
EATING DISORDERS:

PROGRESS AND CHALLENGES OF THE MIND, BODY AND SOUL

Course # 625
15 CE Hours

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Purpose and Goals

The goal of this course is to provide the healthcare professional with a vast amount of beneficial information regarding eating disorders.

Instructional Objectives

Upon completion of the course, the learner will be able to:

1. Identify the DSM IV-TR criteria for diagnosing anorexia nervosa and bulimia nervosa and compare the warning signs.
2. Differentiate between bulimia nervosa, binge-eating disorder, and eating disorders not otherwise specified (EDNOS).
3. Outline the history of the development and treatment of eating disorders.
4. Identify factors that contribute to childhood obesity.
5. Select the sociocultural factors contributing to the development of eating disorders.
6. Recognize the physical, biological, and psychosocial factors involved in the development of eating disorders.
7. Identify specific pharmaceutical options for eating disorders.
8. Outline the effects of eating disorders on the spiritual dimension of human existence.
9. Select the appropriate factors necessary for nursing assessment and nursing diagnosis of eating-disordered patients.
10. Identify the role of the nurse in the interdisciplinary approach to treatment of eating disorders.
11. Recall the evidence-based practices utilized in treatment modalities for eating disorders.
12. Identify common medical complications associated with eating disorders.
13. Recognize the major issues that are the focus of therapy for those with eating disorders.
14. Differentiate between *primary*, *secondary*, and *tertiary* prevention goals.

Overview of Eating Disorders

Historical Perspectives

Anorexia and bulimia may sound new, but their origins are far back in our past. Most readers have heard of the Roman Empire practices of periodic vomiting during lengthy banquets in order to ingest greater quantities of food without discomfort. In the Middle Ages, fasting was a measure of virtue, purity, thinness, and goodness. Various historical accounts of women who ate next to nothing are generally considered to be myth but in some cases are historically documented. Perhaps the first medical documentation was that of Dr. Richard Morton in 1689. He describes a condition he came to call “nervous consumption” in a seventeen-year-old woman. Lucas

(1981) in his thorough historical review of anorexia quotes Dr. Morton’s case. The young woman’s symptoms included amenorrhea, pale skin, lack of appetite, digestive complaints, preoccupation with studying, lack of sleep, cold skin temperature, and extreme weight loss. Ultimately this patient died. Later in 1767, Robert Whytt describes a young male patient who was depressed, emaciated, and refusing to eat. The case records describe a year of fasting followed by compulsive overeating and obesity.

In the 1870s we find the first systematic study of a number of eating disorder cases. Two physicians, Sir William Gull in England and Professor Laseque in France, independently but concurrently described patients with anorexia nervosa. Both first labeled the illness “anorexia hysterica (or hysterique).” Anorexia seems an unfortunate choice of terms, although the restriction of food in quality and quantity certainly mimics the medical symptom of anorexia; literally, without appetite.

We know today that absence of appetite is not the anorexic’s experience. In the last quarter of the 1800s, Bull and Laseque describe components of eating disorders that are still accurate. Some of these include absence of food intake; boundless energy, despite weight loss and even muscle wasting; food restriction; weight loss; and familial involvement. Independently, both physicians stress the psychological aspects of both the illness and its treatment.

In the early 1900s, anorexia was viewed as a mental disorder. Dejerine and Gauckler in 1911 used the term “*mental anorexia*.” Soon, however, in keeping with the prevailing view that all disease involves some cell or organ pathology, a medical theory emerged. Morris Simmonds, a pathologist, between 1916-1918 described in the literature a series of cases of pituitary cachexia. From 1915 or so through the early 1930s, this medical diagnosis was assigned to the great majority of cases with symptoms of anorexia nervosa. During the 1930s, several new theories of anorexia arose. All ascribed to various medical malfunctions ranging from abnormal insulin metabolism to atrophy of the gastric mucous membrane. Finally in 1941, Escamill and Lisser extensively reviewed the existing literature of 595 cases of Simmonds disease. Their assessment of these was that only 101 were accurately diagnosed.

Between 1938-1940, various writings on the psychogenic causes of anorexia were published. Later in the 1940s further distinctions were made. This decade witnessed the upsurge of the psychoanalytic assessment of anorexia.

Symptoms were considered evidence of fantasies and fears of oral impregnation or rejection of sexual identity. A psychoanalytic approach continued to predominate treatment into the 1960s. In 1961, Hilde Bruch presented a paper articulating some of her formulation regarding eating disorders. She focused on the perceptual and conceptual distortions that characterize anorexia. Hilde Bruch has come to be regarded as the pioneer of our modern understanding of eating disorders. She differentiated primary anorexia from an atypical type that is secondary to other psychiatric illnesses. Dr. Bruch characterizes true anorexia by the following parameters:

1. A disturbance in body image of delusional proportions.
2. A disturbance in the accuracy of perception of cognitive interpretation of stimuli arising within the body with failure to recognize signs of nutritional need.
3. A paralyzing sense of ineffectiveness pervading all thinking and activities.

Eating Disorders and The Golden Cage: The Enigma of Anorexia Nervosa, two works by Hilde Bruch, represent a new era of eating disorders understanding and treatment.

From a historical perspective, there have been several eras documenting evidence and philosophy of eating disorders:

1. Oral tradition of disordered eating patterns
2. Early psychosocial period
3. Medical misdiagnostic period
4. Emergence of anorexia as a psychosocial illness
5. Psychoanalytic period
6. Revised psychosocial period

Evidence suggests that the psychological underpinnings of this illness have long been apparent, and only for brief periods has the illness been interpreted as a purely medical problem.

In recent years, Americans have become obsessed with weight. Terms like the Atkins Diet, the Dr. Oz Ultimate Diet, Weight Watchers®, Diet Coke®, HCG diet etc. barely begin to suggest our National obsession with body size, shape, weight, food and calories. Yet, even in an incomplete stage, these terms help identify with a powerful trend that has undoubtedly touched all of us in some way. During the past four decades, America has scrutinized the physical well-being, nutritional habits, and lifestyle behaviors of her citizens as never before.

Consider the following statistics on the subject:

- Twenty years ago, the typical fashion model weighed about 8% less than the average-sized women.
- Most of today's fashion models weigh 23% less than the average women of the same age and height.
- Most models qualify for the Body Mass Index (BMI) criteria for anorexia.
- While most clothing outlets cater to size 14 or smaller, at least 50% of women wear a size 14 or larger
- Overweight women are 20% less likely to get married than thinner women.
- Overweight women earn significantly less money than their thinner counterparts.

One of the effects of this preoccupation is the epidemic increase in the incidence of eating disorders in our society. Anorexia, bulimia, and related problems have received significant media attention in recent years. At first, anorexia was idealized and discussed in an almost admiring fashion as a problem of the rich and pampered; "a golden girl syndrome." Newspapers and magazine articles focused on the weight loss and thinness associated with anorexia. Although it was reported as a problem - perhaps an illness - many envied this problem as the public dieted and wished for trimmer, leaner figures. When celebrities became identified as anorexic and the media published reports of hospitalizations, the public began to realize that dehydration, exhaustion, debilitation, intravenous fluid replacement, and other unpleasant aspects were part of anorexia. Ultimately, deaths were reported. Singer Karen Carpenter's struggle with anorexia and her death brought home to many that the "envious" problem was, indeed, very serious.

As anorexia became publicly established in our culture, bulimia began slowly to be identified and acknowledged, too. Harder to glamorize, without the benefit of excessive thinness, often expensive, anti-social, and fraught with guilt, bulimia did not capture the imagination of the public as anorexia did. In fact, although many anorexics engage in the purging of food and calories through vomiting that characterizes bulimia, this was seldom included in reports on anorexia. Gradually, well-known figures who are bulimic began to step forward and share their experiences with this problem. Jane Fonda and Cathy Rigby, for example, acknowledged, in print and in interviews, their long-term problems with bulimia. Both highlighted the pressures their respective careers imposed to be thin as serious contributing factors to the develop-

ment and maintenance of their illness. Eating disorders aren't something of the past. Current well-known figures, who have suffered from eating disorders, include, but are not limited to: Janet Jackson, Elton John, Kathy Griffin, Lady Gaga, Calista Flockhart and Mary-Kate Olsen.

Why have these illnesses remained so prevalent in our culture? What factors have facilitated the rapid and significant increase in these problems, an increase that has been characterized by some as "epidemic?" How do these illnesses develop and flourish? Why are women predominantly affected (although in recent years evidence is growing that men are also becoming increasingly vulnerable to them, and men comprise a large segment of those over forty-five who die from the diseases)? Can these illnesses be treated successfully? What works? What is helpful to those who suffer?

These are a sample of the questions frequently raised about the complex issues of eating disorders. The questions will all be discussed, if not actually answered, in the text of this course. The how's and why's of eating disorders are multi-faceted to include biological, genetic, behavioral and psychological. New research is aimed at studying the role human genes play on eating disorders. Researchers are now using the latest technology to explore DNA variations that may help provide a clearer understanding of eating disorders. Neuroimaging studies are revealing different patterns of brain activity between women with eating disorders and healthy women. These studies may provide clues for how women respond to specific treatments for these medical illnesses.

Spurred by the increasing prevalence and the interest in the treatment in psychiatric illnesses, we continue in an era of understanding and approach to eating disorders. Today, many of the theories and beliefs held by psychiatry well into the '70s about the etiology, treatment, and course of anorexia have been redefined, expanded, seriously altered, or discarded. The addictions field has noted many similarities between other types of addictive behavior (substance abuse) and eating disorders. Treatment providers also note that many eating-disordered clients are actively chemically dependent, recovering from chemical dependency, or the children of chemically dependent families. Both anecdotal clinical evidence and research data confirm this connection. This new information adds to the complexity of the eating disorders is-

sue yet also offers more options for effective treatment.

In the past 25 or so years, the problems of eating disorders have been a major focus in the international psychiatric community. Here in the U.S., Hilde Bruch, M.D., treated young anorexic women and published several volumes containing her experiences, impressions, clinical data, treatment recommendations, and, ultimately, theory about eating disorders. In Toronto, Canada, London, England, and Milan, Italy, other prominent therapists were focusing on treating patients with eating disorders as well as publishing their ideas and findings. Out of the efforts of these individuals grew clinic settings where specialized treatment was evolving and offered in outpatient and inpatient settings. Not only the symptomatic individual was treated, but the whole family or system was gradually viewed to be in need of treatment to resolve the eating disorders and recreate a family atmosphere conducive to on-going recovery.

As well as in psychiatry and psychology, eating disorders have presented a challenge to the medical profession. Often the pediatrician or family physician is the first in the medical community to have the opportunity to notice and assess an eating-disordered patient. The physician may be disturbed and perplexed by the mounting evidence of a problem, the patient's denial that anything is amiss, and the parents' mounting anxiety and inability to intervene. In some cases the medical doctor may attempt treatment single-handedly, may "give in" to the denial, or may adopt a "wait and see" attitude. Regardless of approach, a wide variety of serious medical consequences typically ensue, presenting increasing management challenges. In many cases, collaboration between the medical physician and knowledgeable psychotherapist produces the most effective treatment.

Because many doctors receive little training in detection of eating disorders during medical school or residency, certain signs are sometimes overlooked during patient examination. To combat this problem, a preventative task force published research that has been adopted by the Academy of Eating Disorders (AED). Pediatricians now have access to the AED's recently published new guidelines for managing eating disorders in private practice. Because many family physicians are on the front line of defense against eating disorders, these guidelines are meant to assist doctors with the recognition, diagnosis and treatment options for eating disorders.

This informative resource can be accessed from the Academy's website, and can be

printed and distributed in doctor's offices. The easy-to-follow instructional booklet outlines symptoms and preventative strategies to assist practitioners with treatment options for patients. The AED guidelines are developed from an evidence-based, multidisciplinary approach intended to treat eating disorders in children, adolescents and adults.

During the period that eating disorders have been on the rise, the medical establishment has become increasingly interested and aware of the dietary habits of the American public. Spurred in the '50s by the increase in heart disease, research into America's dietary and lifestyle habits took off and accelerated. Many of the exaggerated behaviors of clients with eating disorders today are quite like early recommendations suggested by cardiology researchers. Many of the early recommendations, however, have not stood the test of longitudinal study and have been discarded or revised. What contributions these now discarded ideas have made to our current universal preoccupation is difficult to assess.

The impact of sociocultural trends and changes cannot be underestimated in even a superficial discussion of eating disorders. The changes in the varying roles of women in our culture during recent years are uniformly accepted as one of the factors contributing to the rise of eating disorders. This stress is intensified by our culture's attitudes and values about body size, shape, and weight.

Conversely, prejudice regarding obesity is increasingly more apparent, and the obese individual meets bias and discrimination in social, interpersonal, family, and work-related situations. A recent study published in the *Journal of Obesity* revealed that discrimination against obesity has increased by 66% within the last ten years. The research indicates that many people have the belief that overweight people are gluttonous and therefore, deserve criticism. The authors suggest that these prejudices fail to consider genetic and environmental factors for obesity.

In the various sections of this course, the many ideas mentioned in this overview will be developed and explored based on current research, clinical data, and personal experience. At the end as at the beginning, the complexity of eating disorders will be apparent.

What Are Eating Disorders?

Anorexia

Eating disorders are multi-causal and multi-factoral illnesses, encompassing both physiologic and emotional elements. In all eating disorders the unifying theme is one of obsessive preoccupation related to food and food ingestion coupled with compulsive behaviors centered around eating. In the two major eating disorders - anorexia and bulimia - the relentless pursuit of thinness further characterizes the problem.

Anorexia nervosa, commonly referred to simply as anorexia, bulimia nervosa, binge eating disorder (BED) and eating disorders not otherwise specified (EDNOS) are all different types of eating disorders. Bulimia nervosa and bulimarexia are terms sometimes used to imply a syndrome which involves symptoms of both anorexia and bulimia. At present, evidence points to bulimarexia as a sub-type of anorexia nervosa or a later phase of primary anorexia.

Presently, eating disorders are considered as primary psychiatric diagnoses. The complex medical problems typical of these illnesses are multiple, yet the disorders are generally agreed, by the medical profession, to be emotional in origin. According to the *Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition)* commonly known as the DSM-IV people who meet the criteria for anorexia nervosa experience all of the following symptoms:

- A. Failure to maintain at least 85% of expected body weight (they often avoid family meals, avoid certain foods, and establish specific ritualistic behaviors designed to limit food intake and to fool concerned loved ones into believing that they are actually eating)
- B. Intense fear of gaining weight even though underweight
- C. Disturbed perception of one's body weight or size (even severely emaciated anorexics see a "fat" person when they look in a mirror)
- D. In post-pubescent women, the absence of at least three consecutive menstrual cycles (In some women, the loss of periods precedes any significant weight loss while in other cases it is the result of low estrogen levels caused by malnutrition).

Recent evidence points to two types of anorexia nervosa. One type develops primarily in adolescent girls and progresses along a classic path. The other begins later in life, in

both men and women, and appears to be the result of emotional distress over a life event such as children leaving home, divorce, etc. This second group accounts for four out of every five deaths attributed to anorexia nervosa. Healthcare professionals should be on guard for the typical warning signs of anorexia, which include:

- Abnormal weight loss
- Irregular menstruation
- Continuous dieting
- Self-starvation
- Intense fear of weight-gain
- Hair loss
- Compulsive exercise
- Refusal to eat in front of others
- Ritualistic eating (cutting food into small pieces)
- Hypersensitivity to cold
- Dry skin covered with fine hair (caused by lack of protein)

Bulimia

According to the DSM-IV-TR those with Bulimia experience all of the following:

- A. Recurrent episodes of consuming a much larger amount of food than most people would during a similar time period (usually about two hours) and a sense of loss of control over eating during each episode. This type of eating is usually done in secret because the bulimic suffers intense shame over the behavior.
- B. Accompanying attempts to compensate for eating binges by vomiting, abusing laxatives or other drugs, by fasting, or by excessive exercise
- C. Both the binge eating and purging occur at least twice a week for three months
- D. A negative perception of one's shape and weight.

Bulimics have been known to consume between 3000 to 5000 calories in an hour during a binge episode. Many people think that bulimics counter this overeating with vomiting; however, that isn't always the case. Bulimics often use fasting, excessive exercise and crash diets to help purge the guilt of eating too much. Unlike anorexia, patients with bulimia are usually of normal weight, because of the large amount of food consumed during the bingeing stage.

In bulimia, body image distortion is also common. In addition to purge methods, exercise may be used abusively in an attempt to reduce. Most bulimic patients are not markedly thin, have weight fluctuations, and often are slightly above average weight for height and frame pre-morbidly.

Like with anorexia, bulimia can also be characterized by several signs and symptoms, which include:

- Going to the bathroom immediately after meals
- Suddenly eating large amounts of food
- Cuts or calluses across the top of the fingers (caused by self-induced vomiting)
- Oral trauma
- Dehydration
- Dry mouth
- Broken blood vessels in the eyes from vomiting
- Inflammation of the esophagus
- Constipation

Recent evidence suggests that the development of an eating disorder progresses over one's lifetime and that often sufferers move between the different categories of eating disorders, making a specific diagnosis accurate only for the time it is made. A recent study published by the International Journal of Eating Disorders indicates that it is common for patients with anorexia to cross over to bulimia nervosa at some stage during their eating disorder. According to research, over one-third of anorexic patients develop bulimia. Conversely, it is rare that bulimic patients cross over to anorexia. Current investigations are looking at classifying a subtype of eating disorder based on this trend.

When bulimarexia is diagnosed, the picture is usually of a thin patient who uses restrictive dieting, as well as purge techniques to control weight. The drive for thinness and body image distortion is present, as in anorexia, but the person also gives into the hunger at times and periodically binge eats. Often, a bulimarexic patient will offer a history of an earlier episode of more traditional anorexia.

Many practitioners do not use the term bulimarexia, believing that if criteria for anorexia are met by an individual, the diagnosis is not altered by the presence of binge/purge behaviors. Bulimarexia may be a variation of anorexia or a later stage of the illness. Even among the experts, the use of these diagnostic labels is currently confusing and subjective.

Criteria C & D allude to some effectual responses to food and eating in bulimia. Many bulimic patients have significant fears regarding loss of control over food intake. After the binge, feelings of panic, guilt, and disgust are often described; these may be relieved by purging. Depression and decreased self-esteem often follow the binge/purge episode.

Among bulimic patients, alcohol and or drug abuse, shoplifting behaviors (including theft of food), self-mutilation, and suicidal

ideas/attempts are typically more prominent than in the anorexic population. Also, bulimic patients are more likely to be sexually active and are often promiscuous. In some cases the promiscuity is actually a form of sexual addiction. In these cases, sufferers may "binge" sexually during periods in which they eat more normally. More often than not, the sufferer does not recognize the addictive nature of the substitution and instead convinces herself that she has the bulimia under control.

Binge Eating Disorder

According to the US Department of Health and Human Services, Binge Eating Disorder (BED) is the most common eating disorder in the United States. In the United States, BED affects 3.5% of females and 2% of males, and can be as high as 30% in some weight loss programs. Since the inclusion of BED in Appendix B of the DSM-IV-TR, research has provided empirical evidence for its distinctive qualities separating it from the other eating disorders. According to recent critical reviews, BED has gained the authority to support its inclusion in the DSM-IV-TR as a separate eating disorder.

In a recent study conducted by the Yale School of Medicine, research suggested that BED diagnosis should include a marked distress criterion. The current standard for diagnosis classifies the binge eating frequency to at least two times a week. The findings in this study suggest that the frequency should be changed to once a week in its inclusion in the DSM-IV-TR.

The effects of binge eating disorder include feelings of guilt and shame as well as medical complications such as obesity and/or extreme abdominal distension leading to breathlessness and stomach tears. Stomach tears are considered a medical emergency. Nurses should caution their binge-eating patients to stop the binge if stomach pain develops and if the pain is extreme they should be advised to get medical attention immediately.

