudes, thoughts on cards and stick it on the wall -staff reactions (aggressive, rejection etc…) -Patient's Ambivalence/denial of diagnosis -Problematic family -Rejection of psychological services -Differences/conflict within management team -Non-compliance…

Goal IV. Develop a treatment plan for an adolescent with an eating disorder, and communicate effectively with all the people involved to implement

Training Objectives	Training Tools	Activities, Issues, and Questions

A. Evaluate the evidence for effective treatment of different eating disorders	Read around	Suggested lecture theme: Provide evidence for the effectiveness of available treatment modalities such as family based therapy, psychotherapy, cognitive-behavioral therapy, medication, and nutritional interventions.
	Discussion	Discuss simple behavioral strategies for bulimia such as self-help groups and self-management plans.
	Small group work	Review data on the prognosis of different eating disorders and discuss possible treatment strategies for chronic eating disorders. What are the important considerations in designing a treatment plan?
B. Discuss short and long term prognoses for each eating disorder in psychological and physical terms, including mortality	Group work on case study Or VIPP card	Case study: A 16 year- old girl has been hospitalized for two months because of anorexia. She was able to increase her BMI from 14 to 16, and she resumed having her menses. However, she is worried about going home because she feels she will relapse when she is living with her dysfunctional family again. Her parents are worried about long term physical complications of the ED
C. List medical and psychological criteria for hospitalization and for discharge	Small group discussion Or VIPP card	List of criteria for hospitalization
	Mini-lecture	Show an example of guideline for management of ED including somatic and psychological indications to hospitalized
D. Develop a management plan for the adolescent with an eating disorder	Group discussion	Discuss the main principles of ED treatment -Multidisciplinary approach -psychological treatment associated with somatic follow-up -discuss around the utility of dietician when? Which ED? Etc..

E. Demonstrate skill in managing difficult situations, ethical and legal issues associated with ED	Small group work	-Discuss experiences around alternative medicines (yoga, art therapy, music therapy etc…) Case study: A 15 year- old girl presents with amenorrhea, low weight, low blood pressure, cold extremities, and hypokalemia at the emergency room. There is need for immediate hospitalization but the parents refuse, arguing that their daughter will have a psychiatrist appointment within a couple of days. Case study: A 12 year-old boy presents with growth failure for the last two years. His BMI is on the 10th centile. He has hypothyroidism and carotenemia. He has no concerns about his current weight and shape, although he has no appetite and is phobic about becoming fat. His father had a heart attack two years ago and is chronically unwell. There are no organic abnormalities. An atypical eating disorder is suspected. What are the specific issues for medication in young males with atypical eating disorder? Case study: An 18 year- old girl with chronic eating disorder has a BMI of 14, is vomiting twice a day and has lost 2 kg in the last 2 months. She has had two previous hospitalizations and dropped out of psychiatric treatment a few months ago. The girl refuses to be re-hospitalized, and the parents are extremely worried. Issue: Is there a role for mandatory medication? Addresses following issues - Legal and child protection issues (voluntary and involuntary medication/hospitalization) - Partnerships with family and adolescent - Need for hospitalization - Criteria for discharge
F. Demonstrate effective communication in sensitive situations	Role play (3 by 3) (1 person plays the patient, one the health provider and one observe)	Use the case study here above to do role play

Goal V. Devise health promotion strategies concerned with body image, dieting and eating disorders

A. Assess current knowledge of prevention of eating disorders	Read around Fishbowl	What risk factors are currently being discussed in the literature as possible targets for intervention? Discuss the potential for harm of individual and population interventions concerning weight and body image.
B. Explore the role of health provider in early detection/secondary prevention - Use of a risk factors profile? - Secondary prevention or early detection of subclinical syndromes	Small group discussion	Case study: You receive a telephone call from a school nurse about a girl who might have a mild eating disorder. The nurse has not told the girl of her concerns, and asks you how she should handle the case. Case study: You weight you adolescent patient (17 yo) and he is above the 97 th centile. What do you say? In what ways can the health provider help young adolescents better understand the causes of pubertal body changes? Consider ways of developing early intervention programs for subclinical eating disorders (including obesity) in schools and community settings.
C. Respond to requests for community programming concerning eating disorders	Small group work with plenary	Case study: A school nurse has recently had three cases of anorexia in her school and asks you to design an educational preventive program. What is your response? Discussion topic: If you were asked to speak at a school about eating disorders, what would be the main message to give to 15-16 year olds? What would be said to 9-12 year olds? What should not be said?

