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Anorexia Nervosa

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DESCRIPTION OF ANOREXIA NERVOSA

Essential features of anorexia nervosa (AN) include energy intake restriction, significantly low weight, intense fear of becoming fat, and emotional disturbance related to body weight or shape (American Psychiatric Association [APA], 2013).

- Significantly low body weight for developmental stage is calculated by Body Mass Index (BMI) and is defined as weighing less than "minimally" expected (APA, 2013).
- There are two subtypes: restricting type and binge-eating/purging type. Based on BMI, severity levels are mild, moderate, severe, and extreme (APA, 2013).
- AN has many deleterious health effects [National Institute of Mental Health (NIMH), 2013] and holds one of the highest mortality rates among all psychiatric disorders (approximately 4%). AN can be the most physically and emotionally damaging of the eating disorders (Crow et al., 2009).
- Biological risk factors include: female sex; relatives with a history of eating, depressive, or obsessive-compulsive disorders; and the developmental period of adolescence/early adulthood (average age of onset is 19 years).
- Environmental risk factors include: occupational or vocational activities that support thinness, cultural variants, socioeconomic status, and psychosocial stressors (Berg & Peterson, 2013; Berg, Peterson, & Frazer, 2012; Crow et al., 2009; Dailey, Gill, Karl, & Barrio Minton, 2014; Fichter, Quadflieg, & Hedlund, 2006; Harris & Barraclough, 1998; Lindberg & Hjem, 2003; NIMH, 2013).
- AN occurs predominately in females and is most often found in post-industrialized countries with relatively high per capita incomes. Cultural and geographic norms, risk factors, and peer influences should be taken into consideration. Prevalence rates are highest among those who identify as non-Hispanic and white (Dailey et al., 2013; Hudson et al., 2007).

Prevalence

- Annual prevalence rates are 0.4% to 0.9% for females with a lifetime prevalence rate of up to 0.3% in males (APA, 2013; Hudson, Hiripi, Pope, & Kessler, 2007). Female to male ratio of AN is between 4:1 and 10:1 (Hudson et al., 2007; Oudijn, Storosum, Nelis, & Denis, 2013).

Resources:
Academy for Eating Disorders
http://www.aedweb.org

American Psychiatric Association
http://www.psychiatry.org

Mayo Clinic
http://www.mayoclinic.org/diseases-conditions/anorexia/basics/definition/CON-20033002

National Eating Disorders Association
http://www.nationaleatingdisorders.org/anorexia-nervosa

National Institute of Mental Health
http://www.nimh.nih.gov/health/topics/eating-disorders/

IDENTIFICATION/ASSESMENT STRATEGIES

Longstanding assessment instruments that measure the symptomology and severity of eating disordered behaviors are available for clinical use. The Eating Attitudes Test and the Eating Disorder Examination Interview represent two commonly used assessments. Specific information about the design, administration, and application of these instruments is provided below.

Eating Attitudes Test (EAT-40© and EAT-26©; Garner and Garfinkel, 1979; Garner, Olmsted, Bohr, & Garfinkel, 1982)

The Eating Attitudes Test (EAT) is a time-tested, widely used screening instrument that has been applied to assess eating disorder risk in clinical and non-clinical settings. The EAT is a self-report measure administered by mental health and educational professionals who seek to determine if an individual should be referred to a specialist for an eating disorder evaluation. The EAT is not designed to provide a diagnosis, but instead identifies behaviors that may be indicative of an eating disorder. The original 40-item assessment (Garner & Garfinkel, 1979) was designed with AN as a primary evaluation target, while the updated 26-item assessment (Garner, Olmsted, Bohr, & Garfinkel, 1982) is designed to be both more efficient and more general in nature. The test items are rated on a six-point scale in regards to how often the subject engages in specific behaviors. The subjects may answer "always," "usually," "often," "rarely," "sometimes," and "never" to each inquiry, and answers are weighted to construct the overall "referral index" score. A total score of 20 or more, or pre-defined thresholds on certain criteria, indicate a need for further assessment. The EAT-26 and EAT-40 tests are copyrighted, but the copyright holders offer use permission at no cost.

Resources:
Online access to EAT-40 and EAT-26 assessments
http://www.eat-26.com/Form

Use permission page for EAT-40 and EAT-26 assessments
http://www.eat-26.com/permission.php

Eating Disorder Examination Interview (EDE and EDE-Q; Cooper and Fairburn, 1987)

The Eating Disorder Examination Interview (EDE) is a semi-structured, clinician-completed interview that is designed to assess the presence of psychopathologies that are associated with eating disorder diagnoses (Cooper & Fairburn, 1987). The EDE-Q is a questionnaire adapted from the EDE and allows for self-reporting in the same structure as the original. The EDE and EDE-Q are rated through the use of four subscales (restraint, eating concern, shape concern, and weight concern) and provide a global score. Forty-one responses are recorded based on behavioral frequency over a 28-day period. Scores for each item use a 0–6 point scale, with an everyday occurrence scoring a 6, and no occurrences scoring a zero. Point assessments from 1–5 are tallied for responses of "1–5 days," "6–12 days," "13–15 days," "16–22 days," and "23–27 days," respectively.

Resource:
Royal College of Psychiatry's link to the EDE-Q
https://www.rcpsych.ac.uk/pdf/EDE-Q.pdf

INTERVENTION STRATEGIES

According to the NIMH (2013), there are three necessary components in the treatment of AN: weight restoration, addressing the psychological sequelae, and reducing maladaptive thoughts/behaviors. Of primary importance is specific focus on achieving and maintaining a healthy weight range (Hebebrank & Bulik, 2011). Approximately 1/3 of individuals diagnosed with AN receive treatment (Hudson et al., 2007), which can be lengthy and occur over the course of multiple years (Fichter et al., 2006).

