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DEVELOPMENT OF AN EATING DISORDER EDUCATIONAL
MODULE FOR THE ADVANCED PRACTICE NURSE

Scholarly Project for the Degree of M. S. N.
MICHIGAN STATE UNIVERSITY
EILEEN M. PIZANIS

1999

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**DEVELOPMENT OF AN EATING DISORDER EDUCATIONAL
MODULE FOR THE ADVANCED PRACTICE NURSE**

By

Eileen M. Pizanis

A SCHOLARLY PROJECT

**Submitted to
Michigan State University
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ABSTRACT

DEVELOPMENT OF AN EATING DISORDER EDUCATIONAL MODULE FOR THE ADVANCED PRACTICE NURSE

By

Eileen M. Pizanis

The incidence of individuals diagnosed with eating disorders in primary care is increasing. Anorexia nervosa is a disorder prevalent in adolescent girls. Bulimia nervosa may go undetected for years as an individual concerned with weight and body image hides dangerous eating behaviors. In the practice of primary prevention, the Advanced Practice Nurse (APN) must educate the patient about the dangers of dieting and food restriction, and promote healthy eating behaviors. The APN must be able to recognize the signs and symptoms of eating disorders and their prevalence in clinical practice. The APN must also be skilled in assessment and in initiating appropriate intervention when an eating disorder is suspected. The goal of this project was to develop an educational module for APNs about primary, secondary and tertiary prevention of eating disorders.

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INTRODUCTION

More than five million Americans suffer from eating disorders and one million American women each year will develop anorexia nervosa or bulimia nervosa (National Institute of Mental Health [NIMH], 1994). Incidence of eating disorders have emerged at alarming rates making the disorders some of the most rapidly increasing diseases in our time (Riley, 1991). The average age of onset of anorexia nervosa is approximately sixteen years of age and ninety percent of cases reported are females (Johnson, Sansone, & Chewning, 1992). Anorexia nervosa is the third most common chronic illness in teenage girls (Beaumont & Russel, 1993). Anorexia nervosa is one of the most lethal psychiatric disorders, with a mortality rate of 20% (Johnson, Sansone, & Chewning, 1992).

Bulimia nervosa has increased at greater rates than anorexia nervosa over the past five years (Heller & Stern, 1998). Two point seven (2.7) percent of high school girls and 1.4 percent of high school boys have engaged in bulimia behavior. Estimates of bulimia among young women ranges from 3 to 10 percent. The six year mortality rate in women who seek treatment is one percent, but 20 percent of women

with bulimia are battling the disease after ten years, even with treatment (Heller & Stern, 1998).

Dieting and weight restriction is a common practice among young women and children. Sixty percent of fourth graders weight themselves every day and 24 percent of women would give up three years of their lives if they could lose weight (Rosen, 1995). Forty to fifty percent of American women are dieting at any one time; and 50 percent of nine year old girls, and 80 percent of ten year old girls have already dieted (Maine, 1994). A two year longitudinal study reported that 35% of normal dieters progress to pathological dieting and 20 to 25 percent of dieters progress to developing eating disorders (Huon, 1993).

The Advanced Practice Nurse (APN) must become aware of the causes of eating disorders, must recognize the signs and symptoms of eating disorders, must know treatment approaches to the disorders, and must develop primary prevention strategies to help control and prevent the incidence of these disorders in the patient population. Because the APN is involved in caring for patients in the primary care settings, he or she is the ideal health care provider for understanding and recognizing eating disorders.

Purpose

The purpose of this project was to develop a teaching module for the education of APNs to help them effectively screen, diagnose and treat eating disorders in the primary care setting. In addition, primary prevention techniques

will be presented so that the APN can help patients develop non-dieting approaches of health promotion.

Conceptual Framework

The teaching module (TM) described in this project was conceptualized in terms of Pender's Revised Health Promotion Model ([RHPM], 1996). The TM fits into Pender's (1996) model in terms of the health promotion and health maintenance goals of the APN in the primary care setting, as he/she seeks to promote healthy behaviors in the patient.

The RHPM (Figure 1) is directed toward increasing the level of well being and self actualization of a given individual or group (Pender, 1996). The RHPM focuses on moving toward a positively balanced state of health and well being where health promoting behaviors become continuous activities in the life style of the individual.

A person's nutritional practices must be developed to promote long term physical and psychological well being. Old patterns of eating, that promote a negative state of health, must be eliminated. The APN, as teacher and health care provider, must reinforce the importance of healthy patterns of eating, and educate the client about the negative effects on health when distorted eating patterns are maintained.

Pender (1996) explains that a person's decision to act in a specific way is based on the individual's characteristics and previous patterns of behavior. The best

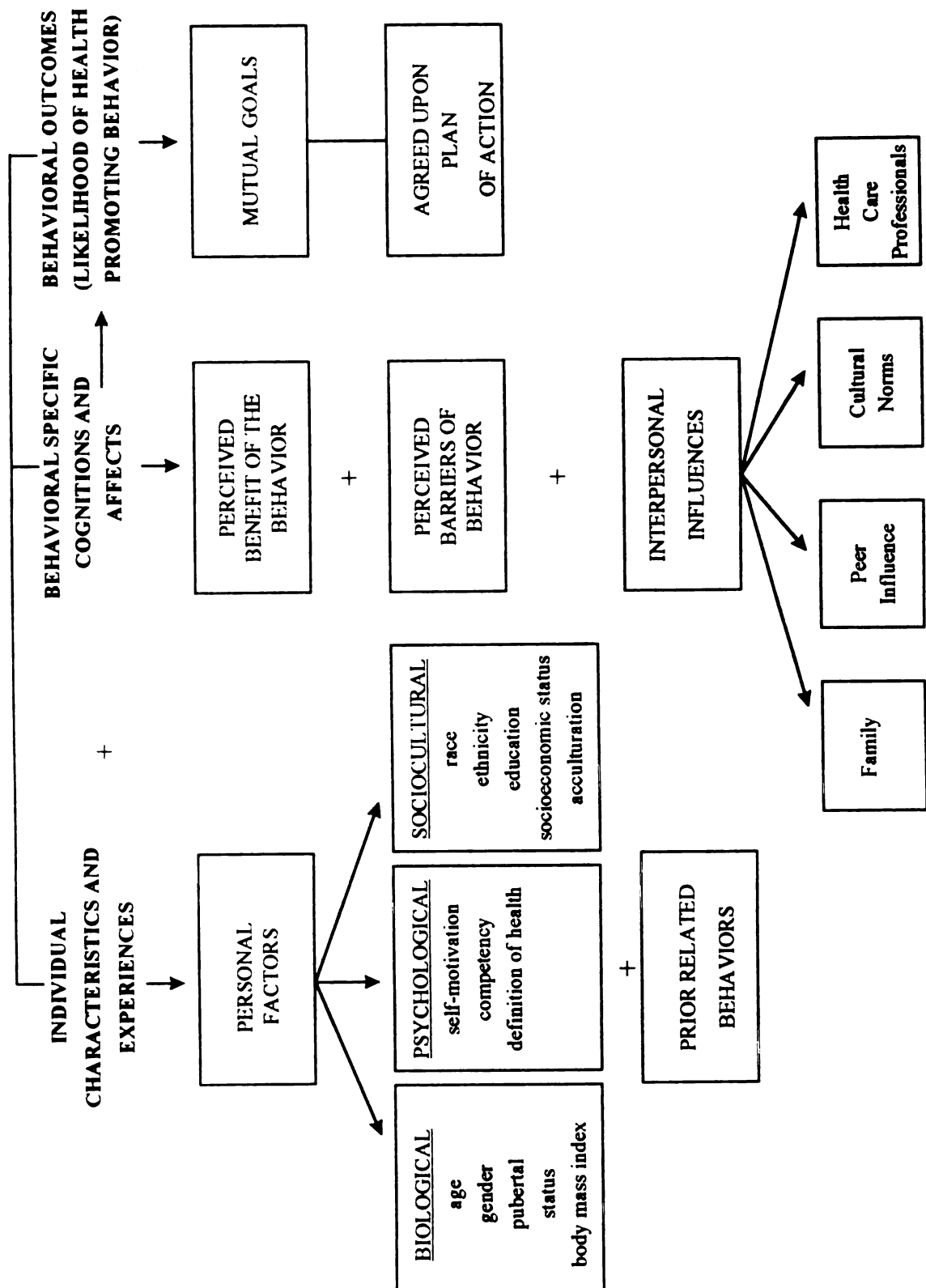


Figure 1. Adaptation of Pender's Health Promotion Model (1996).

predictor of behavior is the frequency of the same or previous behavior in the past. If short term benefits are experienced early in the course of the behavior, the behavior is more likely to be repeated. The level of efficacy and positive affect when the behavior is successfully performed results in positive feedback, and reinforces the repetition of the behavior.

Personal factors in an individual affect subsequent actions (Pender, 1996). Pender relates biological, psychological and sociocultural factors that can be predictive of a given behavior. The biological factors include the variables of age, gender, pubertal status, and body mass index. Psychological factors include variables such as self motivation, personal competence, and definition of health. Personal sociocultural factors include race, ethnicity, education, socioeconomic status and acculturation.

Behavioral specific cognition and affect interact with the individual's characteristics and experiences and impact the behavioral outcome (Pender, 1996). Pender explains that a person's behavior is dependent on anticipated benefits that will occur as the result of the behavior and the real or imagined barriers to the behavior.