Eating Disorders Not Otherwise Specified

Eating Disorder Not Otherwise Specified (EDNOS) is indicated when the client's eating disorder meets criteria for anorexia and bulimia, but doesn't quite fit in either category. According to the DSM-IV-TR, an example of EDNOS is when a client demonstrates all the symptoms of anorexia, but continues to maintain normal body weight. Although criteria for EDNOS are less stringent than other classified eating disorders, some of the same health concerns are still present. The Journal

of Counseling and Development reports that patients with EDNOS experience cognitive, behavioral and psychoemotional features such as:

- Negative self-image
- Intense fear of gaining weight
- Preoccupation with food
- Misperception of body size
- Anxiety
- Depression

Similar to other eating disorders, the underlying contributors for EDNOS often co-occur with other psychiatric disorders and predisposed risk factors. Although the etiology is complex, treatment options begin with understanding the symptoms of all eating disorders and applying preventative measures along with patient education to a healthcare plan.

Obesity

Many experts in the eating disorders field do not consider obesity in the same realm as anorexia and bulimia. To omit a discussion of obesity, however, would be remiss, especially as some treatment facilities offer obesity treatment (such as for compulsive overeating) in their eating disorders programs or in related programs. A recent study published by the Journal of the American Medical Association (JAMA) revealed that over 32% of men and 35% of women were classified as obese. Moreover, the medical costs associated with obesity in America exceed \$75 billion. It's clear that obesity is a growing problem in the United States. There are several contributing factors to this obesity epidemic. The root of this problem begins with the American diet – hamburgers, French fries and doughnuts are just a few examples. Additionally, in our fast-paced culture, fast food establishments and pre-packaged foods have enjoyed immense popularity. The drawback to this convenience is that these types of foods are frequently high in fat and lack proper nutritional value.

The obesity problem in America has recently gained national attention. Many school districts have changed their cafeteria meal plans due to legislature efforts by anti-obesity advocates in several States. Additionally, school educational programs have been initiated to help students understand the importance of a healthy diet. The First Lady of the United States has also led a recent initiative to fight obesity in the American youth. This program, known as "Let's Move" combines simple elements of a healthy diet and exercise with the ultimate goal of eradicating obesity in the younger generation.

Obesity means excessive body fat. Cultural

and social values affect individual and group impressions of what constitutes "excessive." Medically, however, excessive relates to the percentage of body weight above established norms for height, weight, and age. Further, definitions of obesity involve size and number of fat cells.

Currently, growth charts by the National Center for Health Statistics are accepted as adequate tools for measuring children up to adolescence. In adolescents and adults, skin-fold measurements are acceptable. One uses calipers to pinch and measure skin folds at specific body sites to determine percentage of body fat. This technique, although simple, is difficult to standardize.

Although skin fold measurement is widely used due to its convenience, there are more reliable ways to measure body fat such as hydrostatic weighing. During this method, the patient is submerged in water while the volume of displaced water is calculated. This estimation of body fat is considered to be the best method available due to its accuracy along with the simplicity and cost of equipment. A newer – but more expensive – measurement uses x-rays calculate body composition. Known as Dual Energy X-Ray Absorptiometry (DEXA), this procedure uses X-rays with varied energy levels; the theory is that the two different types of X-rays absorb fat in the body at various rates. An overall calculation subtracts one image from the other to determine the patient's body fat.

What percentage of excess body fat constitutes obesity? Most sources seem to feel that 20 percent above normal, as dictated by height and weight, is obese. As late as 1977, however, researchers complained of the absence of a well defined and generally accepted biological basis for determining a firm cutoff between normal and obese. In fact, the literature frequently uses the terms overweight and obese interchangeably. This makes for confusion. Many researchers use the term overweight in a more casual or arbitrary manner, while obese designates a longer term of elevated percentage of bodyweight. Additionally, the term obesity often refers to a syndrome that includes age of onset, number and/or size of fat cells, degree of severity, and evidence of psychosocial factors influencing weight.

One of the most widely accepted measurements for body fat is known as the body mass index (BMI). This assessment of body fat uses the patient's height and weight to determine body fat. The calculations for BMI are merely estimates; however, they are useful measurements to gauge potential obesity

reports the National Heart Lung and Blood Institute. Nevertheless, BMI calculations do have limitations - In athletes, pregnant women, or men with a muscular build, BMI often overestimates body fat. It can also underestimate body fat percentage in the elderly.

Early writing on obesity made a distinction between endogenous obesity, related to internal factors such as endocrine or metabolism, and exogenous obesity, induced by dietary and/or environmental factors. Terms labeling obesity, classified according to fat cell size and number, are hypertrophic, referring to enlarged fat cell size, and hyperplastic-hypertrophic, indicating an excessive number of fat cells as well as enlarged fat cell size. Research evidence conflicts regarding which type of obesity is correlated with adult or juvenile onset. These classifications have practical relevance, as they seem to be associated with different responses to treatment. Apparently, increased numbers of fat cells make weight loss and the maintenance of weight loss difficult.

One researcher, Mellin, has addressed adolescent obesity. She describes exogenous obesity as progressive and reactive, involving contributing factors that are social, affective, psychological, and behavioral. In elaborating this progressive obesity, Mellin points to a long-term pattern of diet and exercise, often seen among various family members, coupled with steady weight gain, beginning in early childhood. Mellin's study shows reactive obesity to be significant in an adolescent population - the same group in which anorexia and bulimia are prevalent.

Childhood Obesity

Obesity has become a significant health concern for children in America. In fact, the number of children who are overweight has tripled since 1980. According to the Centers for Disease Control and Prevention, about 17% of children, aged 2 to 19 are obese. Overweight children are at a higher risk for type two diabetes, hypertension, high cholesterol, respiratory problems, depression and orthopedic problems. Similar to adults, the causes of childhood obesity are due to several factors, such as: lack of physical activity, poor diet and the influence of popular media.

Research has indicated that physical environment plays a major factor in the types of food and beverages that a child consumes. A recent study published by the Journal of School Health investigated the relationship of childhood obesity and school meal programs, membership in sports programs and other household factors. The goal of this research was to suggest policy recommendations for

the Centers for Disease Control and Prevention. The results of the research suggest that regardless of socioeconomic status, children of physically active parents had lower body mass indexes than those with inactive parents. In addition, the findings show that children who participate in free lunch programs in public schools had higher body mass indexes than children who attended private schools. Studies like this reinforce the theory that parental influences and physical environment play major roles in adequate nutritional choices and proper eating habits--All of which are essential in combating childhood obesity in America.

Obesity is a problem at all stages of physical growth and development. In fact, emphasis and preoccupation with an individual's weight begins during the mother's pregnancy. Parents and their health care providers begin at this stage to control and feel concern about body size and weight of the expected infant. The past twenty years, for example, have witnessed wide variations in the expectations for healthful weight gain during pregnancy and, consequently, infant birth weight and size. The popularity of breast feeding also may influence infant weight. Parents are aware of developmental expectations and expectations for the first year of life; they inquire about and follow percentile ratings of weight and height of their children. None of these trends are essentially problematic, but they may contribute to general confusion about infant feeding practices and healthy weight.

Until recently plump babies were viewed as healthy and content, and overfeeding was common. Now a growing concern exists that chubby infants grow to be obese adults, despite research evidence that does not support a linear progression between infant and adult weights.

In recent years a number of significant studies have been done on children and obesity. Several of these children's studies are longitudinal, i.e., conducted over several years; these studies begin to identify patterns related to obesity and may lead to establishing some predictors of adult obesity. One longitudinal study measured infants who were at the upper end of the BMI scale. The data from this research identified the following six risk factors in these children that were related to later childhood obesity:

- Parental obesity
- Birth weight
- Short sleeping duration at three years of age
- Catch-up growth
- More than eight hours of watching television weekly at three years of age
- Very early BMI

The issues of genetics and environment

have long been debated relative to obesity. The frequency of obesity in children of obese parents has been noted by researchers and casual observers alike. Recent research indicates that there may be a strong genetic component in the development of obesity. The obesity gene, known as the "fat mass and obesity associated gene" or FTO gene is carried by more than a third of Americans. A groundbreaking recent study reported by the *New England Journal of Medicine* confirms that people who carry this gene are at a greater risk for becoming obese. During this investigation, the FTO gene played a role in the control of food intake. Subjects who carried the gene ate more food, to include high-calorie food, than subjects who didn't have the FTO gene. Other research has shown that among people who carry the FTO gene, physical activity reduced the risk of obesity by 27% compared to those who don't exercise.

The results of this research indicate that instead of blaming overweight people for their gluttony and laziness, obesity will be looked upon as another disease like diabetes. They encourage clinicians to begin treating obesity as a complex and often multi-faceted problem.

The physiologic variables influencing weight form a lengthy list including:

1. Metabolic factors
2. Choice of diet
3. Neuroregulators
4. Hormones
5. Enzymes

The effects of psychological and sociocultural factors on obesity cannot be overemphasized. The psychological variable considered relevant to obesity include:

1. Lifestyle
2. Thinking style
3. Response style
4. Social network
5. Beliefs and attitudes
6. Cultural perception and interpretation

Each of these, individually or in combination, may significantly influence any individual's body weight. Often more than one factor may be operating, and individual factors may influence or intensify others. Additionally, determining whether these variables may be causative or a result of weight gain may be difficult.

Often lifelong patterns relative to some of these factors develop very early in life. Perception of internal cues of hunger or satiety can be confused or misinterpreted when stressed by external factors. Early responses to parental or familial discipline, influences, verbal and nonverbal communication, and modeling may facilitate the psychological development and

maintenance of obesity.

The sociocultural factors influencing eating and body weight are numerous. Early in infancy parental confusion and ambivalence regarding body fat often occurs. Recent trends in infant feeding demonstrate this — breast feeding vs. formula, skim milk or whole milk, baby food vs. table food, etc. Good nutrition in infancy means a chubby baby to many of us. Yet a chubby baby soon becomes a chubby child, and then the parental panic sets in, as well as the fears and theorizing. Even in young children, obesity provokes negative interpersonal reactions. Adults as well as peers act negatively, supporting our cultural bias for thinness. Such reactions sow the seeds of low self-esteem, bodily preoccupation, guilt, and feelings of failure, which characterize obesity in children and adults. A fat child reflects on his or her parents; often obesity is viewed as a moral issue, inferring loss of parental and individual control, discipline, and willpower. Often the mother bears the burden of blame for the "failure" of childhood obesity, generating feelings that may range from inadequacy and resentment to outright rejection of the child.

Within the family system, food may be used to reward or punish children's behavior. The familiar "clean the plate" family style may lead to power and control struggles between child and parents. The relationship parents have with food, ranging from casual to obsessed, conveys a message to the child that is often incorporated. Family tension, especially if mealtimes become a battle zone, affects feelings toward food and eating. These are a few of the childhood family factors that contribute to eating patterns, body weight, and relationship to food.

Anti-Obesity Drugs

In recent years anti-obesity drugs have become increasingly popular in the treatment of this disorder. Most of these drugs are only recommended for those who are at least 30% above their ideal weight (20% above in the presence of some other health problem such as diabetes or heart disease) or for people with a BMI of 30 or greater. In reality, however, there are many people taking these drugs who do not meet these standards for obesity. This causes concern among many health care professionals who fear that indiscriminate use of these drugs may lead to serious health problems in the future.

The following list of medications is prescribed by doctors for obese patients who are at an increased risk of medical complications because of their weight. However, diet and

exercise are still the primary treatments for obesity.

Orlistat (Xenical) - This drug has been approved by the Food and Drug Administration for long-term use in adults and children who are 12 and older. This medication is classified as a lipase inhibitor, which helps to prohibit the absorption of fat in the intestines and stomach. The average weight loss from this medication is approximately 5 to 7 pounds. Side effects include gastrointestinal issues, such as diarrhea, oily spotting, cramping, gas and frequent bowel movements. There is also a reduced strength version of Orlistat, known as Alli, which is sold over the counter. Alli works the same as Orlistat; however, it is not currently approved for children.

Lorcaserin (Belviq) - This long-term drug, approved by the FDA, acts as an appetite suppressant by affecting the central nervous system. In clinical trials, patients prescribed lorcaserin lost about 6% of their weight compared with the placebo group. Common side effects include fatigue, headaches, dizziness and nausea.

Phentermine – Topiramate (Qsymia) – This FDA-approved drug combines topiramate - an anti-seizure drug - with phentermine – a short-term appetite suppressant. The low dosage of phentermine helps to release the body’s stress hormone norepinephrine, which decreases the appetite. Topiramate increases the sense of feeling full. Potential side effects

include insomnia, increased heart rate, dry mouth and constipation.

Over the course of the last decade, several anti-obesity drugs have passed the regulatory process and have been brought to the market. Many of these medications haven’t stood the test of time. Once-popular weight-loss drugs, such as “Fen/Phen,” Pondimin and Redux have all been recalled due to harmful side effects. The American College of Cardiology cautioned that people who took Fen/Phen, Pondimin or Redux were at risk for valvular heart disease and primary pulmonary hypertension. In fact, today there are fewer options for anti-obesity medications than there were ten years ago. Researchers hope that the future will present more options for the pharmaceutical treatment; however, until this need is met the healthcare community needs to rely on dietary choices and behavioral changes to combat obesity.

Weight-Loss Surgery

Bariatric surgery is becoming increasingly popular for obese patients. The National Institutes of Health only recommends weight-loss surgery in cases of extreme obesity – a BMI of 40 or greater; nevertheless, in some cases of coexisting conditions, patients with a BMI of 30 to 35 are eligible. Some weight-loss surgeries can decrease as much as 50% body fat.

Gastric Bypass Surgery - The most common procedure is known as gastric bypass surgery. During this surgery, doctors create a small pocket in the stomach, while cutting the small intestine, and then connecting it to the pocket. Food and liquid are circumvented into this pocket and bypass most of the stomach.

Gastric Sleeve - During this procedure, surgeons remove a portion of the stomach, which creates a smaller area to store food. This restricts the amount of food that can be consumed.

Laparoscopic Adjustable Gastric Banding (LAGB) - Also known as the “Lap-Band,” this procedure has been approved for patients with a BMI of 30 to 34, who have other health concerns relating to obesity. In this procedure, surgeons separate the stomach with an inflatable band into two sections. This band prevents the opening from expanding and can be adjusted as needed. The narrow channel caused by the band restricts food intake.

Generic Qualities

Eating disorders often begin in adolescence; a time of rapid physical changes, extreme sensitivity to social and cultural input, and stressful, challenging developmental tasks. Many adolescents find negotiating the teen years very difficult. Issues of dependency/autonomy, power/control, intimacy, personal effectiveness, and adequacy in on-going new

ALTERATIONS IN BODY METABOLISM DURING STRESS

Carbohydrate Metabolism	<ul style="list-style-type: none"> ◆Glucose is mobilized by increased glycogenesis and glycolysis. ◆Glucogenic amino acids and glycerol are used for energy. ◆Vitamin B1, B3, B6, B12, Biotin, K, Mg, Inositol metabolism affected.
Protein Metabolism	<ul style="list-style-type: none"> ◆Protein breakdown occurs in peripheral tissues. Amino acids then converted into glucose in the liver. ◆Urinary excretion of nitrogen and creatinine. Vitamin B3, B6, Folate, K, Mg, An, Biotin
Fat Metabolism	<ul style="list-style-type: none"> Fat stores mobilized to produce energy. ◆Circulatory fatty acids and cholesterol ◆Fats in liver. ◆Oxidation free radicals Vitamin B1, B2, B3, Biotin, Mg, iron, Phosphorous.
Steroid Production	<ul style="list-style-type: none"> ◆Glucocorticoids affecting metabolism of cholesterol, B2, B3, and pantothenic acid.
Catecholamine Production	<ul style="list-style-type: none"> ◆Epinephrine and norepinephrine production affecting metabolism of tyrosine, Iron, B6, Mg, Vitamin C.

situations are raised again and again. These normal adolescent challenges are exacerbated by a culture that elevates extreme thinness to a moral victory. Weight loss and thinness may be equated with self-control, power, self-esteem, or rebellion. Thinness can also mask the physical changes and sexual development that cause conflict, fear, and confusion for many teenagers. Many emotions may be put aside or assuaged by preoccupation with food, weight, bingeing or by the actual eating behavior. As a result, many eating-disordered adults are emotionally arrested at the adolescent state of development and must undertake those tasks as an adult in order to heal.

Prior to the onset of illness, some characteristics have been recognized in eating-disordered patients. Often the patients are over achieving, eager-to-please, feel that they must prove themselves and be successful, superior, even perfect. Clients may be overly concerned about or sensitive to their parents' reactions to them and feel overly responsible for others. Non-expression of feelings may prevail when hurt, anger, etc., are depressed and harbored; such emotions are often shut out and denied as rapidly as they are experienced.

Alternative Perspectives

Many contributors to the rapidly expanding body of information on eating disorders approach the problem from perspectives beyond the traditional psychiatric model that has historically addressed anorexia. Many individuals working in addictionology notice striking parallels between addiction to drugs and alcohol and eating disorders. Some commonalities include the obsessive/compulsive elements of thought and behavior, the progressive nature of the illness that gradually becomes the focal point of one's life, and the psychological defense mechanisms that support maintenance of the process. The denial of eating-disordered patients strikingly parallels that of chemical dependency. The patient denies all the realities that would permit her/him to perceive the eating disorder as a problem, including denial of excessive weight loss, mood changes, social isolation and withdrawal, reactions of concerned others, etc. Uninformed family members or friends may view the eating disorder as a moral problem or a sign of weakness to be overcome by willpower.

An additional parallel is the extent to which eating disorders are a systems or family problem. When an eating disorder develops, especially in a teenager, the entire family becomes preoccupied with the issue. Struggles ensue over food, calories, exercise, and the

fall-out-isolation, loneliness, mood changes, and so on. This family focus may mask other family issues, prevent family development, and scapegoat the eating-disordered son or daughter. This problem will be discussed more fully in the treatment section. Many eating-disordered individuals are concurrently addicted to or abusing alcohol or other drugs.

Another significant population is children of families where one or both parents (and/or) grandparents are chemically dependent. Research indicates that sons in alcoholic families are at a high risk of developing chemical dependency themselves. We need studies that will demonstrate whether daughters are at a greater risk than the average population to develop eating disorders.

Other contributors to eating disorders theory discuss the connection with food allergies. Studies of individuals who suffer food allergies or, more accurately, sensitivities reveal information that parallels some of the issues in eating disorders. For example, people crave the substances they are addicted to, such as wheat (bread/cake products), yeast, (alcohol products) or chocolate. If they give in to the craving, the result is often a binge.

Another basic issue that is sometimes minimized is the very concept of dieting. When one reduces caloric intake, the result is hunger. For a time, this signal may be ignored. As it persists and grows more intense, one may respond to it inappropriately with overeating and then return to the diet mode, vowing to restrict even more seriously to make up for the infraction. This cycle can become a major preoccupation. Physiologically, many of the diets touted by our culture are forays into starvation-like states. Weight loss on the popular high protein diets relies on putting the body into the unnatural and unhealthy metabolic state of ketosis. Other diets, such as the Beverly Hills diet®, mimic eating disorders; these diets require binges on certain foods that encourage diuresis and diarrhea. In her bestselling book, the author of the Beverly Hills diet® describes her own process of food binges followed by restrictive periods and recommends this method to us all.