Physical health represents a paramount treatment issue as AN causes disturbance to most organ systems (Marzola, Nasser, Hashim, Shih, & Kaye, 2013). Initial inpatient treatment is often recommended; this allows for careful

monitoring of physical health (Garber et al., 2013; Leclerc, Turrini, Sherwood, & Katzman, 2013). AN also negatively impacts reproductive health; although no longer a criterion for AN in the *DSM-5*, amenorrhea remains a negative indicator of overall physical health in females of childbearing age (APA, 2013; Berg & Peterson, 2013; Linna et al., 2013).

Resource:
Center for Disease Control BMI calculator
http://www.cdc.gov

Family-Based Treatment (FBT)

Family-based treatment (FBT) is efficacious for children/adolescents with AN (Lock & Le Grange, 2012). Also referred to as the Maudsley approach, FBT is a long duration, outpatient treatment program for youth and their families (Lock & Le Grange, 2012). FBT focuses on the critical inclusion of parents/caregivers in treatment, including their oversight of the youth's nutritional intake, and takes approximately one year to complete. There are three phases of treatment: (1) weight restoration, (2) transitioning control of eating back to the adolescent, and (3) adolescent issues and termination. With positive and sustainable treatment results, FBT is often the intervention of choice for children/adolescents with AN (Eisler, Simic, Russell, & Dare, 2007; Kress & Paylo, 2015).

Family Therapy

Including family members in the therapeutic process fosters success, especially with the treatment of AN in children and adolescents (Chavez & Insel, 2007; Linville, Stice, Gau, & O'Neil, 2011). Family therapy assists with impairment in emotional regulation (Racine & Wildes, 2013) and serves as an adjunctive treatment intervention for AN (Ghoch et al., 2013; Goddard et al., 2013). Barriers to address in family therapy include: parental consistency, family time commitment, and application of behavior change in real-world situations such as family mealtime (Linville et al., 2011).

Behavior Therapy

Individuals with AN benefit from behavioral reinforcement systems that reward healthy eating patterns (Lock et al., 2013). Behavioral interventions target adaptive eating and weight restoration with the goal of healthy weight achievement and maintenance (Brown, Mountford & Waller, 2013; Hebebrand & Bulik, 2011). Counselors can target intervention strategies to maximize coping with frequent residual symptoms (Kaye, Klump, Frank, & Strober, 2000), and clients benefit from learning applied behavioral skills in real-life settings (Couturier et al., 2013).

Resources:
Marzola E., Nasser, J. A., Hashim, S. A., Shih, P. B., & Kaye, W. H. (2013). Nutritional rehabilitation in anorexia nervosa: Review of the literature and implications for treatment. *BMC Psychiatry,13* (290), 1-13.

http://www.biomedcentral.com/1471-244X/13/290

Cognitive Behavioral Therapies (CBT)

CBT interventions focus on addressing both cognitive and behavioral components of AN. This includes restructuring of negative cognitive schemas and introduction of thought-stopping techniques to address weight and body image obsessions (Kaye et al., 2000; NIMH, 2013). Individuals with AN can experience functional fixity; cognitive remediation therapy (CRT) may be helpful in addressing this rigidity of thought (Tchanturia, Lloyd, & Lang, 2013). CRT promotes holistic thinking about AN and broadens the treatment approach. Brown et al. (2013) found that, in addition to the establishment of a strong therapeutic alliance, CBT interventions were helpful in assisting with weight gain (see also Stiles-Shields et al., 2013). When exposed to food, individuals with AN experience a negative affective response (Marek, Ben-Porath, Federici, Wisniewski, & Warren, 2013); the technique of exposure and response prevention can be utilized when addressing this and other treatment issues (Brockmeyer & Friederick, 2013).

Enhanced CBT Therapy for Eating Disorders (CBT-E)

A targeted CBT approach, Enhanced CBT Therapy for Eating Disorders (CBT-E) is a treatment intervention developed for broad application across eating disordered behaviors (Fairburn, 2008). CBT-E utilizes individual therapy occurring over the course of four phases and lasting a total of 20 weeks. The first stage (weeks 1–4) includes client participation in treatment plan development, and the second stage (weeks 5–6) is primarily a progress review. The third stage (weeks 7–14) emphasizes cognitive restructuring, which is the main component of the overall treatment. The fourth and final stage (weeks 15–20) targets relapse prevention (Kress & Paylo, 2015).

Resources:
Beck Institute for Cognitive Behavior Therapy
http://www.beckinstitute.org/

National Association of Cognitive-Behavioral Therapists
http://www.nacbt.org/whatiscbt.htm

National Center for Biotechnology Information
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2928448/

Dialectical Behavior Therapy (DBT)

DBT is a cognitive-behavioral treatment approach that has been successful in addressing the sequelae of AN (and in addressing its comorbidity with anxiety, depressive, and personality disorders). Egan et al. (2013) posit that women with AN have higher rates of anxiety disorders and perfectionism, and that there is a five times higher rate of eating disorders in those with obsessive-compulsive personality disorder (Reas, Ro, Karterud, Hummelen, & Pedersen, 2013).

For individuals with AN, normative eating behaviors need to translate to the real-world environment; DBT's focus on behavioral change and emotional regulation addresses the complexities of eating disordered behavior (NIMH, 2013).

Resources:
U.S. Department of Health and Human Services (USDHHS), Substance Abuse and Mental Health Services Administration (SAMHSA) National Registry of Evidence-Based Programs and Practices (a search on eating disorders provides information on treatment programs which address co-occurring disorders inclusive of AN):

http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=36

http://www.nrepp.samhsa.gov/Index.aspx

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