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The Benefits of Art Therapy in Eating Disorder Treatment

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Art therapy has been available in clinical settings since the 1940s, bringing training in the arts and an interest in creativity, well-being, and mental illness (Junge, 2010). By the 1960s, the practice of art therapy was spreading across the US, thanks to artists, art educators and psychiatrists, who were interested in the diagnostic indicators and healing benefits of having patients create art.

The physical effects of eating disorders, and particularly the consequences of malnourishment, affect the brain's ability to function properly. Such effects include disruption of neurotransmission, structural changes, and abnormal activity because of anorexic states. In addition, the brain is affected by conditions such as potential oxygen deprivation due to a low heart rate (Frank, 2011); nerve-related conditions, including seizures (Misra et al., 2013); shrinking of grey and white matter (Bang et al., 2016); adverse effects on the emotional centers of the brain; weakened reward pathway responses in the brain; and difficulty and disordered thinking, planning, and cognitive flexibility (Arnold, 2013; Kaye, 2007). Engaging in creative processes utilizes various brain networks and in turn activates these brain-related functions that can be compromised by an eating disorder.

Today, graduate art therapy programs are training master's level mental health clinicians. Such programs integrate psychological theories with an understanding of creativity, art materials, and the art-making process and products within a clinical setting. With the field's theoretical roots in Freudian and Jungian theory, art therapy has grown along with contemporary psychological theory. In the same way that mental health counselors practice cognitive behavioral therapy (CBT) or motivational interviewing, art therapists practice arts-based CBT and motivational interviewing, in which the theories of creativity and art-making are embedded in the assumptions of the identified theory.

Art Provided in Sessions vs. Art Therapy

Other mental health providers, such as counselors, social workers, and psychologists, use art materials within sessions to gain a greater understanding of the client. In this context, art serves as a bridge to conversation, a tool for relaxation, or a means for emotional release. In contrast, "Art therapy is an active therapeutic process that integrates the mind and body, allowing an individual to uncover, explore, and process emotional content through art making." (Misluk-Gervase, 2020) This is achieved by pairing fear-arousing emotions with new experiences to support coping, regulating, and integrating (Hass-Cohen, 2008).

Art therapists create "holding spaces" for emotionally laden experiences while encouraging spontaneous engagement in the creative process through directive and non-directive approaches. Creativity requires methodological processes such as "problem-solving, organization, cognitive flexibility, abstract thinking,

planning, willed action, and source and working memory" (Misluk-Gervase, 2020). Engaging in creative activities heightens a person's "ability to engage in contradictory modes of thought, including cognitive, affective, deliberate, and spontaneous processing" (Ellamil et al., 2012).

Three Brain Networks

Creativity activates three brain networks: Executive Attention, Imagination, and Salience (Gotlieb et al., 2018). The Executive Attention Network activates during complex problem-solving tasks, and demands extreme concentration, and focus on working memory (Gotlieb et al., 2018; Kaufman, 2013). The Imagination Network constructs mental simulations from past experiences by using the same processes as remembering, future planning, and imagining alternative perspectives (Gotlieb et al., 2018). The Salience Network is activated in reward and punishment pathways and body distortions (Gotlieb et al., 2018). Additionally, researchers have noted the engagement of the brain's dorsal and ventral stream during visual, sensory, and creative activities (Hass-Cohen and Loya, 2008; Lusebrink, 2004; Lusebrink & Hinz, 2016).

This is accomplished through the integration of vision, action, and detection of movement and location, and response to shapes, meaning, form, color, and brightness (Hass-Cohen and Loya, 2008). Hass-Cohen et al. (2014) stated that the centers that mediate emotional awareness are involved in subjective decision-making, such as choosing colors, shapes, and forms in meaningful image-making. The innate practices involved in art-making, from planning and decisions to meaning-making, pair with the diagnostic needs of individuals with eating disorders.

Materials and Processes Involved in Art-Making

In tandem with the field of psychology, art therapists utilize a variety of theoretical approaches to address the needs of clients and their presenting issues. In conjunction with these theories, art therapists take into consideration the properties of materials and the psychological and physiological processes involved in art-making.