Another theory to be considered in a broader perspective of eating disorders is the set point theory of body weight. This theory maintains that we are all genetically predisposed to a certain adult weight. When this weight is subjectively deemed unacceptable and individuals diet to manipulate their weight below set point, the body compensates by reducing the metabolic rate. This lowered Basal Metabolic Rate (BMR) both slows weight loss and

As our society daily becomes more complex, women are under greater pressure from many aspects of society to excel.

increases appetite. The experience of increased appetite for the eating-disordered person may intensify fears about eating, intensify feelings of helplessness and powerlessness, and lead to binges or the beginning of binge cycles.

Sociocultural Factors

In many other parts of this text, mention has been made of cultural influences perceived to influence eating-disordered clients. To discuss eating disorders without recognizing these influences is virtually impossible.

One significant, pervasive, yet subtle factor is the body/mind split or duality that is deeply embedded in our culture. This dichotomy between psyche and soma is not new, per se, nor is it a new issue or concern to the psychologist or philosopher. Throughout history this split is a recurring theme, beginning with the ancient Greeks. Perhaps Descartes is most readily associated with the concept of dualism, for his writings thoroughly divide the mind from the body. The context of this was a religious political climate that exalted the mind and demeaned the body. The implication is of an unequal yet dependent relationship. Out of this viewpoint come many of our social value judgments regarding right and wrong.

The mind/body split places positive value on the mind and its potential: logic; knowledge; thought processes; and, by extension, concepts such as power and control. The body is more negatively viewed; the physical needs and dependencies engender vulnerability.

Early in our experience we meet this split and its associations. Infants take great pleasure in simple sensuality: eating, sleeping, and later, touch. At first they do not realize that they are distinct beings; as they grow, they realize their separateness and their dependency on a nurturer for warmth, comfort, food, etc. With this realization comes frustration and restrictions. Our values require that children learn permissible from non-permissible touch; that toilet training take place and natural interest or pleasures in bodily functions, smells, etc., be diminished; that polite table manners be acquired; and so on. A little later, children can be frustrated by their lack of coordination and physical needs.

Think of the kindergarten child who has an accident and urinates in the classroom; he or she is shamed by his or her own standards and ridiculed by peers. We all face awareness that our minds are at times held back or limited by our physical bodies. These early experiences may be what Chernin calls the child's experience of "alienation from the body", and such experiences bring home the reality of our limits - we have bodily needs of the most basic nature that at times undermine the powers of the mind. This universal experience may be the foundation for the self-dislike or low self-esteem prevalent in our culture today and may also serve to heighten the needs many of us feel to be in control.

By alienating or turning off our body and our sensitivity to physical needs, we are at great risk. Like it or not, we are each a synergistic whole, with body and mind inexorably connected. In rejecting our body we reject the availability of somatic perceptions, cues, and information necessary for comfortable management in our day-to-day life. We may lose cues that tell us of hunger, thirst, stress, fear, anxiety, need to sleep, etc. Our ability to perceive the nature of our relationships with others may be diminished, affecting all aspects of life: work, play, friendships, love relationships, and so on. Additionally, this lack of perception can contribute to social isolation, confusion, intellectual preoccupations, as well as poor physical health. Furthermore, we give up an immense source of physical and sensual pleasure and comfort in rejecting our physical bodies.

As our society daily becomes more complex, women are under greater pressure from many aspects of society to excel.

Even this abbreviated look at the losses inherent in rejecting the body raises questions as to why so many women and girls, especially, in our culture reject their physical selves. Perhaps one answer lies in our culture's treatment of women. For centuries the American culture and its antecedents have been strongly male-oriented and male-dominated. The male has been the keeper of all power - economic, political, and sexual. Women, like children, were possessions of the culture-bearers. As such, they maintained their function and contributed to civilization through all the labor traditionally viewed as "women's work." Women cared for children, cooked, cleaned, sewed, entertained, and generally organized the household and the family. They were the emotional balancers and caretakers. In this role, women did have influence, especially on children, but the extent of influence varied based on class, period, race, family patterns, and other factors. Further-

more, women rarely had the authority or power politically or economically to authenticate or sustain their influence.

Within the current century many changes have begun and been maintained relevant to the role of women in society. In the early years of the 1900s, women's part in the temperance movement gave them a social and political prominence over a sustained period. Later, in the 1920s, women won the right to vote and so became fully franchised citizens. This right implies an obligation to become aware of issues and candidates in order to use this privilege discriminatively. Although many men expected their wives to vote as instructed, women have gained important political power by voting their own decisions. Interestingly, the term enfranchise, which means "to admit to the right to vote," also means "to free from slavery".

Perhaps no other event had an impact on women's role in our society as did World War II. In the U.S., women were doing jobs long considered men's work and doing them well. One popular example during those years was Rosie the Riveter. Women received approval and gratitude for their contribution to the war effort; however, this social change was not maintained when the men came home and needed jobs in a diminished post-war economy. In fact, we witnessed an increase of domesticity in the 1950s. Women's role was definitely in the home — mothering and organizing the increasingly technologically sophisticated household. The 1950s were the years of cocktail parties and other types of home entertainment, in which the wife was expected to compete with other wives in personal appearance, home decor, food preparation, and household management. The women's abilities in this role often facilitated or jeopardized her husband's ascent on the corporate ladder.

Within recent memory, the women's movement became a significant political force, challenging the role of women, the dynamics of the traditional family, and public values and opinion regarding women. The women's movement has generated significant change for women, including increase in the number and variety of employment or career options, the broadening of lifestyle and relationship possibilities, and the diminishment of a typical "female" stereotype. All of us have been influenced in some way by the women's movement.

These breakthroughs have also generated new areas for competition and stress. As our society daily becomes more complex, women are under greater pressure from many aspects of society to excel. Social expectations, peer expectations, and internal expectations all

pressure women to be competent and successful in many roles concurrently. The old stereotype of the single woman living alone (and presumably miserable), and having a successful career has given way to the image of the trim, perfectly groomed woman executive who works 50 hours a week and, in her spare time, efficiently runs a yuppie household, is a devoted and alluring wife and an involved, supportive parent. Amazingly, many fit the latter description, some with ease and some with the medical and psychotherapy bills that attest to enormous stress and pressure.

Young women today look ahead to a complex future. In their own homes they may witness a traditional male-oriented and dominated family structure, which offers little incentive for being female; or they may witness the "super mother" who does it all. Often the observing daughter is all too sensitive to the drawbacks of either position. She may recognize very early the pressure to do well, compete socially and academically, and choose a college and career that will help her in the race. Such prospects do not welcome her to the adult world. Rather, they may cause her to pause or become emotionally immobilized as she regards the complexity. Often these factors can be part of the roots of an eating disorder. A study published by the Journal of Advanced Nursing has investigated the disorder of compulsive eating in professional women. During this query, women from small metropolitan areas of the south-central United States were interviewed regarding their eating behaviors. These women were employed at one time in some type of professional capacity. The data indicated that the participants cited many reasons for overeating; however, the three common themes were stress, loneliness and anxiety. Participants routinely cited on-the-job stress, such as meeting deadlines as a trigger for compulsive overeating.

Can we recall a time in history or in memory when women's appearance was not a focus of constant critical attention? Seemingly, various cultures and eras have all had their ideal, and this ideal has influenced the majority of women seriously. History, throughout all cultures, tells us of the ideal woman. As early as the Romans and Greeks, records of mythological and real standards for feminine beauty are available. Later, during the Middle Ages, different ideals and norms for feminine appearance were set forth. All cultures seem to evidence this heritage.

The foot binding in China is an example of a centuries-old tradition that caused pain, deformity, and disability to women. In this tradition, the feet of young girls from middle

or upper middle-class families were bound to produce the “lily-foot.” Bindings of cloth were applied, often by the child’s mother, who bent the toes back under the sole while the heel and forefoot were contracted. The binding process was an excruciating process of examining and ever-tightening the bindings over many years until the ultimate crippling results were achieved.

The result, as well as complying to cultural standards of the womanly physical ideal, enhanced the status of the husband, because as a woman seriously limited in mobility, she could not work nor engage in many activities. Only in the beginning of the current century was this custom finally rejected.

Physical size has long been a focus in western cultures. The use of corsets to manipulate the figure is not new, as anyone who has seen *Gone With the Wind* knows. Corsets interfere with digestion and ventilation but are still widely accepted in modified forms. In some eras, the corseted figure was seen as pure and the ‘uncorseted’ as promiscuous. Such views may have some reality base, considering the time and assistance required to get in and out of these garments!

The book, *Illness as Metaphor*, delves into the many ways that physical illnesses over the years have been interpreted as beauty. At one time, tuberculosis patients became so envied that cosmetics were used by healthy women to replicate the look.

Our current century has witnessed wide swings in acceptable feminine appearance. At the turn of the century, the busty but small-waisted Gibson Girl was admired. After World War I, the emancipated flapper with bobbed hair, small bosom, slim body, and masculine appearance was appreciated (and given the vote!). In the 1940s a somewhat masculine dress was popular, but the figure was shapely; and in the 1950s, a fuller hourglass figure, with ample bust and hips, was again the ideal.

In the 1960s and since then, some version of the thin, more tubular woman have been idealized. The models of the 1960s were emaciated in appearance, with almost an absence of secondary sex characteristics. This ideal, in combination with other social factors, has popularized dieting and exercise. Many speculate that trends such as less external control on behavior (for instance the “sexual revolution”) and the expansion in women’s role options raise a need to impose greater self-discipline and control. Dieting may be one area where the woman can assert, dominate, achieve, control, etc.

For some women success in dieting and weight control may be equated with success in life. Beauty and compliance with feminine cultural standards is surely one criterion for success imposed on women by our culture. Also, many of the careers women enter are founded on appearance, such as modeling, dancing, or flight attending, to name a few. One’s size figures heavily in the successful pursuit of such careers.

In *The Obsession*, Kim Chernin discusses at length many trends and factors that support women in disliking their bodies and rejecting a mature woman’s body. From the advertisements of leading stores, whose catalogs display adult women who look like early adolescent girls, through the boutiques filled with size one, three, and five fashions for women(?), the author finds examples that allow her to describe and interpret powerful components of our culture. From a feminist perspective, Chernin points out the concurrence in the 1960s of the emergence of the women’s movement and the emergence of widespread anorexia, as well as numerous weight control programs. Her analysis of these two phenomena and their synchronism is provocative, articulate, and fascinating, encompassing both personal experience and motivation in a political context.

Social observers have noticed that the increase in anorexia is prevalent in cultures where food is plentiful. Those Western cultures where eating disorders are on the rise have greater and more generalized access to food than did the cultures that existed during most other periods in history.

The thinness sought by eating-disordered women may also create the appearance of youthfulness in many. Although the face may be drawn and lined, the general smallness and fragility often connote youth and immaturity to many observers. Our society has a preoccupation with being and remaining young. Much of the cosmetic industry that has grown enormously in this century has its roots in keeping women young-looking. While signs of age may be viewed as attractive and enhancing on a male, the very same gray hairs or laugh lines are socially unacceptable on a woman.

It is not uncommon for women to be discarded by partners as they age and are deemed less attractive by our rigid cultural standards. This may be peculiar to so-called sophisticated or industrialized societies. In some Pacific Island cultures we think of as primitive, a large woman is considered beautiful. Her body is expected to change and become larger when entering pregnancy and childbirth. Substantial size also reflects adequate access to food, an access that is culturally admired.

This discussion is really the tip of the iceberg. The sociocultural factors involved in eating disorders are still being enumerated and assessed. Various theorists weigh these factors differently when estimating their impact on the rise in eating disorders. Yet all seem to agree that these factors are quite significant.

Current Incidence

Current research indicates an incidence of anorexia nervosa in one in every 200 American women. Anorexia is the third most common chronic illness among adolescents – 95% of eating disorders occur between the ages of 12 to 25. To help put these statistics into perspective – This translates to nearly half of all Americans knowing someone first hand that suffers from an eating disorder. The long-term outlook of anorexia paints the grimmest picture. According to the National Association of Anorexia Nervosa and Associated Disorders, 5% to 10% of patients with anorexia die within 10 years of contracting the disease; almost 20% of anorexics die within 20 years, and only 30% to 40% ever fully recover.

Researchers are using a variety of populations as well as different criteria for defining eating disorders. While these inconsistencies are not unusual at this early stage of investigation, these are two obvious problems that contribute to varying and confusing results. Such conflict does not mean that the resultant statistics are inadequate, but merely that the reader needs to pay special attention to the methods and parameters of each study. Careful discrimination is always advisable in assessing and interpreting research results and statistics.

Research results are quite unanimous in their agreement that eating disorders occur predominately in girls and women and the most frequent ages at onset are 14 to 18, or during the period of adolescence. Through the 1970s, researchers agreed that the disorders appeared most often in the upper socioeconomic classes. More recent studies have begun to question this and to suggest that this over representation may be a result of this socioeconomic group’s greater access to medical attention and psychological care.

As public awareness grows and as more health providers and family members are educated about the incidence, onset, and progression of eating disorders, more cases are being detected beyond the confines of the upper socioeconomic classes. Increased awareness and consequent detection are major factors in accounting for the increase in the numbers of eating-disorder cases being recognized annually in the United States and Europe.

One recent study, published in 2012 by the Public Library of Science sampled 2520 subjects to determine the prevalence of eating disorders in older generations. This was one of the first studies to investigate a lifespan perspective on eating disorders in a cross-sectional sampling. The purpose of this study was to find out the impact of advancing age in eating disorders in both men and women. Results from the sampling revealed that the prevalence of eating disorders decreased with age in women, and was significantly higher in obese than women of average weight. Eating disorders declined in both men and women under 65, and peaked at age 55 to 64 in men. However, the overall incidence of eating disorders in mature women still remained higher than their male counterparts of the same age.

Research conducted on the bulimic population show that 2 to 3 in 100 American women suffer from bulimia. Previous research and accompanying literature has frequently focused on anorexia nervosa; however, recently published studies have raised a watchful eye on the incidence and associated harmful effects of bulimia nervosa. One notable recent study reported by the Journal of American Psychiatry explored the mortality rates of bulimia nervosa and other eating disorders. The statistical analysis from this study used computer software programs to conduct a longitudinal assessment of mortality by linking the program to the National Death Index. The review included 1,885 subjects diagnosed with anorexia, bulimia and EDNOS over a period of 8 to 25 years. The results of the study revealed that over 95% of the deaths were women; the most common diagnosis was bulimia (48.1%), followed by EDNOS (42.1%) and anorexia (9.4%). The highest mortality rates were at 5.2% for EDNOS followed by 4% for anorexia and 3.9% for bulimia. To date, this study is one of the largest studies of mortality in bulimia; the results clearly demonstrate that the growing level of incidence and mortality rate reveal that additional research is needed on bulimia.

The statistics on the current incidence of eating disorders do not tell a complete story. Many individuals who do not meet the strict criteria for an eating disorder may suffer from subclinical eating patterns which cause disruption in their daily lives. Studies show one out of every five adolescent girls scores in the abnormal range on tests for eating attitudes and behaviors even though they may not meet the strict requirements for a diagnosis of an eating disorder. Often treatment for these people is warranted.

As more research of better quality occurs and as results are more widely published, any-

one interested in further information of greater accuracy should have no difficulty finding it, as a growing body of literature exists, including the International Journal of Eating Disorders. Another good resource are those professional journals dedicated to the treatment of families.

Etiology

Associative Factors

A number of factors are now known to be associated with eating disorders. Actual causative factors are indefinite at present, but the following have been regularly noted in clinical investigation.

1. Adolescence
2. Cultural Influence
3. Stressors/reactions
4. Spiritual
5. Family Biological History
6. Family Dynamics
7. History of Abuse
8. Hormonal Abnormalities
9. Emotional Characteristics

Adolescence

Adolescence is a complex developmental period of intense biological and psychosocial changes. Physiological changes in height, weight, shape, facial features, skin, body hair, voice, and, less obviously, in mood and hormonal secretion all occur concurrently and in a relatively short period of time. Emotional changes occur, too, relevant to interpersonal relationships with family and peers, new roles and responsibilities, new developmental tasks, identity, and sexuality. Often adolescence is a painful and emotionally turbulent period of acute sensitivity to one's environment, including social and cultural values, messages, and norms.

Some of the major tasks of these years include individuation from the family, peer identification and solidarity, and, ultimately, the development of an autonomous self-identity. These psychosocial events cannot be minimized or underestimated in terms of the stress they generate in the adolescent individual (and their family!), nor in their importance as a foundation to adjustment to adulthood.

Spiritually, the adolescent seeks to understand the meaning of life and how to use this understanding to make decisions. Adolescent spiritual development is often characterized by questioning the belief system in which one is being raised, rejecting institutionalized religion, comparing the religious beliefs of peers, and an intense examination of one's

own beliefs. Those at this age begin to realize for the first time that human beings are mortal and, therefore, issues of life and death become more important. Adolescents are frequently confused by what they see as inconsistencies in others' behavior e.g. adults who espouse values of honesty but cheat on their taxes. The adults in their lives are often singled out for ridicule when they fail to live up to the standards of perfection that the adolescent imposes on them.

In our culture many have noted that adolescence seems to occur or begin earlier and earlier. Physiologically the hallmarks of adolescence do occur at an earlier age now than in generations of a few hundred years ago. Many girls and young women who develop eating disorders are significantly stressed by the body changes of early adolescence. The fat deposits that develop to form "feminine" hips, thighs, and buttocks; breast development; and body hair all begin to appear close to the onset of menstruation. This constellation of physical changes connotes adulthood, adult responsibilities, security, maturity, and independence. The prospect of all these can be alluring, yet terrifying.

Our adult world today is replete with violence, intense competition, rapidly changing values, and life-threatening stress. This is true on the personal level at work, home and community and on larger scales of national economy, international political strife, and the worldwide threat of nuclear holocaust. Our youth are very aware of this reality and the potential impact on their future. Adulthood is not the rose picture presented to most adolescents 50-100 years ago.

Cultural Influences

The culture we live in certainly has a strong impact on the pre-adolescent. Innumerable factors influence young teens. Drugs, alcohol, sexuality, academic pressures and competition, family conflict, peer acceptance, and economic needs and stressors can safely be noted as general influencing factors. Boys and girls, then, each have separate cultural norms and expectations with which to deal.

Since the post-World War II years, we have witnessed serious and dramatic lifestyle changes relevant to health and fitness. Some of these were motivated by medical research and findings, prompted by the high incidence of heart disease and related deaths the U.S. experiences annually. Although some of the earlier findings and recommendations have not stood the test of longitudinal study, much of the understanding gained about the American

diet and its flaws has had a positive impact on our dietary habits and lifestyle.

In the past few decades, we have been urged to reduce our polysaturated animal fats, to increase dietary fiber, to use less refined sugar and processed foods. We have become aware of and concerned about food preservatives and additives. Exercise has taken on new importance for general fitness, cardiovascular fitness, and stress reduction. Many Americans now routinely incorporate vigorous exercise into their busy schedules.

Concurrent with this, and perhaps related to this new consciousness, came the emphasis on slenderness, youth, and beauty that has hopefully reached its zenith today. In the span of the post-war years, our culture's norms for feminine beauty have radically altered. Gone is an appreciation for the rounded curving figures of Betty Grable or Marilyn Monroe. Between the late 1940s and the late 1950s and early 1960s, a dramatic swing occurred: Twiggy, Veruska, and other lean, angular models became the ideal. Women who were complemented and accepted for their curves in the '40s and '50s as teenagers or young adults were considered too fat and criticized a few years later. Today, teenage girls are under social pressure to be thin and slim-hipped.

With the interest in fitness and exercise, the ideal image evolved. Not only does one now need to be thin, but muscle definition and body sculpting are important. Androgyny has gained popularity, and from the back many men and women appear strikingly alike. Typifying the "American Way," an enormous industry with a huge financial base has grown up around this trend, reinforcing what now amounts to an obsession. Fitness is no longer merely a trend; it is big business. A slim, muscular appearance is no longer an option but an essential element in the competition for peer acceptance, family approval, social success, etc.