The behavior specific cognition of perceived self efficacy influences behavior (Pender, 1996). Self efficacy is the judgment of one's ability to perform the specific behavior. Feelings of confidence and skill in one's

performance encourages the individual to engage in the behavior.

Subjective feelings that occur prior to, during and following a behavior, are defined as activity related affect (Pender, 1996). These affective responses are cognitively labeled and stored in the memory. When the behavior is thought of, direct emotional responses are aroused. The behavior may elicit a positive or negative response.

Interpersonal and situational influences also facilitate or impede behavior. Primary sources of interpersonal influences are families, peers and health care providers (Pender, 1996). Social norms set standards for behavior that an individual can adopt or reject, and social support for a behavior may come from the input of others. The individual must understand and assimilate the wishes and input of others for the behavior to be influenced.

Situational influences impact behavior and the environment may present stimuli that trigger the behavior (Pender, 1996). An individual performs more competently in an environment that is safe, compatible, and supportive.

Finally, the end point to the RHPM (Pender, 1996) is the health promoting behavior which is directed toward attaining a positive health outcome for the patient. The likelihood of this behavior is increased when the individual is involved in strategic planning and in setting health promoting goals.

With this model in mind, the APN must seek to promote normalized eating by the patient (Figure 2). The likelihood that the patient will decide to eat normally is based on the individual's characteristics and previous experiences and the behavioral specific cognition that influence the behavior. An adolescent female, or a homosexual male, may be more likely to have an eating disorder (Garner, 1993; Johnson, Sansone, & Chewing, 1992; Rosen, 1995). An individual who has a body mass index that is 85% of the expected value may engage in restrictive eating behaviors (Wiseman, Harris, & Halmi, 1998; Beaumont & Russel, 1993). An individual who diets frequently and is over concerned about weight and body image may have a history of distorted eating behaviors (Zimmerman & Hoerr, 1995).

Psychological factors impact the behavior of the patient (Pender, 1996). An individual's self-esteem, need for control, affect, ability to concentrate, and sense of body image can affect eating behavior (Foreyt & Goodrich, 1993; Johnson, Sansone, & Chewing, 1992).

Personal sociocultural factors affect the individual's eating behavior (Pender, 1996). Individuals of all socioeconomic levels can be influenced by a culture that communicate the ideal beauty myth of thinness (Shisslak & Crago, 1995). This ideal pressures many individuals to diet in an attempt to achieve an unrealistic body weight, often with dangerous weight control methods (Zimmerman & Hoerr, 1995).

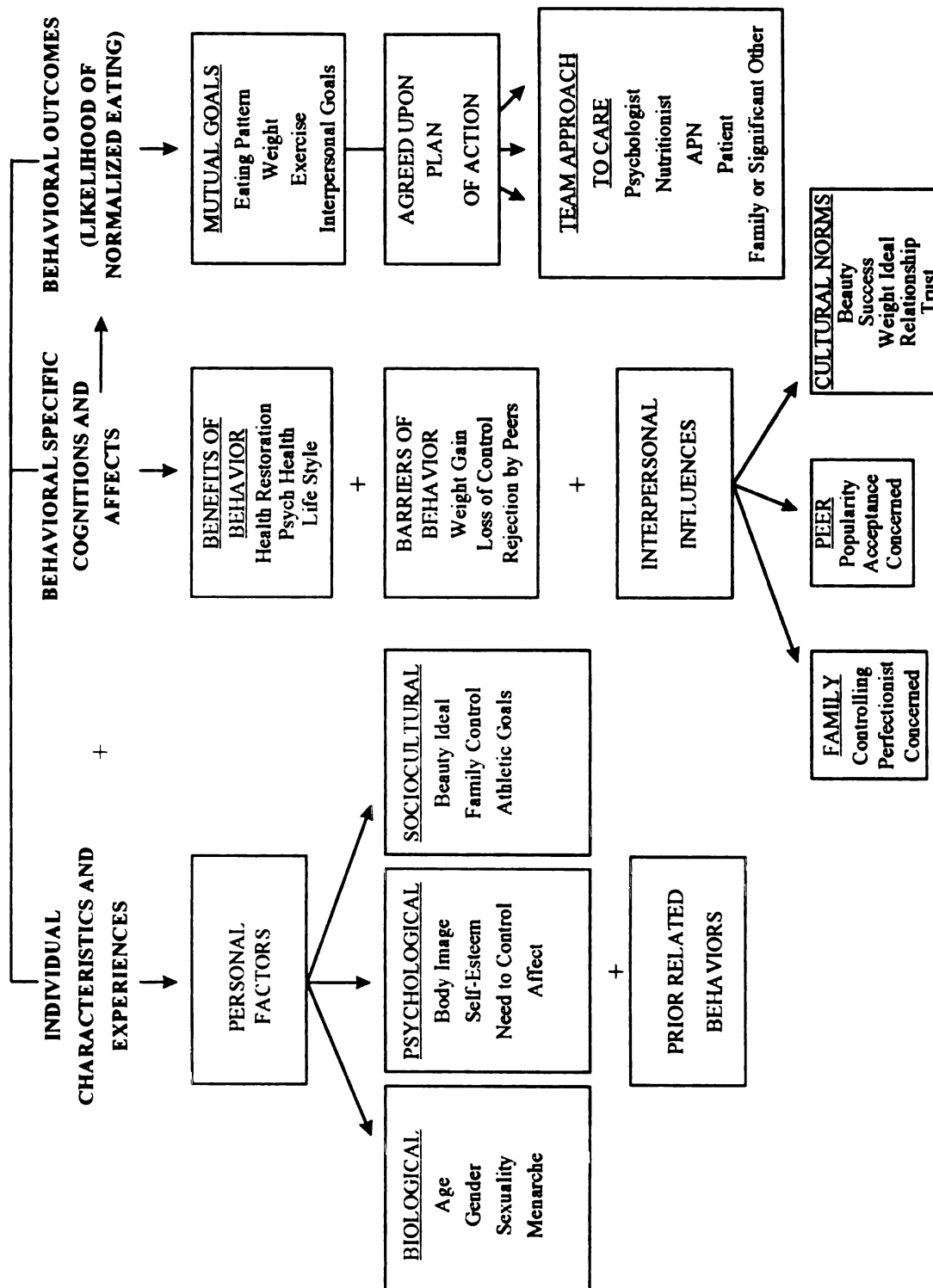


Figure 2. Adaptation of Pender's Revised Health Promotion Model Applied to Normalized Eating for the Patient with an Eating Disorder, 1996.

The APN may attempt to influence the individual's behavioral specific cognition about normalized eating. The provider can educate the patient about the benefits of normalized eating. The patient's perceived barriers can be defined and explored.

The influence of the family on the development and maintenance of eating disorders is recognized (Wiseman, Harris, & Halmi, 1998; Rosen, 1995; Johnson et al., 1992). The quality of the family dynamics, and the influence of the family on eating behavior, must be explored during counseling sessions (Rosen, 1995). Family therapy may become one component of eating disorder treatment. Social norms about beauty, dieting and exercise influence an individual's decision about eating behavior. These issues should be discussed with the patient.

Finally, the individual's decision to eat normally must be based on agreed upon goals and strategies (Pender, 1996). A nutritionist, in close communication with the APN and the psychologist, sets goals for weight and eating behaviors with the patient (Beaumont & Touyz, 1992). These goals are concrete and specific, and are reinforced by the APN and the psychologist. The patient must agree with the goals and establish strategies that will help to establish normalized eating patterns. The APN has an ongoing relationship with the patient, and reassesses the patient's physiological well being, and progress towards establishing the health behavior.

Literature Review

Introduction to Eating Disorders

An eating disorder is set of eating habits, weight management practices and attitudes about weight and body shape that may result in alterations in self control, obsession, anxiety, guilt and alienation between the individual and others (Levine & Maine, 1996). The eating behavior may result in physiological imbalances and may be potentially life threatening. This is the definition of eating disorder that was used for this scholarly project.

A significant number of people with eating problems do not fit the criteria for anorexia nervosa and bulimia, and there is substantial disagreement about the nature and labeling of these eating disorders (Levine, & Maine, 1996). An individual may present with disordered eating patterns, but not fulfill the diagnostic criteria for anorexia nervosa or bulimia (Schludt & Johnson, 1990). These individuals are considered to have partial syndromes and require detailed comprehensive assessments and interventions when appropriate (Love & Seaton, 1991).

This project focuses on the primary, secondary and tertiary prevention of anorexia nervosa and bulimia for the APN in the primary care setting. A teaching module was designed to instruct the APN in methods to prevent the incidence of eating disorders, and to assist the APN in learning screening and assessment skills to help evaluate a patient with a suspected eating disorder.

Clinical Significance of Anorexia Nervosa

Anorexia nervosa occurs most often in adolescents but the age of onset can range from preadolescents to middle age (Garner, 1993). The average age of onset is sixteen years of age (Johnson, Sansone, & Chewing, 1992). The disorder is well represented across all socioeconomic levels and 90 percent of cases reported are females (Johnson, Sansone, & Chesing, 1992). Anorexia nervosa carries a mortality rate of 18-20% and is often a chronic condition with the probability of death increasing over time (Zerbe, 1996).

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994) defines anorexia nervosa as 1) a refusal to maintain a body weight at or above a minimally normal body weight for age and height (85 percent of that expected), 2) a persuasive fear of becoming fat or gaining weight, even though underweight, 3) a significant distortion of perceived body size or body shape, and 4) amenorrhea in post menarchial females. There are two types of anorexia nervosa: restricting and binge-eating/purging type. A person that does not regularly engage in binge eating or purging behavior has restricting type anorexia nervosa. An individual who engages in binge eating and purging behavior has a binge-eating/purging type anorexia nervosa. These are the definitions that were utilized for this project.