A Creative Art Therapy Framework

The Expressive Therapies Continuum (ETC), a creative art therapies framework, provides a unified language and structure to discuss art-making within the therapeutic setting. The ETC is not a distinct theory; rather, it can be aligned with any theoretical perspective, and provides guidance on the effects of art-making and the creative processes involved in art therapy (Hinz, 2009; Lusebrink and Hinz, 2016).

The ETC organizes media and expression on three levels of complexity: Kinesthetic/Sensory, Perceptual/Affective, Cognitive/Symbolic, and a fourth level, Creative, which is conceptualized to cross all other levels. Art therapists may utilize the ETC to identify client needs, or to develop treatment plans, select materials, and formulate directives. The Kinesthetic/Sensory component processes somatosensory experiences and mediates internal and external sensations as they relate to art-making (Hinz, 2009; Lusebrink & Hinz, 2016). The Perceptual component emphasizes the formal elements of art-making (e.g., line, color, form, direction), nonverbal communication, and cognitive restructuring by exploring various perspectives (Hinz, 2009). "The Affective component supports identification, amplification, discrimination, and expression of emotions" (Misluk-Gervase, 2020). The Cognitive component requires planning and decision-making while integrating past and present imagery (Hinz, 2009). The Symbolic component supports the exploration of personal symbol formation and self-expression (Hinz, 2009). The Creative level is an integrating factor within the ETC as individuals work within and between the various components throughout the creative process (Hinz, 2009). In 1989, Wooley emphasized:

It should not surprise us that so many are finding unique value in experiential techniques. The fact that eating-disordered patients adopt physical and often complex metaphoric means of expressing their emotional pain suggests the difficulty we are likely to encounter in asking them to articulate the inarticulable. In moving to spatial, kinesthetic, and symbolic

expression, we are, in a sense, agreeing to speak the patient's language rather than our own (as cited in Makin, 2000).

While practicing art therapy with individuals with eating disorders for over a decade, I have witnessed the positive impact of this process on recovery. In art therapy, I have engaged clients in the creative process, along with verbal and nonverbal therapeutic approaches, creating an active therapeutic process that helps to build tolerance to the psychological and physiological needs associated with eating disorder recovery.

Cora: Challenging Eating Disorders Thoughts, Behaviors, and Beliefs

In her early 30s, "Cora" entered outpatient treatment with me after successfully completing residential treatment for anorexia nervosa and bipolar disorder. Her therapeutic goals included: continuing to challenge eating disorder thoughts, beliefs, and behaviors; increasing self-esteem and body awareness; and managing stressors related to her eating disorder and daily life. Cora explored the intersection of her restrictive patterns and self-harm through construction paper collage, using shapes and colors to explore the progression of her urges to restrict and subsequent cutting. These art materials supported cognitive processes such as planning, problem-solving, and symbolism while supporting emotional regulation. In describing her artwork, Cora was able to gain therapeutic distance from her self-harming behaviors and to identify thoughts and patterns previously left undiscussed. As a result, a more effective plan was created for her to reduce and eventually abstain from self-harming as a mode of coping.

This process supported further exploration of her dissonance with the various roles she played in the workplace and with her family. These roles consistently triggered her eating disorder symptoms. A layered painting process helped her explore the underlying beliefs embedded in these roles. Most influential were her diagnoses of anorexia and bipolar disorder, and her history with psychiatric treatment. Several sessions were devoted to the exploration of these concepts on a large canvas. Paint allowed for a fluid process that engages affect with a wide range of colors that supports symbolic exploration. The initial layer was a gradient of grays surrounded by hazy patches of yellow and purple as a representation of her bipolar disorder, with a thinly lined drawing of a floating stylized tree representing the self.