The intense emphasis on a trim, youthful, and beautiful appearance in recent years is interesting sociologically in that it has flourished concurrently with the women's movement and a recent surge in the social evolution of women's role. The need for today's women to be superhuman is well documented.

The "real" adult woman is an ambitious, successful career woman; a competent homemaker/household manager; a warm, supportive mate; a patient, understanding mother; and a sexy, gorgeous wife. With this to face what young girl with half a brain will be eager to grow up and compete in the world of adult womanhood? And, of course, we have the adolescent version of the above superwoman. Our

thirteen-year-olds are to be fresh and naturally pretty; punk enough for peer acceptance, but not so much as to irritate family; outstanding in academics, sports, and extra-curricular activities (politically selected to impress the college of their choice); popular with the opposite sex; sexually aware, yet prudent and responsible; burdened by no sexual identity conflict; able to resist, without rejection or loss of friends, peer pressure to use alcohol and drugs; and so on.

Stressors and Reactions

For many eating-disordered women, these stresses, which are so custom in our culture, as to almost go unnoticed, are very significant factors in the etiology of their illness. As we live and survive in the midst of a culture, it is seductive to minimize, rationalize, and ignore negative cultural standards. Although this may appear easy on the surface, we do our daughters harm to assimilate unquestioningly values that are oppressive at best and often physiologically and psychologically destructive.

Many eating-disordered patients recall an event or situation that provoked a desire for weight loss. Often this is a seemingly minor incident, such as a parental comment on weight, development, appearance, or how an article of clothing fits, etc. To suggest that such a casual remark can cause an eating disorder seems ridiculous. More likely, such a remark is perceived as confirmation by an important individual as an area for concern. Underlying the obvious concerns about body size or weight usually lie serious feelings of inadequacy or ineffectiveness. The eating-disordered patient often feels more powerless and out of control than his or her peers. These feelings are held in; they are perceived as negative, and our culture does not encourage the expression of negative emotions, especially in girls or women. The repression of these feelings, support its continuation and facilitates the development or intensification of lowered self-esteem, dependency, lack of ability to produce effects, and loss of self-identity. What sets the stage for the eating-disordered youth to feel powerless is probably a complex interaction of family dynamics, cultural and sex role factors, timing, biology, individual psychological development, and perhaps genetic determinants.

For many patients, the trigger situation they recall is perceived by them as some form of rejection or as some kind of loss. As we know, the sensitivities of young adolescents are heightened in respect to these issues. Peer

acceptance is so important in this developmental stage that real or perceived rejections carry symbolic as well as real meaning. The transition from child to adult that we call adolescence is one replete with actual losses - loss of childhood, loss of a child's body, loss of the protection and responsibility accorded to children, and so on. These are very real and frightening issues that may be activated by any experience of loss, and therefore they intensify the response to any perceived loss.

Many times a trigger event may be of a sexual nature. Incest or inappropriate boundaries/behaviors are often uncovered in the family histories of eating-disordered clients. Premature sexual encounters with peers may also be a factor. Such events are seriously traumatic and often truly out of the child's control. They can contribute significantly to negative inner feelings, diminished self-esteem, etc. Often the victim in these circumstances is made to feel at fault and rejected. A young girl may respond to such an event by deciding, on some level, that she must remain child-like in appearance to prevent future encounters.

Others respond by gaining weight, often to the point of obesity, in an attempt to push people away by hiding the offending female body under layers of fat. When this happens the girls are using the fat to symbolically express their taking on themselves the inappropriate behaviors of others.

Developmentally, it is difficult to master the psychological, emotional and spiritual tasks of adolescence - they are to create a stable identity and become complete and productive adults. Over time, adolescents develop a sense of themselves that transcends the many changes in their experiences and roles. They find their role in society through active searching which leads to discoveries about themselves.

The changes experienced during puberty bring new awareness of self and others' reactions to them. For example, sometimes adults perceive adolescents to be adults because they physically appear to be adults. However, adolescents are not adults. They need room to explore themselves and their world. Thus, as adults, we need to be aware of their needs and provide them with opportunities to grow into adult roles. A developmental task represents our culture's definition of "normal" development at different points in the life span. There are a several developmental tasks that enable adolescents to create an identity including:

- Achieving emotional independence from parents and other adults
- Preparing for an economic career

- Acquiring a set of values and an ethical system as a guide to behavior -- developing an ideology
- Desiring and achieving socially responsible behavior
- Preparing for marriage and family life
- Achieving a masculine or feminine social role
- These all have profound implications for their developing spirituality.

Spiritual

The effects of eating disorders on a person's developing spirituality are huge. In order to develop spiritually it is important to be aware and to be connected to others. Both this awareness and this connection to others is impaired by the preoccupation inherent in eating disorders. Frequently the point of the bizarre eating behaviors is precisely to stop awareness and to blunt painful connections with others.

Whether one is starving oneself as occurs in anorexia or stuffing oneself as occurs with binge eating, the result is a mind that cannot function at optimal levels because both the starving and stuffing have significant effects on brain chemistry. Spiritual development is difficult when abnormal brain chemistry is present.

The eating-disordered patient frequently feels a spiritual emptiness, depression, and/or a need for immediate gratification of desires. They may ask the question "*Is this all there is?*" There is usually a loss of self-esteem that occurs early in life, maybe even as far back as the oral stage of psychological development with its task of learning to trust in the goodness of the world. If there is parental pressure to be thin then the individual may interpret his/her lack of thinness as "I'm weak and bad," a thought that usually has profound effects on spiritual development.

A person who thinks that he/she is weak and bad will be unable to be present in relationship with others because of the fear that if one gets too close to another person that person will then see the weakness and/or badness which could result in rejection. Rather than risk such exposure the eating-disordered individual will avoid relationships.

Social isolation is inherent in the phenomenon of eating disorders because of the need to protect the eating behavior. The need to sneak, hide, and steal food makes it difficult to relate in normal ways to other people. The shame following a binge-eating session may cause the individual to break social engagements. Over time they may become increasingly isolated,

sometimes to the point of agoraphobia. It is not unusual for someone with an eating disorder to postpone activities and decisions until some point in the future "when I get thin." The result is a life unlived because all anyone really has is the present moment. Learning to live in the present is one of the major tasks that anyone recovering from an eating disorder must undertake.

In any of these situations, a coping response may be the desire to lose weight. Success at this goal is usually attainable through restriction, laxative abuse, vomiting, obsessive exercise, or some combination of these behaviors. Obsessive focus on this goal and the accompanying rituals psychologically block the client from thoughts and feelings that are very painful. Additionally, a sense of control is felt regarding caloric intake, body size, and weight. The individual can be competent at this endeavor, can perhaps even be thinner than peers and, therefore, excel.

Family Biological Factors

Eating disorders have traditionally been understood as sociocultural; however, new research has shown that inherited biological factors increase the risk of developing eating disorders by about 56%. There is now strong evidence reported from family studies that indicates women with a mother or sister with anorexia are twelve times more likely to develop anorexia and four more times likely to develop bulimia. As discussed in the Hormonal Abnormalities section, several abnormalities, such as deviation in the activity in the hypothalamus or neurotransmitters can contribute toward eating disorders. These chemical irregularities can tend to run in families.

There have been findings in family, twin and molecular genetic studies that have corroborated the genetic influence of eating disorders. One of the largest studies, known as the Minnesota Twin Family Study (MTFS), has examined the issue by comparing genetic influences in 680 11-year old twins and 602 17-year old twins. The results show similarities of approximately 32% to 72% in categories related to weight concerns and body dissatisfaction. Binge-eating and vomiting reveal predisposed genetic factors of about 46% to 72% in the twin studies.

The abuse of chemicals, including alcohol dependence, seems to be more common in families of eating-disordered children than in the general population. Various studies bear this out quite consistently. Research gathered

from a sample of 33 eating-disordered women in treatment indicates 60 percent have one parent who abuses chemicals and 10 percent of the patients state that both do. In this same population, 39 percent describe chemical dependency in grandparents. Among this group 27 percent have family histories of affective disorders; there was a history of five suicides among family members. Research has amply illustrated that sons of alcoholics are at high risk for alcoholism and/or chemical dependency. A question one could ask is: "*Are daughters of chemically dependent families at high risk for eating disorders?*"

It is well known that chemically dependent families tend to be chaotic and inconsistent, with higher rates of violence and physical and sexual abuse. Given what we know of the underlying issues of eating-disordered clients, it is not a great intellectual leap to assume that loss of control, powerlessness, inadequacy, etc., may be realistic responses to a chemically dependent family situation.

Recent research suggests that there may be a connection between certain inherited personality traits and the development of disordered eating patterns. Obsessive-compulsive disorder (OCD), high novelty-seeking, and depression are examples of inherited traits that may predispose an individual to the development of an eating disorder, especially when a dysfunctional home environment is also present. These traits may vary from one specific eating disorder to another. For example, in general anorexics have more OCD traits, bulimics are more often high novelty-seekers, and a tendency toward depression is common to both (It is important to note that I am not saying there is no novelty-seeking in anorexia and no OCD in bulimia because clearly the bulimic is obsessed with body image/weight and binge/purge behavior is certainly compulsive; the anorexic who is slowly starving herself to death is definitely creating drama and novelty).

Studies conducted over the past ten years on CSF fluids, urine samples, and post mortem suggest that low levels of serotonin and dopamine may contribute to severe depression. Low levels of serotonin metabolites also correlate with impulsivity suggesting a possible biochemical factor in the development of bulimia. However, it is important to stress that while a tendency toward these personality traits may be inherited, it is not a given that an individual will progress to the level of an eating disorder from the inherited trait alone. The inherited tendency when combined with a dysfunctional home environment is the key to understanding the development of eating disorders.

Yale University researchers have reported the findings of a study suggesting a correlation between binge-eating and an inherited tendency toward the production of high levels of cortisol in response to stress. These high levels of cortisol also correlated with the ingestion of high-fat foods. Additional studies have validated the association between high levels of cortisol and eating disorders. Recent research found that cortisol levels were significantly higher in women with bulimia than those without the disease. Even if the bulimic patient has recovered, high cortisol levels were still present.

Exciting research into the inherited trait of “high sensitivity” has promising implications for understanding the development of eating disorders. The Arons’ study identifies a compilation of personality characteristics which they call the trait of “high sensitivity.” This refers to emotional sensitivity as well as sensitivity to the physical world, both internal and external. Those with this trait pick up on more subtle sources of stimulation than does the population in general and are therefore more easily overstimulated than the average person. They also tend to be more cautious than the average person and therefore tend not to rush into things full speed ahead but stop to check out the environment before acting. Approximately 20% of the population has this trait and, interestingly enough, research shows this same percentage of high sensitivity in the animal world as well. This suggests that the trait may be necessary in these proportions to ensure perpetuation of the species.

Because this trait is found in a small minority of the population, the majority of people do not understand it and often ridicule it. The Arons stress that the trait itself is not a problem for those who have it, but if they are reared in an environment in which they are constantly ridiculed and misunderstood because of the trait, then emotional problems often ensue. In contrast, those who are taught by their caretakers to respect their trait are emotionally well-adjusted. Once again the key is the inherited trait combined with a dysfunctional home environment.

Research is currently underway to see if the trait of high sensitivity is more common in those with eating disorders than in the general population. If the study shows that it is, then this fact will have implications for the treatment of eating disorders. It will be important for those working with eating-disordered individuals to teach the self-respect and coping techniques that should have been taught by their clients’ caretakers during childhood. Reframing the old negative messages

about the trait into positive messages should help the eating-disordered individual begin to develop the self-respect necessary to stop the destructive behaviors. Further research will then be necessary to see if such intervention is effective.

Family Dynamics

The dynamics of an individual family system are often viewed as an important, even critical, factor in eating disorders. While the experts do not point a finger at a family with an eating-disordered child and say, “You caused this,” there is consensus that certain family styles or patterns seem to be more associated with eating disorders than are other styles. We might say that in some families there is a climate that allows an eating disorder to develop and continue with greater ease than in some other families.

One mechanism that permits problems of any sort to flourish is the defense mechanism of denial. Families who use denial as a coping mechanism refuse to acknowledge the existence of the illness. They may rationalize, “It’s just a phase she’s going through - they all do it at some point”; or they minimize, “He’s not all that thin; he’s just growing rapidly. He’ll fill out.” Such statements or positions allow a family to ignore a problem by acting as if it were not occurring or, at least, was not serious. Often, denial is a prevalent mode in the family and serves to protect members from confronting issues that are potentially laden with emotional pain.

Traditionally, eating disorders have been reported with greatest frequency in upper-middle-class families. Other frequently observed characteristics include traditional parental male/female roles, i.e., a passive, home-and-family-oriented wife and an assertive, active outside-involved husband; a family who is socially sensitive to peer and cultural pressures; and family members who are ambitious, competitive, perfectionistic. Often these families have strong needs to be viewed as members of a trouble-free, model family.

All these values make it difficult for both the family and the medical system to acknowledge and tackle a serious problem like an eating disorder. The defense mechanism of denial, while not a conscious, deliberate choice, would fit well psychologically to preserve the myth of the model family.

Salvadore Minuchin and colleagues in Philadelphia have worked extensively with anorexic families; they are noted for their contributions to current understanding of family

systems who develop eating disorders. These therapists describe a characteristic known as enmeshment as typical of families with an eating-disordered child. Enmeshment refers to an overly involved family, in which members seem to merge or blend emotionally. Such families are a group of individuals who are poorly differentiated. They share certain beliefs or attitudes about their family to an extent that prohibits individual opinions or options.

In well-differentiated families there are subsystems that exist, such as the parental subsystem and the sibling subsystem. Parents relate to each other as peers, help-mates, lovers, supporters, etc. They share some interests, thoughts, and actions with each other that are not shared with the entire family as a unit.

The sibling subsystem is similar functionally. The children share among themselves some thoughts, interests, etc. Depending on the age of the children, parents may have more access to the sibling subsystem than vice versa in order to fulfill adequately their role as parents.

These subsystems are delicate and constantly in flux, due to the ever-evolving state of the family unit and all the individual members. In a nonenmeshed family, however, these subsystems function to the benefit of members as they change and grow through the various stages of family development.

In the enmeshed families, subsystems are seldom well established. Parents may relate to children as if the children were their peers, for example. A parent may come home from work after a difficult day and proceed to tell his or her eight-year-old a complex tale of office politics and intrigue. While the child may attempt to be responsive and empathetic, the child cannot adequately respond to this adult situation that is out of their realm of experience. Instead, the child may feel anxious, helpless, confused, and inadequate. These feelings may be intensified because they originate as a reaction to a situation initiated by a trusted parent.

Another way of describing this phenomenon is to assess or describe boundaries. Enmeshed families have poor boundaries. Ask one person a question and another may answer. Or, ask a question and every member gives the same reply. Children act like parents, or parents behave like siblings who allow their children to parent them. If one person has a problem, another member assumes it and perceives it as his or her own.

In some families with eating-disordered children there is an alliance or subsystem that forms between one parent and the symptom-

atic child. Often a daughter who is eating-disordered forms a strong attachment to the father. This may be played out in overt or covert rejection of the mother, specifically rejection of the mother's passive role in the family because of her lack of power and influence. The daughter admires and wishes for Dad's authority, status and influence. She is attracted to many aspects of his role and desires this, yet is aware that her destiny lies in mother's role. This causes confusion and conflict. On some level, the daughter acknowledges that she will grow up to be more like her mother than her father. This situation is particularly relevant, giving the traditional upper-middle-class families associated with anorexia.

In my clinical experience I have seen families in which the father acts more like boyfriend than parent and in which mother and daughter compete with and reject each other. Conversely, alliances may exist between mother and daughter, excluding father for real or imagined shortcomings. Mother/daughter subsystems tend to be conflicted by issues such as competition for the lowest weight or the smallest clothes size, even when an alliance is formed.

Whenever an alliance or subsystem exists between one parent and one child in a family, triangulation may exist.

In this situation, a parental subsystem dysfunction is played out through a child. While this is not usually a deliberate, strategic play on anyone's part, the result is a child's being placed between the two most important adults in his or her world. The child may "side" with first one parent then the other, depending on circumstances, or the child may attempt to mediate between the parents. The lack of a parental sub-system, which allows such triangulation to occur, also maintains it. Parents do not assert leadership or resolve conflict.

Boundary problems often extend beyond the nuclear family. The nuclear family may be unclearly delineated from the family of origin of one or both parents. A grandparent or other relative may be inappropriately influential, forming an alliance with one parent that undermines the parental subsystem or forming a subsystem with a child that bypasses parental authority and undermines nuclear family structure and unity. Such alliances may be seen in many families but especially in situations where one parent has unresolved conflicts of individuation and separation from his or her own adolescence. If a parent has not freely entered the couple partnership, transgenerational family problems easily result due to family dynamics in his or her own family of origin.

In examining the parameters of boundaries and alliances, one aspect of assessment is the family communication pattern. In what manner do members interact? In a **closed system**, members communicate indirectly; real meanings of messages are often covert. Adherence to rigidly shared beliefs and attitudes is of tantamount importance.

In an **open system** there is flexibility and openness in communication. Basic family structures are stable and maintained, and members relay messages directly and clearly. Differing beliefs and opinions are accepted.

A third type of system is called **random or chaotic**. Here inconsistency and unpredictability are the norms. In this mode, communication that is accepted or valued one day may be rejected or even punished on another. This family style is often associated with serious problems, such as chemical dependency or parental psychiatric illness. Some research seems to suggest the random or chaotic communication patterns will be more associated with the emergence of bulimia in a child, while the anorexic syndrome is more likely to occur in a closed system.

Family dynamics have incalculable influence on the healthy or problematic development of members. The factors and patterns described are only a small portion of the whole emotional environment in a family. In considering the impact or contribution of a family's style on the development and maintenance of a problem such as an eating disorder, it is vital to bear some cautions in mind.

First, the data on which clinicians develop theories is quite subjective. Therapists approach a troubled family with their own background, training, and biases. Some of what they find may be colored by their expectations and previous experience.

Another problem is that data is retrieved retrospectively. The family and therapist reach back into memory to reconstruct certain situations and emotional reactions or patterns. This recall may be positively or negatively distorted.

Finally, families come to therapists for help with eating-disordered children some time after the onset of the illness. (This is changing as the public awareness increases). Are the system and the patterns presented to the therapist, the same ones that existed prior to the onset of the illness? Are the alliances, family styles, and boundary problems that seem characteristic of eating-disordered families actually a result of the symptoms - a reaction or an attempt to cope with a baffling, unexpected crisis?

These questions are very difficult to assess

retroactively. Studies of families need to be done over lengthy periods of time to garner accurate longitudinal data relevant to family problems, reactions, and changes. Such projects are very ambitious and require significant time, skilled researchers and therapists, as well as adequate financial resources.

History of Abuse

Studies have reported that sexual abuse is as high as 35% in women suffering from bulimia. Sometimes children who are sexually abused have overwhelming feelings of guilt. Binge eating, purging and starving become a form of self-induced punishment.

This recent research has also revealed that women who reported at least one incident of sexual abuse before the age of 16 were 2.5 times more likely to exhibit symptoms of bulimia than women who have not been abused. The prevalence of bulimia doubled for women who were sexually abused more than once.

Anorexia and EDNOS weren't as prevalent in sexually abused women. However, according to a study published by the Journal of Abnormal Psychology, other psychological issues such as avoidant personality were also present in victims of sexual abuse. Moreover, eating disorders related to sexual abuse were more difficult to treat than patients with no history of sexual abuse.

Hormonal Abnormalities

Hormonal abnormalities exist in many patients with eating disorders. Examples include chemical irregularities in the thyroid, reproductive areas and regions of the body related to appetite and stress. These changes begin in the limbic system of the brain; specifically, the hypothalamus. This small area of the brain regulates responses, such as: eating, sleeping, sexual behavior, emotions, secretion of hormones and body temperature.