The most striking feature of anorexia nervosa is an intense preoccupation with weight and shape and a relentless pursuit of thinness (Beaumont & Russel, 1993; Garner, 1993;

Wiseman, Harris, & Halmi, 1998). The patient loses up to 60 percent of normal body weight and accomplishes this by restrictive behaviors associated with dieting, undereating, avoidance of high energy foods, performing strenuous activity and purging behaviors such as vomiting and using laxatives (Love & Seaton, 1991; Riley, 1991; Beaumont & Russel, 1993). The semi starvation states that result from these behaviors contribute to common medical complications and common psychological features in the patient. The psychological factors include depression, irritability, social withdrawal, obsessive behavior, poor concentration, and preoccupation with food (Garner, 1993).

Medical Complications of Anorexia Nervosa

The medical complications of anorexia nervosa result from the starvation state and all providers must be aware of the wide range of physical abnormalities associated with anorexia nervosa patients (Beaumont & Russel, 1993; Fisher et al., 1995). Serious complications present in patients who are severely emaciated, abuse laxatives and induce vomiting (Fisher et al., 1995). The medical consequences include electrolyte disturbances, hypokalemia, hypochloremia, and metabolic alkalosis, and can be associated with muscle weakness, cardiac arrhythmias and renal impairment (de Zwaan & Mitchell, 1993). Endocrine abnormalities, secondary to starvation, are the result of hypothalamic dysfunction and may be associated with aberrations in LDH, FSH, hypogonadism, hypothyroidism and

disturbed glucose metabolism (Wiseman, Harris, & Halmi, 1998). Gastrointestinal complications include delayed gastric emptying and constipation worsened by the chronic use of laxatives. When associated with bingeing and purging behaviors, gastric dilation, esophageal perforation, bleeding, esophagitis, and salivary gland hypertrophy may result (Wiseman, Harris, & Halmi, 1998).

Low estrogen and elevated cortisone levels in anorexia nervosa are implicated in the development of osteoporosis (Wiseman, Harris, & Halmi, 1998). Adolescent girls are the greatest risk for developing osteoporosis because peak skeletal mass has not been attained. If the osteoporosis continues, fractures can result in the adolescent (Wiseman, Harris, & Halmi, 1998).

Renal insufficiency can also be the consequence of vomiting, laxative misuse and the resulting electrolyte imbalance (Wiseman, Harris, & Halmi, 1998). The patient with anorexia nervosa may have dependent edema because of increased capillary permeability and an increase in plasma creatinine and urea secondary to muscle protein catabolism (Beaumont & Russel, 1993).

Clinical Significance of Bulimia Nervosa

Bulimia Nervosa is a serious disorder that involves periodic episodes of overeating in which a person feels out of control, followed by self induced vomiting or purgative abuse aimed at reducing the caloric consequences of the over consumption (Garner, Rockert, & Olmstead, 1985). The DSM-IV

(1994) definition of **bulimia nervosa** is: 1) recurrent episode of binge eating with a sense of a lack of control over eating during the episode, 2) inappropriate compensatory behavior to compensate for binge eating (vomiting, misuse of laxatives, diuretics, fasting or excessive exercise), 3) binge eating and compensatory behaviors occur at least two times a week for three months, and 4) excessive concern about weight and shape. There are two types of bulimia nervosa, purging and nonpurging. If the person has used other inappropriate compensatory behaviors such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, the individual is diagnosed with nonpurging type bulimia nervosa.

Studies suggest that as many as 20 percent of young women engage in bulimic behaviors (Rosen, 1995). A patient with bulimia may be harder to diagnose because he or she may be underweight, overweight or normal weight, but still be engaging in binge eating and purgative behaviors (Zerbe, 1996). Many patients with bulimia keep their symptoms secret and may confess their struggles with disordered eating with much guilt and shame (Zerbe, 1996).

Medical Complications of Bulimia Nervosa

The drastic method to achieve purging can cause serious physical consequences. Vomiting, laxative purging, and diuretic use can result in hypokalemia, hyponatremia, metabolic alkalosis and dehydration (de Zwaan & Mitchell,

1993). These electrolyte imbalances can cause central nervous system dysfunctions, muscle wasting, cardiac arrhythmias, and cardiac arrest (de Zwaan & Mitchell, 1993). Gastrointestinal impairment also results from purgative actions, including gastric and duodenal ulcers, acute gastric dilation, necrosis and rupture, esophageal tearing, esophagitis, parotid swelling, increased amylase, constipation, pancreatitis, and hepatitis (de Zwaan & Mitchell, 1993). Renal impairment from chronic purging causes high BUN, decreased glomerulofiltration, proteinuria, pyuria ad hematuria (de Zwaan & Mitchell, 1993). De Zwaan (1993) reports pulmonary complications including aspiration pneumonia and pneumomediastinum from repeated vomiting. Finally, dental erosion is also common with bulimia (McComb, 1993).

Adolescents At Risk

The APN, in providing care for patients in the primary care setting, must be vigilant in screening and evaluating eating disorders. Adolescents are at a higher risk for developing eating disorders (Fisher et al., 1994; Johnson, Sansone, & Chewning, 1992; Carino & Chmelko, 1983). Rosen (1995) recommends that every teenage girl be screened for an eating disorder. Most teenagers who have eating problems do not have classic anorexia or bulimia, but are at earlier stages. Girls between the ages of 9-12 often feel they are overweight or have the wrong shape (Rosen, 1995). Seventy-five percent of girls this age have dieted 2-5 times in the

last year and two thirds of all teenage girls think they are fat (Rosen, 1995). Personality characteristics and familial and cultural influences all contribute to the pathogenesis of eating disorders in adolescents (Johnson, Sansone, & Chewning, 1992). Johnson et al. (1992) have identified common psychological factors in adolescents who develop anorexia nervosa. The anorexic adolescent is often compliant, approval seeking, self doubting, socially anxious, perfectionist, and conflict avoidant. Adolescents who are anorexic tend to fear spontaneity, are reluctant to take risks or experience novelty, and view impulse and desires as "wasteful distractions to achieve higher moral objectives" (Johnson et al., 1992, p. 732).

The families of adolescents with anorexia have been characterized by enmeshment, overprotectiveness, rigidity and a lack of conflict resolution among members (Johnson, Sansone, & Chewning, 1992; Wiseman, Harris, & Halmi, 1998). "Overprotection is a facade for enmeshment, and the families display rigidity and lack open communication" (Johnson, Sansone, & Chewning, 1992, p. 732). For many anorexics, the decision to not eat may be the first time in their lives that they assert their own will (Johnson, Sansone, & Chewning, 1992).

Some adolescents may be exhibiting dieting behavior and are seeking weight loss, but do not have a diagnosable eating disorder (Rosen, 1995). Social and cultural pressures for thinness that the adolescent faces in this

society and the "pressure to be perfect" can be a killer (Zerbe, 1996, p. 161). The cultural pressures on girls to diet contribute to shape dissatisfaction endemic to girls and young women (Garner, 1993). A strong concern for physical appearance seems to predate the development of eating disorders (Garner, 1993).

Males at Risk

One in every ten patients with an eating disorder is male (Anderson, 1990). Young men who participate in seasonal sports, that specify a particular weight or that stress appearance and body building are at a special risk (Zerbe, 1996; Anderson, 1990). In addition, there is increased incidence of eating disorders in the male homosexual population (Zerbe, 1996).

Athletes at Risk

Young women and men who engage in gymnastics, wrestling, running, rowing, dancing or other sports that emphasize thinness and appearance are at a special risk for developing anorexia nervosa or bulimia nervosa (Zerbe, 1996; Brownell, 1995; Garner & Rosen, 1991). Progressive weight loss may be the goal of anorexics who misuse exercise to expend enormous amounts of energy. The anorexics may become addicted to the exercise and may suffer multiple injuries and exhaustion (Zerbe, 1996). The APN must help athletes, coaches, and parents see the potential for disaster when weight control and size limitation promote dangerous dietary restriction and purging in the athlete.

Women at Risk

Women often keep their eating problems a secret for years and may confess their struggles with guilt and shame (Zerbe, 1996). An older woman may harbor a distorted body image since youth, and never have sought medical treatment after years of restricting, bingeing and purging behavior. These individuals may have great dissatisfaction with their bodies and may have dieted frequently to try to obtain weight loss. When they are unable to lose weight, they often experience a sense of personal failure and worthlessness (Foreyt & Goodrick, 1993).

Since these patients are commonly seen in the primary care setting, the APN must address their concerns about weight loss, body image and self acceptance. The provider must promote healthy life style choices and recognize potential eating disorder behaviors. The APN can utilize various screening tools during office visits.

Screening Tools

Psychometric evaluation tools for evaluating eating disorders are available for the APN. These instruments have been used in clinical and research settings to assess specific symptoms of eating disorders (Garner & Rosen, 1990). The tools appraise attitudes about weight and shape, and evaluate psychological symptoms associated with disorders (Garner & Rosen, 1990). Two well recognized screening tools are the Eating Attitudes Test (EAT) developed by Garner and Garfinkel (1979, 1983), and the

Eating Disorder Inventory (EDI), developed by Garner, Olmstead, and Polivy (1983).