Annex 1

I- Revision of the diagnostic criteria for eating disorders in DSM V:

Diagnostic Criteria for Anorexia Nervosa

A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected)
B. Intense fear of gaining weight or becoming fat, even though underweight.
C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

Specify type:
Restricting Type: during the current episode of Anorexia Nervosa, the person has not regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)
Binge-Eating / Purging Type: during the current episode of Anorexia Nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

Diagnostic Criteria for Bulimia Nervosa

- **A.** Recurrent episodes of binge eating. An episode of binge-eating is characterized by both of the following:
  - (1) eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances.
  - (2) A sense of lack of control over eating during the episode (e.g:, a feeling that one cannot stop eating or control what or how much one is eating)

- **B.** Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercise.
- **C.** The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.
- **D.** Self-evaluation is unduly influenced by body shape and weight.
- **E.** The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

Specify type:

Purging Type: during the current episode of Bulimia Nervosa, the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.
Non purging Type: during the current episode of bulimia nervosa, the person has used other inappropriate compensatory behaviors, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics or enemas.

Eating Disorder Not Otherwise Specified

This category is for disorders of eating that do not meet the criteria for any specific Eating Disorder. Examples include:

1. For females, all of the criteria for Anorexia Nervosa are met except that the individual has regular menses.
2. All of the criteria for Anorexia Nervosa are met except that, despite significant weight loss, the individual's current weight is in the normal range.
3. All of the criteria for Bulimia Nervosa are met except that the binge eating and inappropriate compensatory mechanisms occur at a frequency of less than twice a week or for a duration of less than 3 months.
4. The regular use of inappropriate compensatory behavior by an individual of normal body weight after eating small amounts of food (e.g., self-induced vomiting after the consumption of two cookies).
5. Repeatedly chewing and spitting out, but not swallowing, large amounts of food.
6. Binge-eating disorder: recurrent episodes of binge eating in the absence of the regular use of inappropriate compensatory behaviors characteristic of Bulimia Nervosa.

II- Revision of the diagnostic criteria for eating disorders in ICD-10 Classification of Mental and Behavioral Disorders:

Diagnostic Criteria for Anorexia Nervosa

A. There is weight loss or, in children, a lack of weight gain, leading to a body weight at least 15% below the normal or expected weight for age and height.
B. The weight loss is self-induced by avoidance of "fattening foods".
C. There is self-perception of being too fat, with an intrusive dread of fatness, which leads to a self-imposed low weight threshold.
D. A widespread endocrine disorder involving the hypothalamic-pituitary-gonadal axis is manifest in women as amenorrhea and in men as loss of sexual

interest and potency. (An apparent exception is the persistence of vaginal bleeds in anorexic women who are on replacement hormonal therapy, most commonly taken as a contraceptive pill).

E. The disorder does not meet criteria A and B for bulimia nervosa.

Atypical anorexia nervosa

Disorders that fulfill some of the features of anorexia nervosa but in which the overall clinical picture does not justify the diagnosis. For instance, one of the key symptoms, such as amenorrhea or marked dread of being fat, may be absent in the presence of marked weight loss and weight-reducing behavior. This diagnosis should not be made in the presence of known physical disorders associated with weight loss.

Diagnostic Criteria for Bulimia Nervosa

A. There are recurrent episodes of overeating at least twice a week over a period of 3 months) in which large amounts of food are consumed in short periods of time.
B. There is persistent preoccupation with eating, and a strong desire or a sense of compulsion to eat (craving).
C. The patient attempts to counteract the "fattening" effects of food by one or more of the following:

(1) Self-induced vomiting
(2) Self-induced purging
(3) **Alternating periods of starvation**
(4) **Use of drugs such as appetite suppressants, thyroid preparations or diuretics; when bulimia occurs in diabetic patients they may choose** to neglect their insulin treatment.

D. There is self-perception of being too fat, with an intrusive dread of fatness (usually leading to underweight).

EuTEACH
European Training in Effective Adolescent Care and Health

Resources

USC Keck School of Medicine (click "eating disorders")
http://www.usc.edu/student-affairs/Health_Center/adolhealth/content/b7.html

Cole TJ & al. Establishing a standard definition for child overweight and obesity worldwide: international survey. BMJ 320 :1-6 (May 2000)
http://www.bmj.com/content/320/7244/1240.full.pdf

US Centers for Disease Control Growth Charts
http://www.cdc.gov/growthcharts/

Eating Disorders in Adolescents (Position Paper Society for Adolescent Health and Medicine)
http://www.jahonline.org/article/S1054-139X(03)00326-4/fulltext

American Academy of Pediatrics: Clinical Report—Identification and Management of Eating Disorders in Children and Adolescents
http://pediatrics.aappublications.org/content/126/6/1240.full.pdf+html

American Academy of Pediatrics: Committee on Adolescence. Clinical Identifying and Treating Eating Disorders. Pediatrics 111: 204-211 2003
http://pediatrics.aappublications.org/content/111/1/204.full

DSM-5™. American Psychiatric Association. 2013, 443 pages, ISBN 978-0-89042-556-5