Another region of the brain that plays a role in hormonal abnormalities is the amygdala. Located deep in the brain, this almond-shaped structure controls many emotions, such as: aggression, anxiety, affection and depression.

The hypothalamic-pituitary system also releases neurotransmitters. These chemical messengers that regulate emotions are believed to play an important role in eating disorders. For example, recent studies indicate that patients with anorexia have increased activity in the dopamine areas of the brain. Scientists believe this is why anorexics don't experience pleasure from food. Additionally,

increased levels of the hormone ghrelin have been noticed in patients with eating disorders. This hormone is responsible for increasing the feelings of hunger as well as slowing down the body's metabolism.

Emotional Characteristics

The exploration of certain emotional states has been investigated for their relation to eating disorders. Current literature points to how specific moods and emotions can affect eating behavior. Emotional eating is defined as binge eating as a response to some kind of negative circumstance. We've all seen the often-replayed scene in the movies where a relationship break-up causes the heart-broken (usually female) recipient to eat a carton of ice cream, box of candy and so forth. Is there any merit to this?

A study reported in the *Journal of Eating Disorders* addressed the issue of "emotional eating" in adolescence. The foremost theory behind emotional eating is known as the Psychosomatic Theory of Obesity, which states that in stressful times, food acts as a buffer against stress. This emotional defense helps to take one's mind off of the negative situation. This research analyzed the emotions associated with eating disorders, and also addressed potential treatment options.

During the study, researchers used surveys to gather cross-sectional data of 666 students from Los Angeles County schools. The questions in the surveys assessed the student's moods, perceived stress, and how they related to emotional eating. The data analysis revealed that perceived stress, tension and anxiety caused females to overeat. Conversely, the only emotional characteristic that caused their male counterparts to overeat was the feeling of confusion.

The results of this study helped to confirm that interventions could possibly assist in the problem of pediatric obesity caused by binge eating. The preventative measures aim at removing the trigger of these negative emotions by introducing certain complementary treatments, such as stress reduction techniques and the encouragement of positive mood. While it's impossible to shelter children from life's disappointments - like the end of a relationship - it is possible to teach them how to respond in a positive manner. A carton of ice cream may take the pain away momentarily, but the distraction is only temporary.

Research has also shown that many women with eating disorders have a hard time express-

ing themselves or opening up emotionally. Moreover, several empirical studies have revealed that emotional characteristics differ within certain eating disorders. A 2011 report published in the *International Journal of Psychology and Psychological Therapy* investigated this issue. The results indicated that women with anorexia often felt more anxiety than women with bulimia. Both groups were also more anxious in general than women without eating disorders. Furthermore, women with anorexia had a more difficult time expressing themselves than those with bulimia.

Relationship To Other Compulsive Behaviors

Eating disorders are viewed by many treatment providers as strongly related to chemical dependency. To some, eating problems are interchangeable with other addictive disorders and are merely the abuse of another substance than the alcohol or drugs abused by a chemically dependent individual. Even those professionals who do not share such a view note a strong connection between eating disorders and substance abuse/addiction problems.

The mental preoccupation or obsession that characterizes eating disorders and compulsive food-related behaviors forms a pattern similar to those patterns seen in chemically dependent individuals. Additionally, this obsessive mental preoccupation, in conjunction with ritualized behaviors, serves to block perception of most emotions and decrease energy for meaningful interaction or connections with significant others.

Work or school behavior, peer relationships, family relationships, and physical well-being are all negatively influenced by either eating disorders or chemical dependency. Although the chemically dependent person is at greater risk to incur legal and economic problems, those individuals with eating disorders may also experience economic stress due to the high cost of binge episodes, stealing to support their food "habit," or resorting to illegal means to obtain money for food. Reckless driving and automobile accidents have been documented when an eating-disordered individual rushes home to binge, or reaches into the back seat of the car while driving to grab food. Ability to function on a job may diminish as the need to binge and purge increases in frequency and/or intensity and as work time is used to engage in this behavior.

Denial, rationalization, and projection are considered steps of the chemical dependency process. In eating disorders these defense mechanisms are notable and in maladaptive

proportions. Denial is most prevalent. The eating-disordered person often denies that he or she is negatively influenced in any way by the illness. He or she denies hunger, as well as emotional feelings like anger, hurt, guilt, or helplessness. Denial often appears to be deliberate lying, but it is a subconscious process that protects the individual from realistic acknowledgment of his or her serious problem and its effects. Denial may be expressed as flat rejection of the problem or may be a consistent minimizing of the intensity of symptoms or consequences.

Rationalizing is another subconscious defense mechanism. When rationalizing, the eating-disordered person justifies and finds "logical" reasons for his or her eating or weight problem, just as the chemically dependent person justifies his or her drinking or drug use. Insistence that one's dieting is just the same as that of peers, describing restriction of many foods as good nutrition or health consciousness, obtaining a job as an aerobic instructor are some examples of how an eating-disordered client may demonstrate rationalization.

In mechanical dependency the addicted person projects both blame and responsibility for his or her illness onto others. He or she may also project inner feelings, such as anger perceived as existing in another and directed toward him or her. Of these three classic defenses of chemical dependency, projection is less pronounced and obvious in the eating-disordered person, but it is a factor in the process of the illness.

Need for control and drive for perfection are symptoms of eating behaviors. The need to control or orchestrate people and situations is evident in serious proportions in the eating-disordered population. In chemical dependency, control is sought and the user often maintains a shaky illusion of control over the substance of choice long after real volitional choice is gone.

The restricting anorexic is a model of self-directed and self-destructive control. This individual's need to test and retest his or her control ability is similar to the chemically dependent individual's repeated attempts to control his or her use prior to acceptance of the illness. Both the chemically dependent person and the eating-disordered individual attempt to control significant others through bargaining or negotiating about their compulsive pattern.

A strong drive or desire for perfection has been unanimously documented by eating-disorders treatment providers. Most clinicians in the chemical dependency field

have commented on this trait in chemically dependent clients as well. High standards and expectations are extremely prevalent in both populations. However, such strivings may be more easily noted in eating-disordered clients. The striving to be the perfect daughter or student is more obvious and consistent than the striving of an individual whose consciousness is impaired by drug use. Either client is often perceived as rigid, impatient, or demanding. Often these clients demonstrate a need to assign a totally positive or negative value to people, situations, and events.

The family dynamics evident in eating disorders and chemical dependency are strikingly similar. In each family system the symptomatic person becomes the focal point of the family. He or she bears the burden of any family problem and is scapegoated. The symptomatic individual alternately enjoys the focal position in the family and feels heavily the pain and stress of being THE family problem. This vacillation is often facilitated and maintained by all the family members who minimize communication, suppress feelings, and increase mutual isolation and distance as the illnesses and attendant helplessness proceed. In both illnesses all parts of the system collide in the process of symptom maintenance.

The families of eating-disordered persons suffer a higher incidence of chemical dependency than the general population. The National Institute on Alcohol Abuse and Alcoholism reports that eating disorders frequently co-occur with alcohol abuse. Recent studies show that this is a growing problem for adolescents suffering from eating disorders. A study published in the *Journal of Substance Abuse* examined the relationship of substance abuse with eating disorders. During the study, researchers surveyed 177 adolescents, who were participating in an outpatient substance abuse program. The results of the study revealed that 26.4% of the participants showed some type of eating disorder. The highest number of eating disorders occurs in females, and the number of eating disorder symptoms increased with the amount of times the participant became intoxicated in the year before entering the treatment program. This pattern of substance abuse with eating disorders is often problematic for practitioners. The most common issue is which disorder to treat first. A successful treatment plan includes a thorough preliminary assessment of the patient to identify both disorders.

It is evident that many eating-disordered patients are children of alcoholic families. In recent years, psychological assessment and treatment for adult children of chemically dependent families has become a significant

component of the services provided by the chemical dependency treatment field. Adult children of chemically dependent families are often affected with destructive behavioral and emotional patterns that have become well-documented and accepted. As detailed in literature published by the *Anorexia Nervosa and Related Eating Disorders (ANRED)* newsletter. Some of the patterns encountered in the eating-disordered offspring of chemically dependent families include:

1. Isolation and fear of people
2. Fear of anger: one's own or others'
3. Approval-seeking, even to loss of identity
4. A victim perspective; the individual expects abuse
5. Excessive responsibility
6. Guilt when legitimately assertive
7. Attraction to another with similar pathology
8. Low self-esteem

Such clients developed pathological coping mechanisms due to their intimate association with chemically dependent parents, their dependent state in childhood, and their struggle to survive emotionally in the chaos of a chemically dependent family situation. As they grow older these children's behaviors and emotional patterns become entrenched. Although they may not develop alcohol or drug abuse (many eating-disordered clients do, however), their pathology is very close to that of chemical dependency in symptoms and in treatment needs.

Overeaters Anonymous (OA) is a self-help support group modeled on Alcoholics Anonymous (AA), the grandparent of all the Anonymous programs. This organization holds anonymous support groups and offers a program for recovery based on the twelve-step philosophy of AA. Originally conceived to assist compulsive overeaters normalize their compulsive eating patterns and diminish the physical and emotional consequences of the patterns, OA also welcomes bulimic and anorexic individuals. OA encourages persons entering their program to enlist a sponsor from the ranks of successful program members. A sponsor is readily available by phone or in person to consult with and support the new member as needs arise in early recovery.

The 12 steps offer a model for recovery, based on acceptance of powerlessness and the need for a higher power. Members are encouraged to tackle their illness "one day at a time." The actual OA meetings offer peer counseling, sharing of experience, hopefulness, and mutual support.

Many bulimics find OA very helpful in relinquishing their binge and purge pattern. In

this program some find adequate structure and support to normalize their eating behaviors. Many bulimic individuals perceive themselves as addicted to certain food substances. In OA they may find peers who are successfully recovering and who share this perception of the binge and purge experience.

OA has grown significantly in recent years. Metropolitan areas often offer many OA meetings per week, and all of these meetings are free. Some eating-disorders programs incorporate the OA philosophy and model into their treatment. Such programs offer education about the addiction model for eating disorders, require attendance of OA meetings during and after inpatient treatment, and expect each client to obtain a sponsor.

It is important to note that the value of the OA experience varies from one group to another. Because they are self-help in nature there is no trained facilitator and some participants report having experienced some very dysfunctional and controlling behavior in some meetings. Since control issues are often at the root of the development of eating disorders, the last thing that an eating-disordered client needs is to attend a group where the same dynamics are present. The nurse working with eating-disordered clients should be alert for signs that his/her client is having such an experience and suggest that he/she try a different OA meeting.

Medical Aspects

Generic Problems

Eating disorders can and do produce profound physiological disturbances in patients. Restrictive dieting, fasting, vomiting, laxative and diuretic abuse, and excessive exercise, individually or in combination, can cause life-threatening physical consequences.

A famous study on the effects of starvation by Keyo et al. provides relevant information for understanding and treating the starved anorexic. Symptoms displayed by the 36 men in this six-month study included food hoarding and stealing; extreme preoccupation with food; slowed eating; ritualized eating behaviors; increased gum and caffeine use; sleep disturbances, including dreams of food; reduced ability to concentrate; decreased interest in sex; and withdrawal. Physiological changes occur too. Lowered pulse and cardiac rate, cold intolerance, development of lanugo and dry skin are examples.

Additionally, starvation produces organic mental impairment that begins well before it is obvious. This is relevant because insight, judgment, self-assessment ability, etc., are all

RELATIONSHIP TO OTHER COMPULSIVE BEHAVIORS

EATING DISORDERS

Body Image Distortion
Drive for Perfection
Control Issues
Splitting

CHEMICAL DEPENDENCY

Illusion of Control
Dependency on Consciousness-altering Substances
Obvious Anger
Projection of Blame

BOTH ILLNESSES

Obsessive Preoccupation/
Compulsive Behavior
Denial
Family Dysfunction
Low Self-esteem
Consequences to Physical Health
Gradual Decline in Psychosocial Functioning

TREATMENT NEEDS

EATING DISORDERS

Body Image Therapy
Nutritional Education and Counseling
Chemical Dependency Prevention

CHEMICAL DEPENDENCY

Chemical Dependency Education
Eating Disorders Prevention
Alcoholics Anonymous or Narcotics Anonymous

BOTH ILLNESSES

Peer group Involvement
Family Therapy
Expansion of Coping Skills
Support and Acceptance

impaired. The starved patient may disregard the seriousness of his or her situation because of his or her organic impairment. Additionally, in this state, a patient is not amenable to psychotherapy, the primary treatment modality used in eating disorders.

In anorexia, secondary amenorrhea occurs in women shortly after the onset of weight loss. Amenorrhea occurs in 95 percent of anorexic women. Menstruation usually returns after returning to and maintaining normal body weight for a period of months. Bulimic women may experience menstrual irregularity even with normal body weight. Usually 16 percent body fat is essential to the resumption of the menstrual cycle.

Teenage girls with eating disorders are at high risk for developing postmenopausal osteoporosis along with all of its health-related problems. The constant starving and binge/purge behaviors inherent in eating disorders mean that the girl is not taking in adequate levels of calcium and, therefore, is not creating the bone mass that is essential at this stage of physical development. As a result she will not have the necessary extra bone to draw on after menopause.

Systems Problems

Oral problems are noted in eating disorders. Loss of enamel from the inner aspects of teeth, due to repeated contact with hydrochloric acid and subsequent caries, has been seen frequently. Vomiting may also induce swelling of parotid, submaxillary, and sublingual salivary glands. Salivary duct stone formation has been recorded. Gum sensitivity is also common.

The entire gastrointestinal tract suffers. Sore throats are a common complaint relative to vomiting. Esophagitis and gastritis frequently occur, sometimes complicated by Mallory-Weiss Syndrome or Boerhaave's Syndrome. Mallory-Weiss Syndrome is a laceration of the mucosal lining at the gastroesophageal junction. Frequent vomiting is the cause, and it should be ruled out if hematemesis occurs. Diagnosis is achieved by visually examining this junction. Boerhaave's Syndrome may also be caused by vomiting. Severe chest pain is the primary symptom noted when gastric contents leak into the chest cavity through a tear in the lower esophagus.

Gastric atony, with the sense that food sits forever in the stomach, may occur in some patients. Other patients may experience acute distention or gas after eating, especially in the refeeding phase of treatment.

Dehydration and electrolyte imbalance are prominent features of eating disorders. They

become especially critical when vomiting, diuretic abuse, and/or laxative abuse occur. Dehydration alone may cause drying of mucous membranes, with subsequent cracking of lips or other areas. Decreased circulating volume develops secondary to dehydration and needs to be accounted for, as it may occur secondary to dehydration-related orthostasis.

The primary electrolyte disturbance is hypokalemic alkalosis; naturally this is associated with purging. Loss of hydrogen and chloride with dehydration is also seen, as well as lowered calcium and magnesium. Muscle cramps are often experienced with lowered potassium levels.

Dehydration, especially alternating with periods of fluid retention, stresses the kidneys. Impaired renal function is not uncommon; both reduced glomerular filtration rates and tubular dysfunctions have been noted. Another complication associated with dehydration may be occasional urinary tract infections. When alkalosis has occurred, bacteremia may be found.

Malnutrition and starvation both occur secondary to decreased calorie intake. Malnutrition may be seen even in the near-normal weight patient. Deficiencies in protein; vitamins, especially A, C, B₆; folate; and deficiencies in minerals, such as iron and calcium, are not unusual.

Starvation is more prominent in anorexia than in bulimia. Anorexic patients often lose 20-40 percent of normal body weight; some up to 50 percent. In a 1982 study by Baker & Lyden, of 654 anorexic patients there were 38 deaths. Eight of these were due to starvation. Another cause of sudden death in anorexics is cardiac arrhythmia. While arrhythmia is associated with electrolyte imbalance, another cause may be loss of cardiac mass due to starvation.

Other consequences of starvation involve organic mental impairment. Increased lability of mood, irritability, and decreased attention span and ability to concentrate are usual. CAT scans on 23 anorexics with an average weight loss of approximately 36 lbs. revealed diminished brain tissue mass in 21 patients.

As mentioned earlier, most eating-disordered women experience amenorrhea. Multiple studies agree on the extreme prevalence of this phenomenon. The factors that produce this include weight, percentage of body fat, extent of exercise, and the degree of stress experience. Additionally, in low weight, eating-disordered patients, a dysfunction of the hypothalamus is seen. Hypothermia is common, as well as weakness and dry skin.

Small breasts and atrophic vaginitis may also be consequences of gonadal dysfunction.

Hematologic consequences related to starvation include mild anemia, neutropenia, and suboptimal platelet levels.

Insomnia is frequent. It may be due to hunger or urges to binge or related to irritability, mood changes, and so on.

Cardiac problems include bradycardia, low blood pressure, decreased blood volume, and decreased muscle mass. Hypokalemia can lead to arrhythmia, and QT prolongations are frequent in prolonged starvation. Endocrine problems may include lowered T3 and lowered blood sugar.

Bone loss frequently occurs with anorexia. Research has demonstrated that over 90% of women with anorexia have also had bone loss. A combination of estrogen deprivation and lack of nutrition are two significant factors. Low body weight causes the body to stop producing estrogen. This lack of estrogen causes disruption in the menstrual cycle. Patients with anorexia often have about the same level of bone density as postmenopausal women.

Increased levels of cortisol in women with anorexia also triggers bone loss along with other obvious nutritional factors such as calcium deficiency and malnutrition. A study published in the *Journal of Women's Health* reports that women with anorexia have a 40% increase in fracture rate compared to the general population because of calcium and vitamin D deficiencies.

Research frequently documents the varied physical health consequences associated with eating disorders; however, an often overlooked characteristic is the increase in suicide rate in these patients. Suicide is a major cause of death among women suffering from eating disorders. A meta-analysis study published by the *International Journal of Eating Disorders* examined the frequency of suicide among subjects with anorexia. Researchers analyzed 42 studies and found suicide was the second-leading cause of death after complications of the disease. According to this research, patients with purging-type behavior are more likely to commit suicide. One of the key contributing factors in the increased suicide rate among anorexic patients was the number of failed attempts to treat the disease.

Laxative and Diuretic Abuse

The abuse of laxatives is associated with many eating-disordered patients. Increasing, even startling, doses are used daily in many

cases. Among the categories of laxatives are lubricants (mineral oil); bulk formers (planta seed types); saline laxatives (sodium or magnesium); stool softeners; phenolphthalein types; stimulants - these are the strongest types, which cause major peristolic changes and multiple stools; and, finally, enemas.

Each type may be hazardous in the amounts eating-disordered patients typically use it. The bulk producing types are generally safest but require sufficient fluid intake. Eating-disordered patients often eschew fluids for fear of puffiness and weight gain, so use of bulk producers without adequate fluids may produce constipation. Excessive use of lubricants may deplete vitamin A, D, E, and K. The high sodium content of stool softeners can provoke salt absorption and congestive failure. Saline laxatives attract and retain fluids; they cause large fluid shifts and can create dependency.

Finally, the stimulant/irritant types, when abused, can cause degeneration of the nerve plexi that stimulate normal motility within the bowel wall. These also cause lowered serum sodium and potassium and rebound edema. Osteomalacia can result as well.

Diuretic abuse can cause excessive fluid loss, contributing to dehydration and its consequences; constipation; and rebound edema. Rebound edema occurs when cells deprived of adequate fluid over long periods overreact to their dehydration by holding on to excessive amounts of fluid as it becomes available.