The EDI was designed to evaluate various psychological dimensions that drive eating disorders including the drive for thinness and body dissatisfaction, ineffectiveness, perfectionism, interpersonal trust, maturity and fears. This measurement tool is one of the most widely used in eating disorder research (Garner & Rosen, 1990).

The EDI has 64 items that form eight subscales. Three of the subscales assess attitudes about weight, body shape, and eating. The remaining five subscales measure more general psychological characteristics of persons with disordered eating and include ineffectiveness, perfection, interpersonal distrust, interoceptive awareness, and maturity fears. Items are presented in a 6-point, forced choice format. Respondents rate whether each item applies "always", "usually", "often", "sometimes", "rarely", or "never". The most extreme response earns a score of 3, the immediately adjacent response earns a score of 2, and the next response earns a 1.

The internal consistency for the EDI scales range from .69 to .93 (Williamson et al., 1995). The validity of the subscales on the EDI range from .43 to .68. Using discriminant analysis, Garner et al. (1983) found that each of the eight subscales differentiated anorexia nervosa from a female comparison group; 88% to 93% of the subjects were correctly classified using the EDI. The researchers also

found that the EDI subscales correctly classified 85% of subjects into bulimic and restrictor subtypes of anorexia nervosa (Williamson et al., 1995).

The EDI questionnaire is easy to administer and score and is written at a fifth grade reading level. It can be used as a screening instrument to detect at-risk populations, and it can be used for diagnosis. The EDI appears to be useful for differentiating levels of severity of anorexia or bulimia nervosa, and it can be used as a treatment outcome measure (Williamson et al., 1995).

The Eating Attitudes Test-26 (EAT-26) is a recognized screening tool, constructed by Garner, Olmsted, Bohr, and Garfinkel in 1982. The EAT-26 is designed on a 6-point Lickert scale, with a forced choice, self report format, that is easily administered and scored (Garner & Garfinkel, 1979; Garner, Olmsted, Bohr, & Garfinkel, 1982). The test measures disturbed attitudes about eating and weight, and has subscales that help screen for anorexic and bulimic tendencies (Garner & Rosen, 1990).

The EAT-26 (1982) consists of 26 statements. The person chooses between the responses: "always", "usually", "often", "sometimes", "rarely", or "never". Choices in the eating disorder direction ("always") are scored as 3 point answers. Choices in the less extreme ("usually") category are scored as 2 points. The problematic response ("often") is scored as 1 point, and the non eating disordered response ("never") is scored as zero (Garner, Olmsted, Bohr, &

Garfinkel, 1982). Recommendations are given to the subject taking the test. If the score is 30 or above, there is a strong warning sign that the person may have an eating disorder, and professional consultation is recommended. If the subject scores 20 or above, he or she is likely experiencing anxiety about eating and weight, and professional help may be beneficial. A person with a score before 20, who feels uneasy about eating and weight issues, is encouraged to seek help (Garner, Olmsted, Bohr, & Garfinkel, 1982).

The EAT-26 has high validity and reliability. High validity is an essential component to determine the predictability of the test (Bluman, 1995). The validity coefficient was 0.87, $p < 0.0001$, when responses from control groups were compared with responses from groups with documented eating disorders (Garner, Olmsted, Bohr, & Garfinkel, 1982). The alpha coefficient measures reliability by estimating the internal consistency of the items in the test (Bluman, 1995). The alpha was 0.94 (Garner, Olmsted, Bohr, & Garfinkel, 1982). The limitation of this tool is the self report design (Garner & Rosen, 1990). Patients with eating disorders often underreport their attitudes and symptoms. Starvation, severe dieting and chaotic eating patterns may influence a person's test scores even when the screening tool has high reliability and validity (Garner & Rosen, 1990).

The APN may use psychometric tools to assist in screening patients for eating disorders. These tools are not diagnostic (Garner & Rosen, 1990). The assessment of a person for an eating disorder is a complex task, and requires ongoing openness in communication and trust, and often repeated encounters with the patient to develop this trust (McKenna, 1989). The APN must get a detailed history from the patient, must carefully review body systems, and must perform a comprehensive physical exam to effectively determine accurate nursing and medical diagnoses. A treatment approach can then be developed that addresses the physical, nutritional and psychosocial needs of the patient.

Primary Prevention of Eating Disorders

The goal of preventive interventions against eating disorders is to eliminate disease related morbidity and mortality (Fairburn, 1995). Primary prevention against eating disorders tries to prevent the incidence of eating disorders in individuals (Fairburn, 1995; Levine, 1994). To help prevent eating disorders in patients, the APN identifies the personal, social and cultural factors that contribute to the development of eating disorders and helps patients recognize the impact of these factors on their own sense of self worth and self acceptance.

Dieting is the most common behavioral precursor of eating disorders (Fairburn, 1995), and the APN must have a goal to reduce the prevalence of dieting and related weight control behaviors in the patient population. Shisslak and

Crago (1994) state that eating disorders are culture bound. The emphasis on thinness, as a requirement for attractiveness and success, is an unrealistic goal for women since most women are unable to achieve this ideal (Shisslak & Crago, 1994). The provider must challenge the beauty myth and help the patient find freedom from chronic appearance anxiety and gain an increased sense of female identity by challenging the stereotype of thinness as ideal (Shisslak & Crago, 1994). Killen et al. (1993) state the goal of primary prevention is to encourage respect for individual body shape and weight, to point out the negative consequences of dieting to the individual, to describe warning signs of eating disorders to the patient, and to suggest ways of promoting healthful weight regulation through sound nutritional and dietary principles and regular aerobic physical activity. The APN must practice primary prevention against eating disorders in the routine health care of patients in the primary care setting. Questions about weight concerns and dietary practices should become part of the APN's interaction with patients. Screening tools should be used whenever the APN identifies high risk populations or could become part of an annual assessment by the practitioner.

Secondary Prevention of Eating Disorders

The secondary prevention of eating disorders is aimed at shortening the interval between the onset of the eating disorder and the obtaining of effective help for the

individual (Fairburn, 1995). This intervention facilitates the identification of the disorder at its early stages, and requires education about the warning signs of eating disorders, effective ways to reach out to an individual in distress, and where to refer the person for treatment (Levine & Maine, 1996).

Health care professionals, teachers, sports coaches and parents must become informed about the signs and symptoms of eating disorders. The APN, as a primary care provider, must be actively involved in these secondary prevention efforts in the education of patients, and in the early screening and identification of disordered eating behaviors.

Fairburn (1995) also relates the obstacles that may prevent the early diagnosis and treatment of individuals with eating disorders. The person suffering from an eating disorder may not see the disorder as a problem, or may not think the eating behavior is severe enough to merit treatment. Other individuals may feel shame and guilt and may desire to hide their problem. Still others fear the treatment and fear weight gain. These factors must be recognized and addressed by the APN who seeks to identify eating disorders in the patient, and seeks to promote healthy eating behaviors.

Tertiary Prevention of Eating Disorders

Tertiary prevention of eating disorders requires activation of appropriate treatment interventions to help reduce the possibility of a negative outcome for patients

with documented eating disorders (Fairburn, 1995). The initial goal in the treatment of eating disorders is the nutritional restoration of eating patterns that will correct the biological and psychological results of malnutrition (American Psychiatric Association Practice Guidelines for Eating Disorders, 1993). These include the restoration of normal weight in the individual that will result in normalization of reproductive function and reversal of bone demineralization in the person with anorexia nervosa, and the normalization of eating patterns free from bingeing and purging in the client with bulimia nervosa (Wiseman, Harris, & Halmi, 1998).

Treatment should be interdisciplinary and should address the complex needs of the client. The person with eating disorders needs medical supervision, nutritional counseling and mental health intervention. The sooner these interventions are initiated, the greater the likelihood of a good outcome in the client (Rosen, 1995).

In the outpatient setting, a team approach is the most effective (Rosen, 1995). The primary care provider must medically monitor the client's progress and must know the potentially lethal results of the eating disorder. Standards of care and protocols must be developed to effectively screen for dangerous changes in the health status of the client, and recommendations for inpatient admission must be developed and strictly followed. The client should have concurrent psychological supervision by a

professional who is experienced in eating disorder management, and should be guided and treated by a nutritionist who can set weight goals and can teach the individual acceptable eating behaviors (Rosen, 1995).

The client's family must also become involved in supporting the plan designed by the health care providers. The family must encourage the client to eat a normalized diet and to develop a positive self image. Psychological intervention may involve family counseling and therapy to help the family members learn better communication skills and to define ongoing interpersonal dynamics that may be contributing to the eating disorder.

The primary care provider must recognize when hospitalization is required for the client. A drop in body weight 16-20 percent from the normal in a client's first episode, or a 10-15 percent decrease from the client's normal in a relapse state, are indications to admit the client to the hospital (Wiseman, Harris, & Halmi, 1998). Hemodynamic instability, significant hypokalemia, syncope, signs of arrhythmias, heart failure, significant gastrointestinal symptoms or indications of suicidal ideations are also indicators for in-patient hospitalization for the client with an eating disorder (Rosen, 1995).

Rosen (1995) states that clients who receive treatment fall into one of three groups, with roughly equal frequency. The first group of individuals with eating disorders can be effectively cured and they will abandon the disordered

eating behavior and many of the attitudes that led to the problem. This group of people become normal eaters with healthy attitudes about weight and food. The next group achieves a behavioral cure (Rosen, 1995). These individuals stop the starvation and binge-purge behaviors, but continue to struggle with many psychological issues throughout their lives. The third group of individuals with eating disorders do not improve at all. They are extremely difficult to treat, and have a mortality rate of up to 20 percent (Rosen, 1995). Early diagnosis and treatment seems to increase the likelihood of a good outcome and may help individuals with disordered eating practices from developing frank eating disorders (Rosen, 1995).

Evaluating a Patient with an Eating Disorder

An individual with an eating disorder may seek health care for various physiological complaints (Rosen, 1995). The person may complain of dizziness, non-specific fatigue, chest pain, palpitations or abdominal pain (Hotelling & Liston, 1994). Some may ask for lab evaluations because they cannot lose weight, or maintain weight loss. Others may seek diuretics for abdominal bloating, or may complain of cognitive symptoms such as poor concentration or memory problems (Rosen, 1995). Most patients with eating disorders are highly ambivalent about seeking treatment for their disorder and may resist confronting their illness (Love & Seaton, 1991).

The APN must know the diagnostic criteria of an eating disorder and must accurately diagnose the disorder and evaluating the patient. Many patients with poor body acceptance and distorted eating patterns may not fit the diagnostic criteria of anorexic nervosa or bulimia nervosa. However, these individuals may be in need of counseling and nutritional referral to prevent the onset of eating disorders, and to help them develop healthy life style attitudes (McKenna, 1989).

Careful assessment is considered the beginning of therapy for the individual and the health care provider must use a structured, non-intimidating, direct interview style to obtain the history from the patient (Love & Seaton, 1991; McKenna, 1989). According to McKenna (1989) alliance building is critical between the provider and the patient. The patient should be interviewed in a matter of fact style, with an attitude of general respect and empathy (Love & Seaton, 1991; McKenna, 1989). Open ended questions often generate feelings of inadequacy and helplessness in the patient who may feel threatened, and resist the revelation of attitudes and behaviors (McKenna, 1989).

The APN must recognize that secrecy is central to the existence of eating disorders. The patient may feel shame, hesitancy and suspicion when asked to reveal hidden feelings and behavior patterns (McKenna, 1989).

Individuals with anorexia are more resistant to treatment than bulimics (Rosen, 1995; Love & Seaton, 1991;

McKenna, 1989). These individuals regard their emaciation as achievement, and their restriction as being in control (McKenna, 1989). They often present for treatment because family members or friends are concerned and they may resist strongly the possibility of surrendering their restricting eating behavior (McKenna, 1989).

Patients with bulimia experience symptoms as egodystonic, but would rather endure the symptoms of the disorder than gain weight (McKenna, 1989). They may be more open to seek medical care, but may experience shame and guilt because of year's of bingeing and purging behavior (Rosen, 1995; McKenna, 1989).

The APN must first gather information from the patient. The presenting complaint, the deviant eating behaviors and associated circumstances, must be documented comprehensively and in detail (Love, 1991). The practitioner questions the patient's weight, dieting behaviors, restricting or purging behaviors, and body image perceptions (McKenna, 1989). A careful history about physical complaints that relate to eating should be obtained (Love & Seaton, 1991). The provider obtains the past medical history of the patient, assesses the effects the eating problem has had on the individual's life style, and thoroughly evaluates the sociocultural and family history of the patient (Love & Seaton, 1991; McKenna, 1989).

Next, the APN must do a review of systems with the patient, and perform an objective physical exam. The

provider must observe for any physical signs of illness that may have resulted from the eating disorder (Love & Seaton, 1991). Appropriate lab studies, electrocardiography and x-rays are ordered based on the findings and the suspicions for an eating disorder diagnosis (Brotmen, Rigotti, & Herzog, 1985).

After data collection, the APN then formulates medical and nursing diagnoses that are based on the DSM-IV criteria of eating disorders, and the recognized altered health status in the patient. The plan then follows the assessment. The APN must determine if the patient has any nutritional or medical emergencies that require hospitalization.

A patient who is hemodynamically unstable, has significant arrhythmias, heart failure, or a history of syncope should be hospitalized (Rosen, 1995). Any significant gastrointestinal symptoms or significant hypokalemia requires hospitalization. Finally, a patient who is suicidal must also be hospitalized.

If there are no indications for hospitalization, the APN, as a gatekeeper in primary care, must facilitate consultation and concurrent care for the patient with a nutritionist and a psychologist. This team approach to care for the patient will facilitate optimum medical care and implement the best individualized treatment model for the patient.

The APN must then educate the patient about the medical complications of eating disorders. The patient should be encouraged to identify and express the feelings that are linked to the eating behaviors, and to seek a trusting relationship with the other professionals in the team caring for the patient. The patient should also define and explore family relationships that may contribute negative feelings of self worth and self acceptance. The family should become part of the team that helps the individual overcome the eating disorder.

The expected outcome of the intervention is an increased food intake for the patient who is anorexic to facilitate a gradual gain of weight to a specific target weight (Love, 1992). For the patient with bulimia, an interruption of the binge-purge cycles and the replacement of a balanced modified diet, is the goal of treatment (Love & Seaton, 1992). Physiologically, the patient will have a restoration of normal endocrine function with a resumption of normal menses in a pre-menopausal female (Love & Seaton, 1992). The patient will have acquired accurate information about normal physiology, weight regulation and adequate nutrition (Love & Seaton, 1992).

In summary, the literature supports the prevalence of eating disorders in the primary care population seen by the APN. There are few references in the literature about the role of the APN in caring for patients with suspected eating disorders. The APN must develop primary prevention

strategies against eating disorders to help prevent and decrease the incidence of eating disorders. The APN must practice secondary prevention of eating disorders by assessing patients and screening for potential cases of eating disorders in the clinical setting. Finally, the APN must know the standards of treatment and intervention of eating disorders to try and deliver effective and comprehensive care and to help prevent the medical and psychological consequences of eating disorders if not treated appropriately.

Project Development

The focus of this project was to develop a teaching module about eating disorders to be presented in a seminar format for APNs. The goals of the seminar are: 1) to define the causes of eating disorders and to assist the APN in developing primary prevention strategies against eating disorders in the primary care setting; 2) to provide skills to the APN to diagnose eating disorders in clients in the primary care setting, and to effectively intervene when disordered eating is identified, and 3) to offer resources to the APN for the primary, secondary and tertiary prevention of eating disorders.

Target Population

The target population is APNs practicing in primary care. The program can also be offered to graduate nursing students. It is expected that the program will be well received due to the prevalence of eating disorders in the

primary care population, and the frequency of dieting and drive for thinness in today's society. The design of the module builds on the knowledge base of APNs practicing in the primary care setting.

Adult Learners

The basic assumptions for developing the teaching module are based on the principles of adult learning. The adult learner acquires knowledge when ideas correlate with the individuals past experiences (Mezirow, 1991). The purpose of adult learning, according to Mezirow, is to understand the meaning of experiences, to gain insight and understanding of past experiences, and to assimilate and transform new experiences. The adult learner must be able to critique assumptions, and to critically reflect on the meaning of these assumptions as they relate to past and future experiences. The learner, therefore, takes an active role in acquiring and using knowledge, and is responsible for his or her own learning (Callin, 1996). Self directed learning helps the individual build confidence, research his or her own interests, examine action alternatives, anticipate consequences, identify resources, and later to educate others about the knowledge acquired (Mezirow, 1991).

The teaching module works within educational principles to assist the APN in developing skills to prevent, diagnose, and treat eating disorders. The material presented builds upon previous clinical experience of the participants, and promotes the development of self directed learning to

facilitate the acquisition of the body of knowledge required to treat individuals with eating disorders. The teaching module is designed to help the APN develop critical thinking skills to recognize the individual with a potential eating disorder, and to design an effective multi provider approach treatment plan. Case studies with realistic scenarios, small group discussions, practical history and physical exercises, and retention aids in the form of handouts, contribute to the effectiveness of the learning process.

Procedure for the Project

The information is presented in a six hour seminar. Continuing education contact hours can be offered through an approved nursing organization. Information regarding the target audience and needs assessment, the goals, purpose and objectives, the content, time frame, presenter, teaching strategies, physical facilities, verification of participation, and seminar evaluation are materials generally requested when submitting an application for continuing education. A detailed outline of the seminar is contained in Appendix A.

The seminar begins by introducing the historical cultural beliefs about beauty, eating and exercise. The role of culture and dieting in the etiology of eating disorders should be highlighted. To facilitate learning, slides of various cultures and historical periods are presented to demonstrate the changing definition of ideal beauty. The video, "Slim Hopes: Advertising and the

Obsession with Thinness" is shown, followed by a short self-report questionnaire that evaluates the participants own definition of beauty, and thinness. There is small group discussion focusing on how the APN in the primary care setting can promote a more realistic view of beauty and self acceptance in clients. The role of the APN in the primary prevention of eating disorders is stressed.

Next, varied components of anorexia nervosa are discussed including the types, causes, signs and symptoms, how to identify clients at risk for developing anorexia nervosa, and the effects of anorexia nervosa on physiological and psychosocial health. These objectives are achieved by the presentation of material in lecture format. The 3rd portion of the seminar defines bulimia nervosa and reviews the types, signs and symptoms to assist the APN in identifying, diagnosing and treating an individual with the suspected eating disorder. The EAT-26 screening tool will be discussed.

An objective history and physical format is presented based on a decision making model for the diagnosis and treatment of eating disorders. Resources for use by the APN in the primary care setting for patient education and for further study are included in the education packet (Appendix B). Participants are asked to evaluate the effectiveness of the seminar.