Nursing Assessment and Diagnosis

A recent study evaluating the frequency of assessment for eating disorders given by primary care providers showed that nurse practitioners are far more likely to provide this service than are physicians. Nursing assessment of the eating-disordered patient covers the physical, emotional, intellectual, social, and spiritual dimensions of human existence. The alert nurse assesses the patient's physical appearance, activity level, eating patterns, physical limitations, exercise program, weight gain and loss patterns, body image, sexuality, medications, and lifestyle. Comorbid conditions that exist with obesity such as hypertension, dyslipidemia, Type II diabetes, and sleep apnea may also be addressed. The nurse also assesses the patient's feelings of anxiety, anger, frustration, and depression as well as any recurring negative thoughts that may be causing undue stress, his/her cultural background, support system, and family relationships. It is imperative to assess the meaning and significance of food in the patient's life as well.

Nursing diagnoses appropriate for eating-disordered patients include the following: anxiety, body image disturbance, hopelessness, altered nutrition: more than body requirement, altered nutrition: less than body requirement, personal identity disturbance, powerlessness, self-esteem disturbance, social interaction impaired, spiritual distress, and altered thought processes.

Appropriate Medical Treatments

Medical treatment for eating disorders must be aimed at reversing the physiological disturbances engendered by dehydration, malnutrition, vomiting, and laxative abuse. Patients admitted to a hospital for eating disorders treatment may be in need of acute medical care, including admission to an intensive care unit. Each eating-disorder patient must receive prompt and thorough medical assessment, including, at minimum, electrolyte studies, CBC, urinalysis, and EKG. Additionally, a comprehensive physical exam should be performed.

The severely malnourished patient will usually be orthostatic and have a decreased pulse rate. When these symptoms appear in the near-normal-weight individual, they usually indicate serious purging. Dehydration usually accompanies these findings. Electrolyte imbalance often completes this picture but is sometimes not evident, due to decreased circulatory volume. A patient with these symptoms may require strict or modified bed rest and careful rehydration with intravenous fluids. Careful monitoring of the rehydration process as well as vital signs is imperative. Rehydration that proceeds too rapidly can provoke renal and cardiac failure.

Medical management needs to be carefully tailored to the individual, the severity of his or her illness, the length of the illness, and his or her willingness to cooperate with treatment. Nursing care will include frequent and careful monitoring of bed rest and vital signs; skin care to prevent breakdown, especially over bony areas; mouth care; keeping the patient warm; support and encouragement; and close observation of behavior. It is not uncommon for an eating-disordered patient to slow down or discontinue his or her own intravenous intake or to dispose of tube feeding fluids, should such measures be employed.

Perhaps the most difficult part of medical management is the negotiation within the treatment team. Often the medical doctor can be split from the other multi-disciplinary team members by the skillful and persistent

manipulation of the eating-disordered patient. Also, the physician or the nurses may find it quite difficult to avoid judging the patient because of his or her destructive symptoms. The members of the staff who are not familiar with eating disorders may be surprised by the psychological complexity of the problem or may question the long-term psychosocial treatment that is required for real recovery. Although it may be tempting merely to restore adequate physiological stability, the stability may be very fragile.

On the medical floors, anorexic and bulimic patients who are admitted for other problems may cause the nursing staff a great amount of concern. For example, witnessing the obviously anorexic patient sending back meal tray after meal tray virtually untouched may cause staff to feel both angry and helpless. The urge to coax or threaten the patient into eating will be felt. This solution, however, merely replicates the family dynamics. Yet, what can be done? There are some alternatives:

- spend some time with the patient and convey some simple facts about eating disorders
- briefly mention that treatment is available
- report your concerns to the patient's physician and be a resource to the patient and the physician regarding options in your community.
- request a psychiatric consultation or a consultation from the mental nurse specialist.

Being aware of in-hospital psychological support resources as well as those available in the community allows the nurse to be a valuable patient and physician resource. The nurse who is able to offer such information feels less frustrated and helpless as well.

Outpatient medical treatment is often available for patients who are willing to comply. (Lack of compliance due to the extreme fear of weight gain is the major problem associated with treatment of eating disorders. Patients may become quite adept at deception in order to perpetuate the bizarre eating behaviors). Outpatient treatment usually consists of dietary and nutritional assessment, helping the patient set a weight goal, prescribing a calorie level based on the weight goal, teaching the patient about the body's natural hydration and hunger cues, and restoring normal eating patterns in which the patient eats regularly in response to the body's hunger signals. The patient's weight and vital signs are measured at each visit (patients are discouraged from weighing themselves in between visits) and any lab abnormalities are discussed and corrected i.e. anemia and/or vitamin deficiencies.

Amenorrheic patients are often given hormone replacement in the form of oral contraceptives in order to maintain bone density. Bulimics are often referred to dentists for their dental cares and many require the judicious use of laxatives in order to restore normal bowel function after years of laxative abuse.

In addition to the above interventions the nurse may also attempt to get the patient to establish a contract with him/her i.e. to get the anorexic to agree to reach a minimum weight goal or to be rehospitalized if she doesn't (the anorexic should not gain more than two pounds a week when outside the hospital setting because there is a risk of developing edema and congestive heart failure with larger weight gains).

Trends in Psychological Treatment

Outpatient Treatment

Outpatient treatment for eating-disordered clients is increasingly available, especially in metropolitan areas or in settings associated with university hospitals. For many eating-disordered clients, outpatient treatment is adequate and completely appropriate. A wide variety of treatment modalities can be offered on an outpatient basis either singly or in combination. Individual psychotherapy; group therapy, including body image-oriented groups; family therapy; or support groups are the well-accepted treatment forms that are particularly suited to an outpatient setting. The primary therapist would ideally assess each patient individually as to which treatment setting - inpatient or outpatient - is likely to be most helpful. When outpatient treatment seems best, then the next decision is which modalities are appropriate.

For many clients, individual therapy in combination with group therapy is very helpful. The decision of therapy group versus support group comes next, although these two forms can be utilized concurrently. Variables including the therapist's theoretical understanding of eating disorders or the existence of addictive disorders (such as alcoholism/drug dependency), may be factors in selecting the type of group. In some situations, only group therapy or support therapy may be recommended.

Family therapy is generally accepted as a very important modality in eating-disorders treatment. However, family therapy is seldom the sole modality of treatment. The primary therapist may see the individual client and

conduct family therapy, although most therapists agree that this dual role may engender considerable conflicts and problems. When possible, the primary therapist refers to a family therapist and the two therapists maintain communication regarding the progress of their individual treatment components. The younger client who lives at home is an especially strong candidate for family therapy, as family patterns need to change if recovery is to be facilitated and maintained. In some situations, the primary therapist may see the individual client weekly and meet periodically with the family.

Unfortunately, but realistically, it must be noted that type and duration of treatment is often predicated on the financial situation of the client and/or family. Psychological treatment is often an expensive process. This is especially true when, as in the eating-disorders situation, therapists with treatment expertise are not plentiful. The treatment of these illnesses is relatively new, and training is only now becoming readily available. Reimbursement from third-party payers, such as health insurance providers is often difficult to obtain due to ignorance, misunderstanding, and the lengthy treatment that is presently deemed unnecessary. Is this a medical or psychological illness? Health insurance providers tend to perceive illness as either one or the other; they are resistant to and confused about diagnoses implicating both. The struggle and evolution of developing standards for covering psychiatric illnesses and chemical dependency treatment may provide some guidelines for eating-disorders treatment coverage.

Outpatient psychotherapy has traditionally been poorly reimbursed by health care providers. Often only a limit of \$20 per visit, or up to \$1,000 annually, is the coverage limit, while therapy costs in metropolitan areas are often \$75 and up per visit. Another mode of outpatient treatment is the day treatment model. This involves a client's going to a care setting, such as an inpatient unit, for a specific number of hours on specific days of the week. This offers more structure, support, and supervision than treatment of a few hours per week. The clinic may be particularly useful for a limited period after discharge from an inpatient unit, or it might be a determining factor in deciding whether inpatient treatment is actually necessary. Day treatment is considerably less expensive than inpatient treatment, although it is doubtful that health providers would cover the service.

Pharmacological Approach

In recent years doctors have begun to give the antidepressant, Prozac, to those suffering from eating disorders. The combination of Prozac therapy and interpersonal psychotherapy tends to help anorexics gain weight and reduce the frequency of binges and/or purges in bulimics and in binge eaters without leading to weight gain. The SSRI antidepressants, of which Prozac is one, tend to have fewer side effects and are thus better tolerated than other groups of antidepressants. The SSRI class of antidepressants work by regulating the serotonin levels (a chemical important in appetite regulation) in the brain.

The standard dosage of Prozac is from 20mg. to 60 mg./day and new patients should be warned that it may take two to four weeks in order to produce a therapeutic effect. While the side effects are less obnoxious than those of other antidepressants some still exist. They include mild nausea, headache, nervousness, anxiety, diarrhea, and insomnia. Many of these side effects disappear after a few weeks and often they can be avoided altogether by starting the patient at 10mg/day and gradually increasing until a therapeutic level is achieved. Giving the dose no later than noon is also recommended to decrease the incidence of insomnia.

Along with Prozac, other antidepressants prescribed for patients with eating disorders are Zoloft, Paxil and Luvox. Doctors, who prescribe antidepressants for patients with eating disorders, believe that the increased levels of serotonin, caused by the medication, helps to suppress the urge to binge. The theory behind this is that consuming high levels of carbohydrates also results in increased production of brain serotonin, therefore acting as a form of self-medicating by over eating.

To date, studies have had mixed results regarding the role of antidepressants for treating eating disorders. Recently, another class of medication, known as antiepileptic drugs, has become an emerging option for managing eating disorders. Antiepileptic drugs, also known as anticonvulsants, are commonly used in the treatment of epileptic seizures. However, they have been increasingly utilized neuropathic pain, bipolar disorder and as mood stabilizers. Evidence is developing regarding the use of antiepileptic drugs for eating disorders. A recent study published in the *Journal of Drugs & Therapy Perspectives*, lists the following potential positive factors of using these drugs to treat eating disorders:

- Reduction in pathological impulsivity
- Positive effect on neural systems responsible

for eating and weight control

- Effective in treatment of neuropsychiatric conditions associated with eating disorders
- Increased appetite, with some drugs, such as gabapentin and pregabalin resulting in weight gain

The efficacy of antiepileptic medications has been studied in randomized, placebo controlled trials of patients with eating disorders such as bulimia nervosa and binge-eating disorder. Further research is needed for anorexia nervosa and EDNOS. The two most positive drugs are topiramate and zonisamide. Studies concerning these two drugs have revealed a significant reduction in the frequency of bingeing and purging. Additional research regarding topiramate has shown positive outcomes in reducing eating and improving weight and sleep in some patients with eating disorders.

Potential side effects of topiramate include taste perversion, paraesthesias, upper respiratory tract infection and cognitive impairment. Side effects for zonisamide include dry mouth, nausea, headache, taste perversion, somnolence and nervousness. Additional research is currently underway to investigate the efficacy of other antiepileptic drugs, such as gabapentin, pregabalin, levetiracetam and vigabatrin. Current results indicate that gabapentin and pregabalin may help patients with anorexia because of the side effects of weight gain associated with these drugs.

Inpatient Treatment

Inpatient treatment for eating-disordered clients is available in a variety of forms. In many hospitals, eating-disordered clients are hospitalized in general psychiatric units; some of these have special eating-disorder protocols that address the special needs of these clients. Occasionally an eating-disordered patient is hospitalized on a medical unit due to a seriously compromised physical status. Such hospitalizations tend to be brief and focus on the medical aspects.

Today specialized inpatient eating-disorder units are being developed in some metropolitan and university hospitals. These programs usually address the various aspects of eating disorders, including medical, psychosocial, and nutritional. Since all the patients have their eating disorder in common, treatment focuses on this primary issue.

Typically there is a well-structured, day-by-day plan of therapeutic events for all patients who are medically stable. As mentioned earlier, the physical consequences and, particularly, the effects of starvation must be reversed before a patient is psychologically

able to benefit from therapy. Programs usually include individual and group psychotherapy. Individual work is often considered the basis of treatment, yet it must be carefully balanced with group involvement. Often eating-disordered clients are socially isolating, have poor peer relationships, are emotionally immature, etc. These issues are prevalent and serious; overemphasis on the individual may support some of these problems rather than work toward a resolution.

Nurses play a vital role in the multidisciplinary treatment program for patients with eating disorders. A recent study published in the *Journal of Clinical Nursing* examined the professional role of nurses in an inpatient eating disorder unit. During this study, registered nurses were interviewed regarding their experiences of establishing therapeutic treatment for eating disorder patients. The setting for the study involved nurses who cared for patients with eating disorders. These patients were admitted to an in-patient facility for 6 to 12 months. The role of the nurses in this setting was to assess the physical and psychological needs of these patients. In this capacity, nurses set goals for the patients to achieve food intake daily, and to educate patients about the danger of starvation. The goal of the study was to investigate the clinical experiences of nurses in these therapeutic settings. The results of the study revealed three categories that nurses implemented into their management program for patients with eating disorders.

Developing the therapeutic connection -

This stage of treatment involves overcoming the initial resistance from the patient to the nursing staff, many patients deny having a problem. Patients will often use strategies to disguise symptoms. It's up to nurses to identify the symptoms and open the lines of communications with their patients. After identifying the symptoms, the nurse attempts to build a trusting relationship with the client. This can be accomplished by conveying availability to the patient and expressing understanding regarding their fears.

Negotiating the therapeutic connection

— Once the relationship with the patient begins to grow, it's now time to manage the conflicts that will arise during treatment. Boundaries must be established by nurses regarding their self-awareness, professional knowledge and emotions. Patients with eating disorders will suffer many frustrating set-backs of reoccurring negative patterns throughout treatment. This can be a constant battle for case managers and nursing staff, who are on the frontline of the roller coaster of emotions that accompany eating disorders. A support system among

nurses will help to manage emotions and deal with frustrations encountered during the treatment plan.

Coordinating the connection - This final stage describes the duality of the nurse's role in this therapeutic experience. In this capacity, the nurse manages the communication between the healthcare team and their patients. Nurses in the study explained that they were foundational in coordinating trustworthy dialogue between the patient and other healthcare professionals. Nurses often have to implement and convey information to the patient; this communication frequently be met with resistance by the patient. The healthcare team relies heavily on the coordination of the treatment plan by the nursing staff. In this vital role, the nurse acts as a collaborator for the team, and a confidant for the patient.

Discharge planning is a critical component in treatment. The transition from inpatient to outpatient is stressful and requires skillful handling to prevent relapse. Especially for the patient who lives at home, family involvement in this phase is critical.

Recreation is another important area. Often the obsessive-compulsive preoccupation characteristic of eating disorders and the isolation engendered by the illness have resulted in an absence of fun and recreation. Play and recreation needs to be reintroduced to the clients. An occupational, recreational, and/or art therapist can be an invaluable asset to a program. Playful and relaxing activities have benefit in and of themselves and also may facilitate peer group interaction, negotiation, conflict resolution, assertiveness and planning, and follow-through in the hands of a trained clinician. Off-unit activities or planned activity passes either alone, with peers or family, are learning opportunities as well.

The dietitian or nutritionist offers another treatment component. Individual nutritional assessment; nutrition education, individually or in group; and daily counseling regarding food selection are some of the services the dietitian may provide. Additionally, the dietitian may provide caloric requirements for weight gain and maintenance and provide each patient with individual discharge planning.

Patient education is a catch-all component. Within this context patients may be offered didactic lectures and/or given "homework," such as keeping a feelings journal or reading assigned material for group discussion. Topics may cover a wide range from laxative abuse and consequences to relaxation techniques and practice sessions. Often "women's issues" will be discussed, such as women's changing role

in society or the cultural messages about size and appearance.

These components form a generic eating-disorders unit. Each unit has other additions specific to its theoretical biases and modified by staff interests and abilities. Usual hospital routine, such as doctors visits and visiting hours, is maintained. Patients have free time during staff meetings. For teenagers or pre-adolescents, an approximation of classroom instruction may be offered to prevent falling behind in schoolwork.

During the early period of treatment the focus is on medical stabilization and psychological assessment. Various members of the treatment team meet with and assess the patient. Aside from interviews, some psychological tests may be administered and interpreted. This extensive data collection will be the basis for the patient's treatment plan. In this initial phase, the patient may not be expected to participate fully in all aspects of the program but to focus on integration into the milieu. The staff can observe the patient and obtain first-hand information about the patient's personal symptoms regarding eating and food-related behavior.

Many units utilize contracts with patients to establish parameters for weight gain or stabilization and to extinguish binge/purge behavior. Contracting requires careful planning, foresight, clarity, and client cooperation. It is a tool that can either facilitate and support change or become a negative opportunity for struggle and manipulation between the client and the staff. Some eating-disorder theorists have mixed or negative feelings about the use of contracts, likening this modality to the patterns of parental over-control and dominance frequently seen in the eating-disordered family. Such concerns are valid and deserve careful consideration.

Contracts are currently utilized in many programs, and many staff members have been challenged to use this tool in a manner that does not replicate family patterns. Irresponsible use of a contract can invite the client merely to refine the compliant and cooperative facade that is often associated with the anorectic personality style. If this occurs, the client is involved in pleasing staff and winning approval while underlying anger and resentment build. In such cases, problematic symptoms (restricting, binge eating, weight loss, etc.) resume almost immediately on discharge.

One model of contracting that seems to be helpful and workable to clients is a graduated program with specific individualized reinforcers. At first, food is prescribed as

if it were medicine. The number of calories is determined based on age, weight, family history, metabolism, percentage below optimal body weight, and amount of weekly or daily weight gain desired. As noted earlier, patients in a state of starvation must be fed enough to reverse starvation in order for their thought processes to normalize and for therapy to be meaningful. Weight gain in a starved individual is physiologically and psychologically traumatic. There will be physical discomforts such as G.I. fullness, bloating and gas, or complaints of constipation. Many malnourished patients have been seriously dehydrated from fluid restriction, laxative abuse, and purging. When fluid intake is normalized, there may be an initial experience of fluid retention with attendant discomfort. These factors and others indicate a need for the initial weight gained to be very gradual and well-supervised. This, then, is one important goal of a meaningful contract.

At first, the M.D. or dietitian will prescribe a certain number of calories per day, divided into three meals and three snacks. Eating will be monitored by nursing staff. Often a nurse will eat a meal with the patient(s). The nursing functions include normalizing the eating experience through casual conversation and normal-eating role modeling; observing the patient(s) for symptomatic behavior such as restricting, hiding food, spitting out rather than swallowing food, etc; and assisting in processing memories or issues brought to the surface by eating a meal. Often the nurse will remain with the patient(s) for a period of time after the meal. Again the staff member will observe and maintain unit rules geared to minimizing symptomatic behavior and facilitating discussion and decreasing fear and anxiety.

Often information about the number of calories prescribed is not shared with the patient. The MD and dietitian will monitor weight gain and physical well-being; they will readjust caloric intake as needed. The contract will specify weight-gain expectations, such as two to three pounds per week, within a defined time frame. The contract will also specify frequency of weigh-ins. A daily weigh-in may be utilized only when such surveillance is medically necessary. Focusing on weight gain and number of calories and minimizing the number of visits to the scale weekly are two tactics that may help to diminish the excessive preoccupation with calories and weight. Many clients weigh themselves many times per day and obsessively count and record every calorie taken in or expended through exercise. These behaviors are maladaptive and symptomatic of the disease.

In some programs, the team will develop the client's contract together, but only one individual on the staff will present/negotiate the contract with the client. This staff member will be consistent in this role and may both advocate for the patient as well as maintain the contract parameters in the face of confusion, manipulation, etc. Some programs reassess and alter contracts periodically. Most contracts provide rewards to reinforce weight gain and healthy eating behaviors. Patients who eat their meals in the course of the day may receive certain rewards or privileges the next day; also, clients who gain the expected amount of weight for the week, have more significant reinforcement available. The client who is engaged with staff in determining rewards will have a more meaningful and personal contract than one who is not.