Implications

Education

The APN as educator can practice primary prevention of eating disorders by educating patients about the dangers of dieting and excessive exercise, and by promoting normalized eating and patient body acceptance. The patient should be encouraged to separate definition of self worth from body weight. The APN should explain the sociocultural drive for thinness that perpetuates a person's discontent with his or her body type, and demonstrate that this discontent can contribute to a loss in a person's self-acceptance. Dieting and restriction perpetuates often unachievable goals and the APN should ask the patient about their dietary patterns and weight concerns to help prevent the onset of eating disorders.

The APN can practice anticipatory guidance with the adolescent population. The APN teaches youth about the physical and emotional changes of maturation, and can help the adolescent recognize the pressures of their peers and advertising to be thin. Parents can be educated about the importance of accepting their children's body shape and of avoiding narrow definitions of success and achievement for their children.

With secondary and tertiary prevention of eating disorders, the APN as educator informs patients of the dangers of their eating behaviors. There must be a trust and rapport established between the provider and the

patient, and the APN should be direct and open in communicating with the patient. In collaboration with the nutritionist and psychologist, the APN can help the patient gradually change the disordered behavior and help the patient to learn to separate feelings and psychological issues from food and weight behaviors.

Information about the types, causes, signs, symptoms and treatment of eating disorders should be included in all levels of nursing curricula. Eating disorders are prevalent in patient populations, and nurses can practice primary prevention when they encourage normalized eating and exercise in patients, and help patients learn self acceptance. Early recognition of eating disorders helps contribute to a more favorable prognosis for the patient. Nurses who are aware of the diagnostic criteria of these disorders and their presenting signs or symptoms, can help identify a patient with a potential eating disorder and help the patient receive appropriate treatment interventions.

The APN as an educator can bring information about eating disorders to the community. Teachers, students of all ages, parents, coaches and athletes need information about eating disorders to help prevent their occurrence, and to help in the early recognition of the disorders in individuals. The APN can explain how the drive for thinness, the striving for perfection, and the prevalence of dieting and restricting, can contribute to the onset of an eating disorder. The APN can also explain warning signs of

a suspected disorder, and give resources to the community to help facilitate early intervention for an individual who might have an eating disorder.

Practice

The APN practices primary prevention against eating disorders. The APN acknowledges that each patient has a unique body shape, and discourages restrictive dieting and excessive exercise for weight loss. The APN should treat the heavier patient with gentleness, tact and concern, and recognize that many individuals do not seek health care because of their fear of prejudice from health care providers (National Association to Advance Fat Acceptance, 1996). The APN should not assume that the cause of illness is a person's weight, and help the person with weight issues choose normalized eating from all food groups and a maintenance of health with pleasurable movement and activity. Dieting and weight concerns should be discussed openly with patients and normalized eating and body acceptance should be encouraged.

As a provider, the APN participates in the secondary and tertiary prevention of eating disorders by recognizing the presenting signs and symptoms of anorexia nervosa and bulimia. The at risk target population should be screened annually for the development of the disorder, or the APN may choose to screen individuals who appear to be at risk. The APN should be confident in the use of a screening tool to

help in early identification of eating disorders to help confirm the diagnosis.

The APN should know the common physiological and psychological effects of eating disorders, and recognize these effects during the history and physical exam. Diagnostic tests should be ordered to help determine the physiological effects of the disorders, and help the APN determine the intervention needed for treatment.

The APN should develop a protocol for intervention for a patient with a diagnosis or suspected diagnosis of an eating disorder. A collaborative team of providers should be ready to treat the patient with an eating disorder. The APN must know the importance of accurate decision making to determine the best approach for treating the patient and communicate effectively with the team members.

As a collaborator and case manager the APN should establish a multidisciplinary approach to the treatment of a patient with a diagnosed or suspected eating disorder. Open communication among the team members helps establish a cohesive, well defined and agreed upon plan of treatment for the patient. The APN should ensure that routine team consultation occurs to update everyone about the patient's progress, and to determine needed revisions in care. This collaborative approach helps to ensure consistency and effectiveness in the treatment of a patient with a eating disorder.

To effectively evaluate the efficacy of the interventions used with each patient, the APN, along with the other team members, should establish measurable and realistic expected outcomes for the patient. This evaluation helps determine the progress of the patient and the effectiveness of the interventions chosen by the team. The APN should follow up on the long term progress of patients and continue an ongoing team collaborative team approach, working closely with the nutritionist, psychologist to ensure that the patient has continuity of care, and to revise strategies of care according to the patient's needs and progress.

As a case manager, the APN can help find support groups for the patient and family. Community resources for the individual can be accessed, and information about eating disorders can be made available to coaches, teachers, friends and family who want more knowledge about the disorder.

Research

Early initiation of treatment appears to increase the likelihood of a good treatment outcome for the patient with an eating disorder (Rosen, 1995). The APN can perform longitudinal outcome studies that can prove the benefits of early prevention programs begun for the young school aged child. Pilot programs can be designed by the APN to educate children about body shape and self esteem. Prevention research may include the measurement of variables such as

weight gain and pubertal growth in females, caloric restriction and weight dysregulation, healthful nutritional practices and physical activity regimens. The criteria for good primary prevention outcome studies include a clear developmental rationale with and extensive well described program. The evaluation of the program must have multiple and valid assessments and assess knowledge, attitudes and behaviors in the subjects (Killen et al., 1993).

More research is needed to identify those essential therapeutics that affect symptom reduction and management in patients with eating disorders. Measurement tools must be developed that extend beyond subjective reporting, and include more direct measurement of psychological functioning. More understanding is needed about the role of comorbidities (e.g., affective disorders, and chemical dependence) on the cause, treatment and prognosis of eating disorders. Perspective studies of at risk populations are needed to identify social and physiological factors related to causation. Outcome studies need longer follow-up periods to provide essential data regarding relapse prediction for both disorders (Love & Seaton, 1991). The APN can contribute to the research about eating disorders in any of these areas of study.

Conclusion

The APN will undoubtedly care for patients with eating disorders in the primary care setting. Many of these patients will potentially go undiagnosed as they hide their

dangerous eating behaviors. The APN must be sensitive to the emotional pressures experienced by the patient and address issues about weight and dietary habits directly and nonjudgmentally. Careful assessment and observation of subtle signs and symptoms can help the APN make a timely intervention. A systematic team approach to the diagnosis and treatment of a patient with a suspected eating disorder will help optimize the potential for a successful outcome.

Eating disorders have reached phenomenal levels in American society. Young female children think "dieting" is a normal daily activity and advertising perpetuates this myth. Safe, health and nutritious eating habits need to be a part of health promotion in primary care. The APN can contribute to reversing this escalating cultural event by staying abreast of the latest research findings on eating disorders and assessing every patient holistically.

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APPENDIX A

GOALS

The goals of this seminar are:

1. To present a history of various cultural definitions of idealized beauty, and to discuss how an individual's drive for society's ideal of thinness can contribute to dieting, and potentially to the development of eating disorders
2. To recommend primary prevention strategies for the APN to utilize with eating disorders.
3. To define anorexia nervosa and to explain the signs, symptoms and treatment approach
4. To define bulimia nervosa and to explain the associated features of the disorder and treatment approach
5. To present an assessment format for the APN to use in caring for a patient with a suspected eating disorder
6. To develop secondary and tertiary prevention strategies for the APN to use in caring for a patient with a suspected eating disorder.

OBJECTIVES

Upon completion of this seminar, the participant will be able to:

1. Identify the cultural variety in the social idealization of beauty, and identify the role of the media in promoting the obsession with slenderness in the United States
2. Understand primary, secondary and tertiary prevention strategies against eating disorders that can be used in the primary care setting.
3. Understand the signs and symptoms of anorexia nervosa and recognize the medical complications of the disorder
4. List the physiological effects of bulimia nervosa and describe the signs and symptoms of the disorder
5. Discuss how the EAT-26 can be used in the screening of eating disorders in the primary care setting
6. Identify sources of information about eating disorders for patients and for further APN reference

OUTLINE

I. INTRODUCTION

- A Speaker
- B. Brief overview of entire seminar

II. CULTURAL HISTORY OF IDEALIZED BEAUTY FOR WOMEN (Slide Presentation)

- A. Goddess, Venus of Willendorf -stone figures with rounded stomachs, big hips, huge breasts
- B. European Beauty- Rubens paintings, Renoir, Victorian ideals of fashion, clothing
- C. 1920-1930's Advertisements about ideal women- thinner but often presented as drawings, not with actual women as models.
- D. 1950's- Marilyn Monroe, Jane Mansfield- full figured
- E. 1960's - Twiggy
- F. Models of 1980's, 1990's Kate Moss - Fashion and Design Norms
- G. Media Role: "Image is everything"

III. VIDEO: SLIM HOPES: ADVERTISING AND THE OBSESSION WITH THINNESS

(Followed by brief discussion)

IV. CULTURE OF SLIMMING - POST WWII PHENOMENON

- A. War on fat becomes serious in 1950's : fat phobia- conviction that animal fat of any kind on the body, in the blood or on plate was dangerous
- B. Diet and anti-fat culture
- C. Health industry embraced the questionable concept of "ideal weight"
 - 1. Belief everyone should and could reduce to the ideal weight if enough will power is exerted
 - 2. Blame the individual if fat, it was his or her fault
- D. Prejudice against fat, thinness spirals into a religion- Moral issues on dieting
- E. Women's body type ideals are biologically unhealthy for most women
- F. Fashion often requires women to meet unreasonable weight ideals
- G. Women's self image, social and economic success can still be determined by their body.
- H. Women made to feel like a failure in attempts to perfect their body and faces
- I. Women feel their bodies are constantly on display and they are being judged
- J. Health professionals have enforced this social control of women's weight
 - 1. Being fat is equated with being ill
 - 2. Health professionals continue to promote dieting as healthy, and obesity as dangerous.

V. "HOW'S YOUR BODY IMAGE" QUESTIONNAIRE (p. 52)

- A. Let participants answer questions individually and study their own responses regarding the importance of weight and shape in deciding self worth.
- B. Small group work (approximately fifteen minutes): What can be done by the APN in the primary care setting to help individuals achieve body acceptance and redefine beauty and self acceptance

VI. ROLE OF APN IN THE PRIMARY PREVENTION OF EATING DISORDERS

A. Health Care Provider

1. Acknowledge each patient as an individual. Do not perceive a patient is fat, and do not encourage restricting diets for wt loss. (NAAFA Guidelines, 1996)
2. Treat heavier individuals with gentleness, tact and concern. Many have had negative experiences with health care provide and avoid seeking health care because of their self image. (NAAFA Guidelines, 1996)
3. Advocate for the individual's size acceptance and separate self-worth from body weight. Ask specific questions about dietary practices in at risk populations, use screening tools to help aide in the early identification of at risk patients.
4. Encourage the adolescent to accept his or her body changes. Educate the adolescent about the natural physical changes of maturity.
5. Educate family about the danger of dieting on the behavior of the adolescent. Encourage the family to be non critical about an adolescent's body type and advise them to discourage food restriction for the adolescent
6. Do not automatically weigh patients unless there is a compelling reason to do so. If weighing is necessary, ensure it is done in in a private setting and record the weight silently, free of commentary (NAAFA Guidelines, 1996)
- 6.. Do not automatically assume that the cause of a heavy person's medical condition is his or her weight (NAAFA Guidelines, 1996)

B. Educator/ Advocate

1. Educate and encourage normalized eating patterns from a balanced selection of food types.
2. Collaborate and consult patients with a nutritionist if needed.
3. Inform patients about the dangers of dieting and compulsive exercise.
4. Anticipatory guidance to adolescent and parents about normal physiological changes of maturity, need for body acceptance,

- avoidance of "drive for thinness" and perfectionism
- 5. Encourage active life style, not potentially intimidating and restricting exercise regiment
- 6. Advocate empowerment, internal trust, physical, mental, emotional and spiritual health address these issues with patients
- 7. Subscribe to the NAAFA newsletter and Radiance Magazine leave in waiting room. Consider displaying prints or art reproductions that celebrate diversity in size

VII. ANOREXIA NERVOSA

- A. DSM-IV definition
- B. Types
 - 1. Restricting Type
 - 2. Binge- Eating/ Purging Type
- C. Review of BMI
- D. Epidemiology
- E. Pathogenesis
- F. Medical Complications: (metabolic, cardiovascular, neurological, hematological, renal, endocrine, thermoregulation, gastrointestinal, dermatological, musculoskeletal, immunological)
- G. History, Physical Exam and Lab Studies
- H. Interdisciplinary Collaborative Team Care Provided by:
 - 1) Nutritionist
 - 2) Psychologist
 - 3) APN
 - 4) Social Worker

VIII. BULIMIA NERVOSA

- A. DSM- IV definition
- B. Types
 - 1) purging types
 - 2) non-purging types
- C. Epidemiology
- D. Pathogenesis
- E. Medical Complications: (metabolic, cardiovascular, neurological, gastrointestinal, ENT, musculoskeletal)
- F. History, Physical Exam and Lab Studies
- G. Interdisciplinary Collaborative Team Care Provided by:
 - 1) Nutritionist
 - 2) Psychologist
 - 3) APN
 - 4) Social Worker

IX. EATING ATTITUDES TEST (page 5)

- A. Introduction
- B. Small Group Discussion

X. PERFORMING A HISTORY WITH A SUSPECTED EATING DISORDER PATIENT

A. History of Presenting Illness:

1. Onset and duration of dieting behaviors
2. Precipitating factors
3. Past treatments for disordered eating
4. Solicit weight history
 - a. ask about ideal weight and perception of body appearance
 - b. highest weight/date, lowest weight/date
 - c. patient's fears about going over what weight
 - d. weight at last period, change in weight in last six months, last month
5. History of Eating Disorder in childhood, adolescence or adulthood
6. Determine types of diets used, frequency and duration
7. Establish when binge eating began and precipitating circumstances
8. Determine the types of purgative behaviors used, frequency, onset
 - a. vomiting, laxatives, ipecac, stimulants
 - b. diet pills, water pills, exercising, fasting, chewing gum with sorbitol
9. Ask if there is any restrictive behavior (total calories, restrictive foods, vegetarian, total avoidance)
10. Inquire about type, frequency and duration of exercise

B. Habits: smoking, drugs, caffeine use, alcohol consumption

C. Assess sexual history and sexuality

D. Social History: marital status, work , education, hobbies

E. Family History- eating disorder, obesity, major health problems, psychiatric problems. substance abuse

F. Review of Systems:

1. General appearance: hyperactive, listless or lethargic, fatigue, coldness
2. HEENT: hypertrophied salivary glands, dental enamel erosion, dental carries, adenopathy, tiny conjunctival hemorrhages, sore tongue, irritated gums, headache, dizziness
3. Skin: dry, desquamated, yellow (carotenemia), lack of acne, dullness and loss of scalp hair, lanugo over the body, brittle nails, dehydrated mucus membranes, bruising
4. Cardiovascular and Respiratory: chest pain, palpitations, DIB with

- exertion, swelling of ankles or hands, cough, fainting
- 5. GI: Vomiting, epigastric pain, diarrhea, constipation, melena, esophageal or epigastric burning, generalized abdominal pain, bloating, cramping
- 6. Musculoskeletal: bone pain, history of fractures, cramping, muscle weakness, tetany, spasms
- 7. Cognitive: decreased concentration, memory problems, mood swings, suicidal thinking, fear of lack of control over eating behavior, fear of fatness, irritability, anxiety, inability to function at school, work or home, desire to hurt oneself self-mutilatory), fear of sex or excessive sex
- 8. GU: LMP, excessive or infrequent menses, amenorrhea, pregnancies live births, abortions, STDs, sexual abuse, increased or decreased libido, birth control methods, hormone use.

XI. PHYSICAL EXAM TECHNIQUES

- A. Height and Weight (both measured in gown only)
- B. Vital Signs
 - 1. low BP or orthostatic hypotension
 - 2. bradycardia or arrhythmia,
- C. General Appearance. State of hydration, state of nutrition -low body weight, above normal, normal weight, obesity, severe obesity
- D. HEENT: mouth, note gums and teeth; parotid, salivary, submandibular gland swelling; include fundoscopic exam
- E. Skin: note skin and hair state; look for callus on back of hand (from self-induced vomiting), lanugo, ecchymosis, petechiae
- F. CV: note rate, rhythm, presence of murmurs, clicks or rubs; assess for rales, edema, JVD
- G. GI: note abdominal distension, pain or tenderness, bowel sounds, organomegaly or masses, stool occult blood
- H. GU: Include pelvic exam and rectal exam
- I. Musculoskeletal: note state of muscle tone, weakness, presence of bone or joint pain or swelling
- J. Neuro: assess DTRs, sensory, motor and coordination

XII. DIAGNOSTIC EVALUATIONS

- A. Bulimia without restrictive behavior: CBC, chemprofile, thyroid studies EKG
- B. Restrictive behavior: CBC, chem profile, thyroid studies, serum magnesium, EKG
- C. With amenorrhea: serum pregnancy, prolactin, estradiol
- D. Amylase if abdominal pain
- E. Serum drug screens

- F. Stool for occult blood
- G. phenolphthalein (if suspect laxative use)
- H. Flat plate of abdomen if suspect gastric dilatation
- I. Bone Scan, Bone densitometry
- J. ECHO and, or Holter Monitor
- K. CT or MRI if focal neurological findings or change in mental status

XIII. DIFFERENTIAL DIAGNOSIS

- A. Apparent eating disorder, specific diagnosis deferred
- B. Anorexia Nervosa - determine type
- C. Bulimia Nervosa - determine type
- D. Differential diagnosis of weight loss:
 - 1. Involuntary with increased appetite
 - diabetes, thyrotoxicosis, pheochromocytoma, malabsorption
 - intestinal parasites, lack of food, diencephalic tumors
 - 2. Involuntary with decreased appetite:
 - depression, malignancies, Addison's disease,
 - hypercalcemia, systemic illness, pain, gastrointestinal
 - disease, dementia, substance abuse, iatrogenic

XIV. PLAN

- A. Can patient be managed outpatient or inpatient?
 - 1. Establish ongoing collaboration with patient's nutritionist and psychologist
 - 2. Educate the patient about the medical complications of the disorder
 - 3. In collaboration with the nutritionist, reinforce set weight goals and eating behavior changes
 - 4. Set follow up visits according to patient's status
 - 5. Include family, significant other, support system of patient

XV. ROLE OF APN IN SECONDARY AND TERTIARY PREVENTION OF EATING DISORDERS

- A. Provider
 - 1. Early screening and assessment of patient with a suspected eating disorder- recognize at risk populations
 - 2. Have knowledge of clinical presentations of anorexia nervosa and bulimia nervosa and the psychological and physiological effects of the disorders.
 - 3. Establish a trusting therapeutic relationship with the patient
 - 4. Make accurate diagnosis and have established protocols for intervention
 - 5. Make proper referrals for collaborative intervention for patient
 - 6. Set realistic goals in collaboration with the team decision and

monitor outcomes; recognize each individual's recovery is unique

B. Educator

1. Educate the patient about the dangerous results of the behavior
2. Establish trust and rapport with the individual.
3. Educate the patient about the epidemiological nature of societal expectation about weight and body image
4. Help the family become supportive rather than confrontation
5. Help the patient separate feeling and psychological issues from food and weight behaviors

C. Collaborator and Case Manager

1. Establish multidisciplinary approach to treatment
2. Communicate openly with team, establish a cohesive, well defined and agreed upon plan
3. Avoid power struggles with other team members of with patient and family
4. Schedule routine team meetings to revise and update treatment strategies for consistency and consensus
5. Establish measurable expected outcomes for assessment of success in the intervention
6. Track follow up status in patients in future to determine effectiveness of interventions

XVI. QUESTIONS AND ANSWERS

XVII. EVALUATION (p. 56)

How's Your Body Image Questionnaire

(Urbansky, 1994. Shape Magazine)

Maybe you have no trouble with how your body appears to you, or maybe it's all you think about. The following quiz will give you an idea of the state of your body-esteem. You may answer 1, 2, or 3 to each question, with 1 being rarely or never; 2 sometimes; 3 almost always or always. Tabulate your total to determine if your body image is healthy or troubled.