Often, patients, due to their illness, will become indifferent to what daily activities give them pleasure. The staff and each patient must then work together observing, giving feedback, and encouraging positive experiences and activities in order to determine what pleasurable activities may be effective reinforcers.

In the early stages of recovery, the treatment team takes the lead in determining treatment parameters. Through treatment, as a client becomes more committed to health, less fearful of weight gain, less distorted about body size and appearance, more involved in psychotherapy and relating with peers, he or she gradually assumes more input into the contract and assumes a more normalized day-to-day routine via extended rewards and privileges. This process can provide an experience of positive actualization and empowerment that can be very therapeutic. The client is encouraged by this structure to take responsibility, achieve a definite goal, negotiate with authority figures, and so on.

The intensity of inpatient treatment and the involvement of a treatment team seem particularly well-suited to contracts. Many individual therapists who work with eating-disordered clients find that working on specific, concrete eating issues decreases their effectiveness in working on the other psychological factors that require focus in individual therapy. These therapists prefer that contract association and maintenance be done by another team member.

Despite these factors, contracts are sometimes utilized in outpatient settings. Clearly, clients who are appropriate to outpatient treatment are not medically compromised by electrolyte imbalance or starvation. Therefore, the type of contract that would be helpful and appropriate would be less complex than for an inpatient. The carefully developed contract,

however, still facilitates therapeutic gains and a positive emotional experience.

The weight component of a contract is often depicted on a graph. Clients sometimes enjoy creating this themselves, using colored inks to chart progress. A copy of the chart is posted in the client's room.

Members of the staff need to be sensitive to the ups and downs clients may experience, especially early in refeeding when weight gain is unpredictable and physiological factors like fluid retention and diuresis can cause significant fluctuations.

The graph depicts the progress of a severely underweight anorexic woman during the early part of hospitalization. The weight gain prescribed for the client is two-three lbs. per week. As she begins to gain, there is a setback, which could be produced by anxiety, and resistance, or natural diuresis.

Such a graph might be kept by the client in her room as well as maintained in her medical chart.

Inpatient treatment is an intense and complex process. A variety of components come together to structure a day-to-day routine. The glue that holds the structure together is the milieu or total environment. The milieu is formed by many factors. These factors include:

- the philosophy of the program
- the biases of the various team members
- the disciplines represented on the treatment team
- the quality of the relationships among the treatment team and the personalities of these individuals, as well as the number and types of patients in care at any one time.

In addition, factors such as the client's length of stay and severity of illness, the peer interactions of patients and the relationships between patients and staff are all significant variables.

The milieu has some stability relative to unit philosophy, politics, and staff relationships. Yet, it is also a constantly changing - balancing and unbalancing - component of treatment. Many liken it to a family environment.

Treatment Modalities

Psychotherapy

Both individual and group psychotherapy are appropriate and valuable treatment modalities extensively utilized in eating-disorders treatment. Both modalities are effective in an inpatient or outpatient setting. In the intensity of an inpatient program, individual and group

therapy typically occur with greater frequency than is manageable or affordable in an outpatient setting.

Individual therapy usually occurs once or twice a week with an outpatient and two to five times per week in an inpatient setting. Regardless of frequency, certain fundamentals are basic to the establishment of a therapeutic relationship. The therapist must be open and honest with the client; this attitude will facilitate eventual trust in the eating-disordered client, who is often distrustful and suspicious of relationships. The therapist must be able to convey a genuine warmth and empathy without overwhelming the client. Also, the client needs to feel understood and accepted.

In group psychotherapy the client forms a less direct and intense relationship with the therapist than in individual treatment. The aforementioned qualities are important for the group therapist too; however, in the group setting these factors will be influenced by the dynamics of the group and the personalities and issues of the other group members. Clients may find some of these important qualities in each other, which will help the clients to bond as a group.

Group members often experience significant connections and interactions with peers as well as with the therapist.

Psychotherapy with eating-disordered clients addresses many issues. There is no formula, nor set group of topics that must be covered. Despite individual situations and variables, however, on-going psychotherapy with eating-disordered clients will usually focus, at least in part, on several predictable issues. Some important and almost universal issues in this population include:

1. Facilitating the client to develop beyond an absolute, dichotomous thinking style.
2. Increasing self-esteem
3. Facilitating successful negotiation of the emotional developmental tasks of adolescence, especially separation and autonomy.
4. Facilitating the replacement of symptoms with alternative sources of pleasure.
5. Supporting increased awareness and expression of internal affective states.

Other functions of the therapy process may be to provide the client with accurate education about eating disorders, to provide appropriate and helpful feedback, and to provide nutritional counseling and monitoring of weight. These cognitive aspects are sometimes more prominent early in therapy and may diminish in proportion as trust develops and as resistance to more meaningful psychotherapy subsides.

Another function of psychotherapy may be to focus on the distorted body image characteristic of eating disorders. This will be discussed specifically as body image therapy.

Family therapy is a cornerstone of eating-disorders treatment. Perhaps no other modality that is utilized in conjunction with individual therapy is as effective.

Both the family dynamics that appear to typify eating-disorders symptoms by the entire system necessitate this type of intervention. This term may refer to individual family therapy sessions, multifamily group therapy, family education and support, family discharge planning, or any combination of the above. Units may offer a family night, where parents and significant others meet together with a group therapist. Often support groups exclude the identified patient, while multifamily therapy includes the patient. Family education is geared to understanding, decreasing denial, and helping the family to view the disorder as an illness, not a moral issue or a self-control problem.

The family plays a vital role in patients with eating disorders. It is important that family members understand the symptoms along with the physical and emotional consequences of eating disorders. In some cases, family members can contribute negatively toward the disorder. For example, some parents identify with the goal of thinness so strongly, that they don't even notice the symptoms associated with the underlying eating disorder. It's important for the entire family to be treated as a team. Current evidence suggests that psychotherapy to include family-based interventions is the best available treatment option for eating disorders. A study published by the American Journal of Psychotherapy collaborates this theory. The

following methods were used during a family-based treatment for anorexic patients:

- Remove blame by educating the family that anorexia is a psychiatric disease
- Encourage patients to exercise and positive eating habits
- Educate parents regarding symptoms and dangers of eating disorders
- Remove parental assumptions regarding anorexia
- Place parents in charge concerning how to address their child's self-starvation.

Authors of this study reported that 80% of patients no longer showed symptoms of anorexia at the end of a family treatment program for patients with anorexia. The aim of this family approach to treatment is to gradually reinforce positive eating habits while educating the entire family about the dangers of eating disorders. The treatment usually lasts between four and six months over a series of about 20 sessions. One of the main challenges is to reduce the feelings of guilt associated with eating disorders. Research has shown that when families come together, they can help to diminish these negative feelings through positive reinforcement.

This process may be painful, but it is also very powerful and revealing in the hands of a skilled clinician. Part of the process is for the family to learn how a healthy family interacts and copes. In a way, the members develop a model for their own internal audit and evaluation tool.

As mentioned above, education plays an important role in family treatment. Family members learn many things: systems theory and principles, their family roles and why these roles are utilized, and healthier alternative behaviors to achieve the positive affection and recognition we all crave from our family.

Family therapy often provokes fears and anxiety among family members. For many families the members have tried many different interventions of their own devising, and strong emotions have built up about the "problem" and the "patient." Family members may be reluctant and resistant to the suggestion of family work. In my experience, this negativity passes quickly as the family is drawn into

the therapy process. Despite the emotional discomfort, this modality offers something special to families that they have not found previously. The therapist's challenge is to examine the family process without blame or finger pointing and, in doing so, offer support and concern to the entire system for the pain they all feel. When this is accomplished, all the members feel a sense of relief, freedom, and hope.

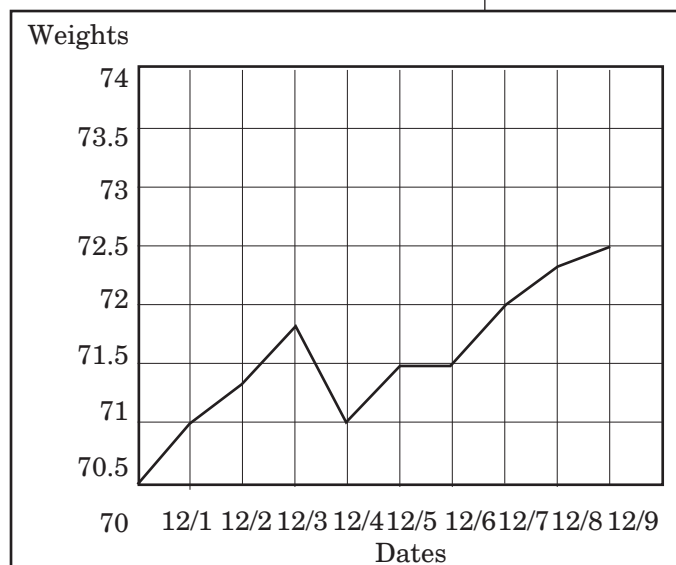
Support Groups

The term support group encompasses several options. Many eating-disorders programs or associations, such as those listed as additional resources, offer on-going support groups. These groups are typically open to individuals with eating disorders as well as to concerned family members and friends. Some support groups are leaderless discussion groups where personal experience is shared. Others have a designated leader. Aside from general discussion and interaction, specific topics or education may be presented by the leader, especially as a point of discussion for the remainder of the group. Overeaters Anonymous or OA is a formal program highlighting a network of self-help support groups. The meetings occur weekly at the same time in the same place. In large cities many meetings occur each week. Often a stable group will regularly attend a certain meeting; attachments and connections will form.

Support groups are one model for an on-going connection with an inpatient treatment program. Prior to admission and/or after discharge, individuals may attend a hospital-based support group. As a post discharge modality, this use of a support group can be helpful in maintaining contact with the institution, staff, and peers.

Women's issues support groups have become commonplace in many communities. A stable group of women meet together regularly, with or without a leader, to discuss specific, yet shared, issues and personal experience and to offer each other a supportive network for growth. Such a group may be valuable for some eating-disordered persons.

Often a support group is recommended in addition to individual and/or group psychotherapy. Therapists operating from a traditional medical or psychological model usually perceive support groups as adjuncts to formal therapy. Those treatment providers operating from an addiction model may view the OA program as the only treatment modality necessary.



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Because nurses are trained in holistic health practices they often make good support group facilitators. The nurse is frequently the only member of the health care team that is trained in both the physical and psychological aspects of human development (with the exception of psychiatrists). As a result they are especially qualified to teach valuable mind/body interventions such as meditation/prayer, mindfulness, progressive relaxation, mental imagery, and breath therapy. Additionally, nurses may be trained to lead guided imagery sessions, to teach the art of journal writing as a means of getting in touch with difficult feelings, and other stress reduction techniques. Nurses are also able to provide individual nutritional assessment, counseling, and education within a support group setting.

The importance of the spiritual connection can also be addressed within a support group setting. The support group itself could be considered a spiritual intervention because it is designed to help the isolated person begin to feel the joys of personal interaction within a safe environment. This kind of self-disclosure can be terrifying for those who have, in the past, experienced connection with others as extremely painful. The facilitator again should regularly acknowledge the courage it takes to try. This is also a good setting to begin teaching the acceptance of limitations that are inherent in living a human existence. We can't always have everything we want and we cannot do everything perfectly. A new way of life in which feelings are acknowledged and honored must be established. Most importantly the support group facilitator can impart a message of hope that is essential to a healthy spirituality.

It is important to note that nurses facilitating support groups, as an outpatient intervention and must be careful to remain within the limits of nursing practice. When facilitating, remind the groups that the nurse is not a **trained** therapist. Nurses need to keep in contact with therapists clients are seeing to make sure that there is continuity of care and support. (It is important to get signed consent from the patient before imparting any information to another health care provider).

Education

A significant component of eating-disorders treatment is the education of the client and the family or significant others. This process of education occurs formally and informally. Within the context of psychotherapy, education occurs informally as accurate information on such topics as the disease process, family dynamics, relapse prevention, and so on. Such education is provided when deemed appropri-

ate by the therapist. Education is a natural part of therapy and evolves in individual group and family therapy.

Education is also a formal and distinct treatment component in the inpatient setting. Various methods may be utilized to impart education:

1. Didactic presentations by various staff members.
2. Reading assignments followed by discussion groups.
3. Individual "cognitive" assignments for clients, which are then presented to peers for feedback.
4. Family education groups-didactic and discussion.
5. Family reading assignments
6. Individual or family consultation with specialists, such as nutritionists.

In the inpatient or structured outpatient treatment setting, a specific educational curriculum is typically established. A cycle is then set that will provide, for example, formal educational sessions twice weekly, one and one-half hour each over a six-week time frame. A list of topics is selected, topics that are viewed as universally pertinent to all eating-disordered clients. Various staff members and assorted disciplines may be involved in the presentations, depending on staff interests and expertise.

My own experience with education curriculum suggests that this modality works best when a specific and detailed outline is developed for each presentation, complete with handouts, experiential exercises, and questions to stimulate discussion. Although certain staff may routinely be assigned to specific presentations, the system should contain all the information needed to present the topics meaningfully by alternative staff.

Regardless of the length of the educational cycle, there will be times when a client has been in treatment long enough to begin repeating the cycle of classes. For example, with a six-week cycle, a client who is in treatment for eight weeks will repeat several classes. Often this repetition engenders resistance and complaints. Bear in mind the client's condition on admission. Many times some combination of starvation, anxiety, and obsession prevents clients from mentally attending and assimilating information in the early part of treatment. It is, therefore, not recommended to excuse the individual from repeating classes. As with many educational experiences, repetition facilitates learning; and, with the eating-disordered patient in particular, this repetition may be helpful. The presenter may wish to ask the client who has been in a particular session

earlier some questions, such as, "What have you heard this time around that you don't recall from last time?" or "Have you heard anything today that means something different to you than it did the first time around?" Cooperative, interested clients may provide themselves and the group with graphic illustrations of progress in treatment and with the cognitive improvement facilitated by adequate nutrition and hydration.

An educational curriculum for an eating-disorders treatment program usually contains certain basic topics, such as:

1. Introduction to eating disorders — accurate, concise information that debunks cultural myths, defines eating disorders, and describes the unit treatment philosophy.
2. Medical aspects — physiological consequences of eating disorders and laxative abuse.
3. Nutrition — basics of stable, healthy nutritional habits.
4. Assertiveness training — basic assertiveness information, including definition of the interactive styles, basic techniques, common problems, role-playing, reading assignments.
5. Chemical dependency prevention — the behavioral and psychological connections between eating disorders and chemical dependency.
6. Family systems theory — family roles, rules, and myths pertinent to eating-disordered families.

In addition, other highly relevant and fruitful topics for exploration include:

1. Depression
2. Self-esteem
3. Body-image distortion
4. Intimacy and sexuality
5. Self-help groups
6. Relapse prevention
7. Stress management
8. Alternative coping skills
9. Use of leisure time
10. Planning and follow-through
11. Anxiety

Education is a serious part of eating-disorders treatment. With some creative thought, it can be incorporated successfully into most treatment programs. The nursing staff is often quite interested in, as well as uniquely suited to, developing and facilitating the educational component of an eating-disorders treatment program. Guest speakers from outside agencies and use of audio-visuals are accepted methods of "spicing up" an educational series and avoiding an overly didactic, intellectualized approach. Also, the use of experiential

exercises and role-play helps clients integrate material.

Body Image Therapy

The distortion of body image is a hallmark of eating disorders. Preoccupation with body size, exaggerated perception of bodily imperfection, unrealistic standards and goals for thinness, obsessive preoccupation with certain body areas - these are some ways that body image distortion may be presented. The therapist and staff must remember that such distortion is one expression of the underlying issues of eating disorders. Merely disputing the distortion or pointing out reality as we perceive it, will not, in most cases, influence body image distortion. Many clients, in fact, experience this response as rejection and complete lack of understanding, which can seriously impair treatment outcome.

In body image therapy, clients are allowed and encouraged to explore their particular distortion or preoccupation and to acknowledge the symbolism of the symptom. Ultimately, this therapeutic process will assist the client to develop some understanding of symptom origin and then to develop an alternative reaction.

Research has confirmed the cognitive and emotional response that body image has on eating disorders. One study examined negative body image thoughts had on subjects who looked at their bodies in a full-length mirror for an allotted time. Afterwards, participants answered a "thoughts checklist" regarding their self-perception of their body image. Participants who had eating disorders then received 10 weekly sessions of body image therapy. The results of this study showed that when subjects with eating disorders looked in the mirror, negative-related cognitions and emotions increased. However, these same subjects showed a marked improvement in body-related cognitions after the 10-week body image therapy sessions.

Methods and techniques used to approach body image are currently being developed. In the verbal therapies, therapists uniformly note great resistance to meaningful articulation of body-image distortions. Theorists believe that the emotional pain involved in body-image distortion is so great that clients do not wish or are unable to talk about this symptom productively. Often the origin of the symptom is in very early life; at puberty the distortion may intensify in reaction to the usual developmental tasks and the interplay between these tasks and eating disorders issues. If dieting begins, this further intensifies body distortion. Some

theorists believe that the distortion is often related to perceived rejection by significant other and/or intense conflict regarding parental identification.

At present, the most fruitful body-image therapy involves many nonverbal techniques. Expressions through art, such as drawing, painting, clay work, or collage, are usually most comfortable. These methods allow clients to create an image and then engage in discussion of what the image means or represents. Imagery exercises may be used to assist clients in recalling early memories and experiences. Sometimes recalled experiences may be reworked with peers leading to more positive conclusions; other memories or experiences may be felt and accepted so that they become less charged. Movement, dance, exercise, yoga and massage therapy may be used in body-image work in order to increase the awareness of the body, and thus heal the mind/body split that often occurs in eating disordered individuals. With or without music, body movement may be used to express and experience inner states usually locked away and inaccessible. Any of these means may be used to facilitate awareness of the meaning of symptoms to understand experiences in therapy, to explore boundaries with significant others, and to question or validate reality. An art or movement therapist is often sought to facilitate body image therapy.

Several goals for body-image therapy have begun to appear in the literature as this modality wins recognition. Some of these goals are:

1. To increase awareness of the sociocultural messages that contribute to women's negative self-perceptions (some evidence suggests that emphasis on sociocultural aspects of the problem is not particularly effective. It is believed that this is because such emphasis does not lead to a sense of increased personal power over the problem. Other interventions, such as nutritional education and education in mind/body techniques, however, do provide one with this sense of personal power and control).
2. To facilitate flexibility of body image, including ability to control and change self-perception.
3. To assist women to define themselves and their internal experiences as distinct from significant others.
4. To explore distorted body image to decrease distortion and to understand the connection between distortion and eating behavior.

Body image therapy appears to be one of the most powerful and significant modalities available for the treatment of eating disorders.

Herbal Wraps

Consider your skin is your largest living and BREATHING organ of your body. Every day, your body is assaulted by harmful air pollution, smoking, harmful ingredients from lotions, soaps, perfumes, dangerous cleaning chemicals, and UV rays.

Harmful chemicals get trapped in our fat cells. It behooves us to clean our body INSIDE and OUT.

Forget Botox, Liposuction, tummy tucks or shapewear. Consider trying noninvasive, all natural way to detoxify and slim your body using herbal body wraps.

Examine the Ingredients

It's best to educate yourself about the benefits and expected results from any herbal wrap. Check ingredients thoroughly before paying for any wrap. The best herbal wraps include those ingredients that hydrate the skin, firm and tone, and provide long-lasting results. Herbal wraps also include anti-inflammatory herbs such as chamomile and rosemary, which also has high levels of vitamin C to nourish the skin. You're trying to cleanse your system, not add more chemicals to the mix. Check to make sure none will contraindicate any existing medication.