Questions:

- ___ 1. Does your mood affect the way you feel about your body?
- ___ 2. Is it hard for you to accept compliments about the way you look?
- ___ 3. Do you avoid situations where others would see your body, such as swimming pools or social occasions that call for shorts or slacks?
- ___ 4. Do you think you look bad on days you haven't exercised?
- ___ 5. Do you remark disparagingly about your body to yourself or others?
- ___ 6. In thinking about your body, do you focus on the parts you believe need improvement?
- ___ 7. Do you feel threatened or depressed by women you perceive as more attractive than yourself?
- ___ 8. How often do you find yourself asking others (spouses, friends) how you look?
- ___ 9. How often do you worry about your weight?
- ___ 10. Are you self-conscious about eating fully in front of other people?

Scoring:

If you scored between 10 and 15, congratulations. You have a positive body image and are where most of us would like to be.

If you scored between 16 and 23, you're in the average range. You need to work on trying to reframe your body image so that you can more fully appreciate your body.

If your score is between 24 and 30, body image is clearly a struggle for you. You may be out of touch with parts of your body. The fact that you took this quiz indicated that you want to rethink your behavior and take positive steps toward acceptance.

EATING ATTITUDES TEST
(Garner, D.M., Olmsted, M.M., Bohr, Y., & Garfinkel, P.E., 1982)

Put an "X" in the category that most reflects your attitude about eating and weight.

	Always	Usually	Often	Sometimes	Rarely	Never
1. Am terrified about being overweight.	☐	☐	☐	☐	☐	☐
2. Avoid eating when I am hungry.	☐	☐	☐	☐	☐	☐
3. Find myself preoccupied with food.	☐	☐	☐	☐	☐	☐
4. Have gone on eating binges where I feel that I may not be able to stop.	☐	☐	☐	☐	☐	☐
5. Cut my food into small pieces.	☐	☐	☐	☐	☐	☐
6. Aware of the calorie content of foods that I eat.	☐	☐	☐	☐	☐	☐
7. Particularly avoid foods with a high carbohydrate content (e.g. bread, rice, potatoes, etc.)	☐	☐	☐	☐	☐	☐
8. Feel that others would prefer if I ate more.	☐	☐	☐	☐	☐	☐
9. Vomit after I have eaten.	☐	☐	☐	☐	☐	☐
10. Feel extremely guilty after eating.	☐	☐	☐	☐	☐	☐
11. Am preoccupied with a desire to be thinner.	☐	☐	☐	☐	☐	☐
12. Think about burning up calories when I exercise.	☐	☐	☐	☐	☐	☐
13. Other people think that I am too thin.	☐	☐	☐	☐	☐	☐
14. Am preoccupied with the thought of having fat on my body.	☐	☐	☐	☐	☐	☐

	Always	Usually	Often	Sometimes	Rarely	Never
15. Take longer than others to eat my meals.	☐	☐	☐	☐	☐	☐
16. Avoid foods with sugar in them.	☐	☐	☐	☐	☐	☐
17. Eat diet foods.	☐	☐	☐	☐	☐	☐
18. Feel that food controls my life.	☐	☐	☐	☐	☐	☐
19. Display self-control around food.	☐	☐	☐	☐	☐	☐
20. Feel that others pressure me to eat.	☐	☐	☐	☐	☐	☐
21. Give too much time and thought to food.	☐	☐	☐	☐	☐	☐
22. Feel uncomfortable after eating sweets.	☐	☐	☐	☐	☐	☐
23. Engage in dieting behavior.	☐	☐	☐	☐	☐	☐
24. Like my stomach to be empty.	☐	☐	☐	☐	☐	☐
25. Enjoy trying new rich foods.	☐	☐	☐	☐	☐	☐
26. Have the impulse to vomit after meals.	☐	☐	☐	☐	☐	☐

Scoring:

For every "Always" response give yourself 3 points, "Usually" 2 points and "Often" 1 point. If you score thirty or above, it should be regarded as a strong warning signal that you may have an eating disorder; a professional consultation can help you decide.

If you score twenty or above it is likely that you experience anxiety about your eating and weight and you may benefit from professional help. Even if you score below twenty and want to feel better about the subject, it is certainly valid to seek help.

Evaluation Form

In order to provide quality programs, please take a few minutes to fill out the following questionnaire:

SCALE:	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Effectiveness of Presenter					
The presenter possessed solid knowledge of the subject material.	☐	☐	☐	☐	☐
The presenter answered questions and handled discussions in a responsive manner.	☐	☐	☐	☐	☐
Overall, the presenter's delivery was effective	☐	☐	☐	☐	☐
Quality of the Content					
The content of the program was well organized.	☐	☐	☐	☐	☐
The time I spent at the seminar was worthwhile.	☐	☐	☐	☐	☐
My expectations for the experience were met.	☐	☐	☐	☐	☐
The information presented will be useful in my practice.	☐	☐	☐	☐	☐

The most valuable part of the program was: _____

I plan to use the knowledge gained to: _____

Additional Comments: _____

APPENDIX B

EATING DISORDER RESOURCES

BOOKS

1. American Psychiatric Association (1993), Practice Guidelines for eating disorders. American Journal of Psychiatry, 150. 207-228.
2. Berg, F. (1994). Health risks of weight loss. Healthy Weight Journal: Hennings, SD.
3. Fairburn, D., Wilson, G.T.(eds) (1993) Binge Eating Nature, Assessment, and Treatment, Guilford Press: NY
4. Garner, D. & Wooley, S.(1991). Confronting the failure of behavioral and dietary treatment of obesity. Clinical Psychology Review, 11. 729-750.
5. Keys, A.(1959). The Biology of Human Starvation. U of Minnesota Press: Minneapolis.
6. Mitchell, J. (1990). Anorexia and Bulimia: Diagnosis and Treatment. University of Minnesota Press; MN.
7. Reiff, D., & Reiff, K.L.. (1992). Eating Disorders: Nutrition Therapy in the Recovery Process. Gaithersburg. Md.: Aspen Publishers
8. Wolf, Naomi (1991). The Beauty Myth: How Images of Beauty are Used Against Women. New York: William Morrow and Co.
9. Wooley, S.C., & Garner, D.M. (1991). Obesity treatment: the high cost of false hope. J. Am. Diet Association, 91. 1248-1251.

Information Centers

1. National Association of Anorexia Nervosa and Associated Disorders Box 7, Highland Park, IL 60035
(708) 831- 3438
2. National Eating Disorders Organization
445 East Granville Road, Worthington, OH 43085
(614) 436- 1112

3. Anorexia Nervosa and Related Eating Disorders, INC.
P.O. Box 5102, Eugene, OR. 97401
(503) 344-1144

4. American Anorexia and Bulimia Association
293 Central Park West
New York, NY 10024
(212) 575- 6200

5. Foundation for Education About Eating Disorders (FEED)
P.O. Box 1635
Baltimore, MD 21210
(410) 467-0603

Eating Disorder Centers/ Programs

1.Center for the Study of Anorexia and Bulimia
(Treatment, training, research, increasing community understanding)
1 West 91st Streetew York, NY 10024
(212) 595-3449

2. Renfrew Foundation
(Treatment, annual conference, foundation seminars, study groups, supervision)
475 Spring Lane
Philadelphia, PS 19128
(800)- RENFREW

3. Michigan Center for Preventative Medicine
405 W Greenlawn, Suite 300
Lansing, Michigan 4891f0
(517) 482- 7400

Journals

1.Eating Disorder Review

2.Eating Disorders: The Journal of Treatment and Prevention
Both (800) 756- 7533

3.International Journal of Eating Disorders
(212) 850- 6645

Videos

1. Minnesota Semi-Starvation Experiment -1990 Educational video/ Office of Instructional Services, Colorado State University, Ft. Collins, CO 80523.
2. Slim Hopes: Advertising and the Obsession with Thinness, 1995/ Media Educational Foundation

Periodicals

1. Radiance: The Magazine for Large Women. Oakland, CA.
2. National Association to Advance Fat Acceptance Newsletters, Sacramento, CA.

MICHIGAN STATE UNIVERSITY LIBRARIES



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