How Do Wraps Work?

Herbal body wraps focus attention on more than simply temporary weight loss. The best body wrap compositions include herbs, minerals and sometimes clay to remove toxins from the body that clog the cells. Toxins lodge in fat cells, creating cellulite and bulging. Eliminating toxins helps purify the skin for healthy tone and firming benefits. Body wraps literally involve wrapping the skin in botanically infused or herbal soaked bandages.

Some wraps require exercise during the one-hour session. Body wraps work on the premise that what you wrap yourself in will be absorbed through the skin. Detoxifying ingredients work to expel unhealthy chemicals from the body--such as salt, caffeine, and preservatives. While many people experience a few inches lost during an herbal body wrap, weight loss isn't the primary reason for using body wraps. Instead, herbal body wraps are used to cleanse the skin from the outside in and replace missing nutrients in the system through the skin.

There are 2 types of toxins in our bodies. Hydrophilic, water-soluble and Lipophilic, fat soluble. Contrary to belief our bodies are able to dispose of lipophilic toxins. Waste fat

(the kind you see on an overweight person) is burned for energy, stored as essential reserves and finally used to absorb more fat. The Lipophilic toxins pollute the lipids or fats in your body and make you sick...by detoxification, these lipophilic toxins enter your liver. Which then brings us to why bile production is the key to detoxification of these toxins! The liver's job is to dump the toxins. This is also why some people may feel "sick" this is normal for a person with a "sick liver". If a person wants to ensure a healthy liver will continue to excrete these toxins they need to make sure potassium levels are stable. Potassium salts comprise the majority of bile salts, which are essential to digesting dietary lipids! If our bodies are not alkaline then the lipids stay in our liver, which attracts more fat. Fat absorbs fat!

A. Body wrap ingredients promote Lipolysis.

The plant extracts and botanicals get into the fat cell and break down the large fat molecules into smaller ones, which are now allowed to leave the cell. They are then burned up as energy somewhere else in the body, which is one reason why you want to be well hydrated while you are using the body wraps. This will help circulate the little fat molecules that are being released and rehydrate the body.

B. The ingredients also release toxins from the fat cell. A major function of fat cells is to store toxins, so if we can release toxins, then we can achieve a shrinking of the fat cell.

C. The natural ingredients improve the microcirculation of the area being applied to. This is what creates some of that tightening, firming and toning effect. Fat tissue requires a great deal of blood vessels and such; if we can improve the microcirculation then we can improve the overall health of the area.

D. They have an anti-inflammatory effect. Fat tissue is terribly inflamed because of all the toxins and such. Again, we get tightening, firming and toning because we've increased the overall health of the area applied and reduce the inflammation of the skin.

The nutrients penetrate our cell walls and cause the lipids (fatty material) inside our cells to be released into the lymphatic system. The fat is then circulated naturally and carried out through the normal elimination process of the body.

This is why it is essential to hydrate during the wrap. Drink at least two 8 oz. glasses or 1 bottle of water while wearing the wrap. Then drink 8 – 10 glasses of water per day over the next 72 hours. The goal should be half your

body weight (in pounds) in fluid ounces of water, and a MINIMUM of 64 oz. to replace lost fluids and flush out the toxins that are released. Also limit your intake of caffeine, alcohol, and artificial sweeteners as can hinder your results.

Like any product, herbal wraps are not equal. Choose carefully when deciding which wrap to use. Making the choice for a natural wrap might afford more long-lasting benefits. Using herbal wraps multiple times will provide skin-firming results that are quite measurable.

Body wraps were never intended for permanent weight loss. Instead, consider herbal body wraps a step towards improving your lifestyle with healthy eating and exercise. You can begin immediately after your herbal wrap. Consider the herbal wrap a clean slate and a new beginning. Fresh healthy skin, a hydrated body, and healthy cells free of toxins provide the perfect start to beginning lifestyle changes for a healthier you.

Coupled with a healthy diet, exercise and improved lifestyle that avoids exposure to chemicals will help maintain your improved skin tone and body condition. Herbal wraps help reduce the size of the fat cells in your body through detoxification. By no means does a wrap burn up your fat cells. Only exercise can do that. Herbal wraps help breakdown fat cells on the surface. The wrap itself helps compress the body while the fat cells are being "cleaned." This results in a decrease in your measurements.

[If you have a medical condition, health concern, or are taking prescription medication, consult with your health care professional before using herbal wrap products].

Nutritional Counseling

Nutritional counseling is yet another important component in comprehensive eating-disorders treatment. A dietitian or nutritionist with understanding of the psychodynamics of eating disorders is a valuable member of the multidisciplinary treatment team. One critical factor in effective eating disorders-treatment is that the roles and areas of influence of the M.D., therapist, nutritionist, etc., are well clarified and mutually agreed upon. Many clients will attempt to undermine treatment, using issues of food and calories. Although the team members may confer in decision-making, one team member needs consistently to relay or negotiate food and calorie (if used) information exclusively. Many teams will utilize nutritionists to assume this role, as they are the experts in this area.

The nutritionist will also provide patient and family education including basic sound

nutrition, meal planning, food exchange, and individualized discharge planning regarding diet. Misconceptions and food myths, too, will be explored in nutritional education. Another way of providing this education, if the setting permits, is for the dietitian or nutritionist to involve patients in meal-planning sessions, shopping expeditions, and food preparation; then the nutritionist joins the clients in a meal.

The dietitian may meet with individual clients daily or weekly for personal assessment, feedback, answering questions, reducing anxiety regarding food and eating, and offering support. Such meetings may continue during aftercare, as the period immediately after discharge from a treatment program is quite critical and is a time of high relapse potential.

In outpatient treatment a nutritionist may work with a therapist as an adjunct to psychotherapy activities. Such an arrangement may prevent eating and calories from becoming the focus of psychotherapy sessions. The nutritionist can meet with the client periodically to provide education, assessment, and direction and report on nutritional progress to the therapist.

Prevention of Eating Disorders

Prevention of eating disorders can be classified into three categories — *primary, secondary, and tertiary prevention* methods.

1. Primary prevention is aimed at reducing the incidence of a disorder by reducing the incidence of known risk factors.

2. Secondary prevention is aimed reducing the duration of disordered eating patterns by intervening early in the development process.

3. Tertiary prevention is aimed at reducing the impairment that may result from an already well-established eating disorder.

Most efforts at preventing the development of eating disorders are targeted toward the adolescent girl and, therefore, are centered around schools. There is some question as to whether targeting this age group is the most appropriate means for preventing eating disorders because research has not been addressed to demonstrate who should be targeted, but most experts believe this is a good place to start.

At present a comprehensive school-based program is recommended. Additional aspects of the school-based prevention program should include staff training, classroom interventions, integration of relevant material into current curricula (health education, physical education, and home economics classes for

example), individual and small group counseling for those at high risk, referral systems, opportunities for healthy eating in cafeterias and vending machines, outreach activities, and parent education beginning with parents of middle school and high school students and eventually targeting parents of very young children as well. Such an approach recognizes the importance of modifying individual and environmental sources of the problem at the same time. School nurses are the logical choice for organizing and implementing such programs.

A recent study focused on a school-based primary prevention program and evaluated its effectiveness in preventing the development of eating disorders six months after program completion and again after two years. Eating disturbances targeted included those that met the criteria for an eating disorder, as well as subclinical behaviors such as unhealthy dieting patterns and binge-eating, both of which are common in adolescent girls.

The goals of the program were to change knowledge, attitudes, and behaviors related to nutrition and weight control; to improve body image and self-esteem; and to encourage effectiveness in resisting peer pressure with regard to eating and dieting behaviors. Results showed that the program had a moderate effect on nutrition knowledge and on preventing the onset of unhealthy eating behaviors, especially in those girls who were already overweight at the start of the program, but it did not significantly alter already existing maladaptive behaviors. The most significant results were seen in nutritional knowledge, establishing regular meal patterns, and in frequency of exercise. Intervention was not particularly successful in improving body-satisfaction, self-esteem, attitudes toward weight loss methods, and food preferences.

In the prevention of eating disorders, the healthcare community can no longer ignore the nationwide problem of childhood obesity. In addition to the aforementioned school-based programs, certain myths regarding eating disorders must be studied and widely published as a guide for professional counselors and the general public. These overlooked factors include:

Eating disorders affect certain females – This notion theorizes that eating disorders only affect white, affluent females. This myth is often reinforced by the media's preoccupation with ultra-slim celebrities. The reality is that eating disorders don't always involve anorexia. Bulimia, binge eating disorder and EDNOS also contribute to the problem. In many cases, such as in bulimic patients, the disease isn't

always as visible as it is with anorexic patients. It should also be noted that eating disorders are on the rise for males. The centers for Disease Control and Prevention reported that 6% of females used laxatives or vomited for weight control in a US high school population-based survey, while 3% of their male counterparts used the same measures to control their weight. This translates to a 2:1 gender ratio. Previous popular belief was a 10:1 gender ratio.

Eating disorders distract from obesity prevention – Current evidence now indicates that childhood obesity and eating disorders are linked in a variety of ways. The previous belief was that eating disorders were separate and therefore, competed with obesity. Studies have proved that commonalities exist in both fields to include binge-eating and negative body image. When treatment plans are combined to prevent eating disorders, greater effectiveness and cost savings occurred.

Diet products are peripheral to public health concerns - There are many public health investigations into the health concerns related to America's fast-food diet, and the targeted marketing campaigns directed at the youth. This exposure helped increase the awareness of eating disorders? There is currently a wide variety of literature available devoted to dietary choices; however, there are still minimal options promoting the signs and symptoms of childhood obesity and other eating disorders. One of the key problems is that there is still an extensive call for dietary products such as diet pills, diuretics and laxatives. The marketing for such products greatly exceeds that of eating disorder prevention. To address this problem, health researchers need to educate the public concerning the specific types of eating disorders along with the symptoms of abuse.

The assessment, diagnosis, and treatment of those with eating disorders is a complex and challenging process due to the multiple factors involved in their development. The process is enhanced, however, by viewing the problem from a holistic perspective, taking into the account the physical, intellectual, emotional, sociocultural, and spiritual dimensions of human existence. Because nurses are trained to look at illness from such a perspective, we have a unique role to play in the assessment, diagnosis, and intervention process necessary for effective treatment of those with eating disorders. The holistic mind set also allows us to assess, diagnose, and intervene in cases of subclinical eating patterns in which patients may be at risk for developing an eating disorder somewhere down the line. The earlier that intervention occurs the better the chance

of success in preventing the development of eating disorders altogether and in preventing the progression of subclinical cases into full-fledged disorders.

Many of the helpful mind/body interventions suggested in the treatment of eating disorders are well within the scope of nursing practice. They include:

- progressive relaxation and stress reduction techniques
- prayer/guided meditation
- facilitating support groups
- teaching complete nutrition
- assertiveness training, and
- self-esteem promotion.

Nurses may also teach patients the dangers involved in the frequent use of vomiting, laxatives, and/or diuretics for weight control. You may evaluate the need for a referral to one or more health professionals for complications that might be impacted by the eating disorder and they include:

- a dietitian or nutritionist for diabetes
- a dentist for teeth problems associated with frequent vomiting
- licensed psychotherapists for individual, group, and/or family therapy
- a massage therapist to relieve body tension
- a social worker and/or
- a physician for concerns about the physical health of the patient resulting from hypertension, excessive vomiting, laxative and diuretic use.

Most nurses are inherently caring and have good communication skills. We are in a position to explain, in a nonthreatening way, the latest trends in psychological treatment; For example, the importance of treating the whole family when the eating-disordered patient is a child; or an adolescent with the use of SSRI antidepressants in the treatment of binge-eating behavior. We can provide general information on the recommended dosages and side-effects of these fairly new medications. When patients express feelings of shame about needing to rely on meds we can help them understand that often there is a chemically inherited component to the development of eating disorders and, therefore, it is not the patient's fault and does not mean that they have a character flaw.

Health care workers with poorer communication skills may not recognize the presence of these debilitating doubts and, as a result, will not address these important concerns.

The modern nurse has an important role to play in helping patients, family members, and society as a whole to begin to address the issue of eating disorders with compassion and love, whether the patient is being treated in an inpatient or outpatient setting. Every nurse,

whether they work in an eating-disorder environment or not, has the skills and the knowledge to help our society as a whole begin to deal with this issue. We need to be more aware.

RESOURCE LIST

National Association of Anorexia and Related Disorders (ANAD)

800 East Diehl Rd., #160
Naperville, IL 60563
630-577-1330
anadhelp@anad.org

National Eating Disorders Organization (NEDO)

6655 South Yale Ave.
Tulsa, OK 74136
918-481-4044

National Eating Disorder Association (NEDA)

165 West 46th Street
New York, NY 10036
800-931-1144
Info@NationalEatingDisorders.org

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APPENDIX A

Sample Contract

1. While I'm at the Eating Disorders Unit, I agree to eat the meals I'm served in order to gain weight necessary to my health.
2. I understand I'm required to finish () each meal. () = necessary amounts of food at each meal.
3. I understand I'm required to gain () lbs. of needed weight each week.
4. I understand I'll be required to eat whatever kinds of food I'm given, even eating more than I like.
5. If I don't gain () lbs. each week, even though I'm eating as decided upon by the staff, I won't lose privileges, but the staff will increase my food requirements.
6. If I do gain () lbs. each week and am eating as required, I'll get special privileges or treats each week, like going out to a theater to see a movie of my choice.
7. Every day that I eat as required, I'll get privileges to watch T.V. or take a walk, the following day.
8. Any day I don't eat as required, I'll lose privileges that day and the next.
9. I agree to gain () lbs. each week until I gain the weight necessary to my health, _____ lbs, and am able to hold that weight, without losing, for five days in a row.
10. I understand that no part of this contract can be changed without the entire staff meeting to approve the change.
11. I understand that this contract may be difficult for me often. I promise to let people on staff know when I'm having a hard time.
12. I understand _____ is the person responsible for enforcing this contract, but that all staff know about this contract and will honor it.

Signed _____ Date _____

Staff Contractor _____ Date _____

Amendments	Date	Done at Staff Meeting

We Want You To Learn![®]

Note: The Following pages are not a part of the course, this is Additional Information for your reference

ANOREXIA NERVOSA

- Dramatic weight loss
- Dresses in layers to hide weight loss
- Is preoccupied with weight, food, calories, fat grams, and dieting
 - Refuses to eat certain foods, progressing to restrictions against whole categories of food (e.g., no carbohydrates, etc.)
 - Makes frequent comments about feeling “fat” or overweight despite weight loss
 - Complains of constipation, abdominal pain, cold intolerance, lethargy, and excess energy
 - Denies feeling hungry
 - Develops food rituals (e.g., eating foods in certain orders, excessive chewing, rearranging food on a plate)
 - Cooks meals for others without eating
 - Consistently makes excuses to avoid meal-times or situations involving food
 - Maintains an excessive, rigid exercise regimen – despite weather, fatigue, illness, or injury, the need to “burn off” calories taken in
 - Withdraws from usual friends and activities and becomes more isolated, withdrawn, and secretive
 - Seems concerned about eating in public
 - Has limited social spontaneity
 - Resists maintaining body weight at or above a minimally normal weight for age and height
 - Has intense fear of weight gain or being “fat,” even though underweight
 - Has disturbed experience of body weight or shape, undue influence of weight or shape on self-evaluation, or denial of the seriousness of low body weight
 - Postpuberty female loses menstrual period
 - Feels ineffective
 - Has strong need for control
 - Shows inflexible thinking
 - Has overly restrained initiative and emotional expression

BULIMIA NERVOSA

- In general, behaviors and attitudes indicate that weight loss, dieting, and control of food are becoming primary concerns
 - Evidence of binge eating, including disappearance of large amounts of food in short periods of time or lots of empty wrappers and containers indicating consumption of large amounts of food

- Evidence of purging behaviors, including frequent trips to the bathroom after meals, signs and/ or smells of vomiting, presence of wrappers or packages of laxatives or diuretics
 - Appears uncomfortable eating around others
 - Develops food rituals (e.g., eats only a particular food or food group [e.g., condiments], excessive chewing, doesn’t allow foods to touch)
 - Skips meals or takes small portions of food at regular meals
 - Steals or hoards food in strange places
 - Drinks excessive amounts of water
 - Uses excessive amounts of mouth-wash, mints, and gum
 - Hides body with baggy clothes
 - Maintains excessive, rigid exercise regimen – despite weather, fatigue, illness, or injury, the need to “burn off” calories
 - Shows unusual swelling of the cheeks or jaw area
 - Has calluses on the back of the hands and knuckles from self-induced vomiting
 - Teeth are discolored, stained
 - Creates lifestyle schedules or rituals to make time for binge-and-purge sessions
 - Withdraws from usual friends and activities
 - Looks bloated from fluid retention
 - Frequently diets
 - Shows extreme concern with body weight and shape
 - Has secret recurring episodes of binge eating (eating in a discrete period of time an amount of food that is much larger than most individuals would eat under similar circumstances); feels lack of control over ability to stop eating
 - Purges after a binge (e.g., self-induced vomiting, abuse of laxatives, diet pills and/or diuretics, excessive exercise, fasting)
 - Body weight is typically within the normal weight range; may be overweight

BINGE EATING DISORDER (Compulsive Eating Disorder)

- Evidence of binge eating, including disappearance of large amounts of food in short periods of time or lots of empty wrappers and containers indicating consumption of large amounts of food

- Develops food rituals (e.g., eats only a particular food or food group [e.g., condiments], excessive chewing, doesn’t allow foods to touch)
 - Steals or hoards food in strange places
 - Hides body with baggy clothes
 - Creates lifestyle schedules or rituals to make time for binge- sessions
 - Skips meals or takes small portions of food at regular meals
 - Has periods of uncontrolled, impulsive, or continuous eating beyond the point of feeling comfortably full
 - Does not purge
 - Engages in sporadic fasting or repetitive dieting
 - Body weight varies from normal to mild, moderate, or severe obesity

EATING DISORDERS NOT OTHERWISE DIAGNOSED

- Any combination of the above

Source: National Eating Disorder Association

SUMMARY OF MIND/BODY INTERVENTIONS

Interventions	Uses	Drawbacks
Meditation	A variety of stress-inducing psychological problems in chronic illness.	May take several weeks or months to see results.
Mindfulness	Helps focus on the present moment thus reduce worry and anxiety.	Requires a lot of practice, and may take months to see results.
Progressive Relaxation	Helps focus the mind on the body.	None.
Mental Imagery	Used once the body and mind are relaxed to suggest new ideas to boost immune system function.	None.
Guided Imagery	Same as mental imagery.	Cannot be done alone.
EMDR	PTSD, phobias, addiction, OCD, depression, eating disorders.	Requires trained professional.
Thought-Field Therapy	Chronic worrying, anxiety, panic disorders, phobias, traumatic memories.	Soreness or tingling from tapping too hard.
Prayer	Provides comfort, when shared it is the most intimate of human communication, encourages spiritual growth.	None (shared prayer does require another person).
Biofeedback	Chronic pain such as migraines, TMJ, irritable bowel.	Requires trained professional and special equipment.
Therapeutic Touch	Restore proper energy flow to the body, reduces pain, increases healing.	Requires trained professional.
Support Groups	Decrease sense of isolation and loneliness.	Requires trained facilitator, and other committed participants.
Yoga	Unifies the physical, mental, and spiritual dimensions of life.	Can be strenuous.
Light Therapy	Seasonal Affective Disorder.	Light boxes may cost several hundred dollars, but sunshine is free.
Breath Therapy	Induce a state of relaxation	May cause the release of strong emotions, so shouldn't be done alone.
Qigong	Induce relaxation response through meditation, dance, yoga.	None.

EATING DISORDERS: PROGRESS AND CHALLENGES OF THE MIND, BODY AND SOUL