For several weeks, this process expanded to include a variety of other materials, including tissue paper. The imagery unfolded as she explored how these diagnoses influence her professional work, future, and intimate relationships. The layering process allowed Cora the ability to explore, take risks, cover and uncover through metaphor. It afforded her the ability to see the self through self-generated representations that mirror the complexity and layers of a person's inner workings. The completed artwork was a backdrop of saturated blues, grays, and black. In the center, she affixed a large tree with a strong base and substantial trunk that was collaged from yellow, green, and blue tissue paper. Among the top branches, this tree bloomed with yellow, white, green, and blue poms. Nestled into its trunk and protected by the overhanging branch, Cora created a symbol of her daughter, a smaller tree, with a purple trunk and pink and white poms. This pairing served to reflect her role as a mother through the symbol of a strong and grounded tree. Cora and I worked together for over two years engaging in art-making, writing, and guided imagery to support emotional tolerance and regulation, increase insight, improve her self-esteem, and develop body awareness while enhancing her engagement in life-fulfilling activities.

Helping Art-Making and Creative Processes Meet Clinical Goals

Art therapists bring a unique skill set to the treatment team because of their depth of understanding about the use of art-making and creative processes to meet clinical goals. Additionally, the art products created in session serve to document clinical progress and provide insight into cognitive functioning and impairment. Art therapy requires a wide range of mental processes, from initial sensory integration to

planning and problem-solving to symbolic representations (Hinz, 2009). It gives individuals with eating disorders the ability to create a visual map of their journey to recovery, to document experiences that are often void of words, and to visually construct an understanding of the eating disorder outside of the self. Art-making affords the ability to create visual representations of self, both the internal experience and the external representation of it (Luzzatto, 1995).

Makin (2000) described art therapy's effectiveness as multi-layered because it offers opportunities for making associations and enabling association-making and self-soothing through the innate properties in art materials. In addition, patients gain insights into and possibilities for change that happen in the act of reviewing and discussing artwork. Art therapy in both individual and group settings requires that individuals actively participate in treatment and recovery. This is especially true early in treatment, where long periods of silence or a lack of commitment to therapy can be common. At this point, art therapy provides an opportunity for participation that circumvents these challenges. Engagement in art therapy allows individuals a safe space to take risks, relinquish control, and in turn gain mastery and autonomy.

Building a Visual Space

Exploring the dichotomy of rigid thinking (good/bad, right/wrong, healthy/unhealthy) through the arts offers a visual space to explore the continuum of messages and beliefs that drive patterns of behavior. This creates opportunities for reflection and projection through the art materials, which can be experienced as less threatening than verbal exploration. The challenges individuals experience in art therapy, art-making, and creative processes often mirror those they confront in everyday life (Makin, 2020), allowing communication around those challenges to be honest, authentic, and client-directed. The use of imaginative thought processes inherent in creativity can support individuals who struggle with exploring alternative perspectives. Van der Kolk (2014) noted that the effects of trauma have the potential to limit imaginative thinking, which can hinder the therapeutic process. As he writes: "Fear destroys curiosity and playfulness." By integrating those qualities into treatment, therapists create a space that is failure-free, open to all, and that supports the uniqueness inherent in all people. According to Makin (2000), art therapy over time and as a whole (art-making, artwork, review and discussion) becomes ego-supporting, promoting a healthier sense of identity, which ultimately supports individuals and helps them reclaim their voice through visual language (van der Kolk, 2014).

Resources

American Art Therapy Association (<https://arttherapy.org>)

Art Therapist Locator (<https://arttherapy.org/art-therapist-locator/>)

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UPDATE: COVID-19 and its Effects on ED Research

The risks and effects of COVID-19 have reached far into the world of eating disorders research, according to three well-known ED researchers, Drs. Ruth Striegel Weissman, Kelly L. Klump, and Jennifer Rose (*Int J Eat Disord.* May 1, 2020).

The three researchers noted that ED research is already particularly susceptible to disruption due to its focus on individuals who are physically and emotionally vulnerable. The trio invited ED researchers from editorial boards and scientific organizations to comment about the virus's current and future impact on their organizations' ED research. They also asked participants to suggest effective strategies for conducting and supporting research during and after the pandemic.

Many of the study's 187 participants had moved their studies online or had completely shut down their research, at least for the time being. Overall the respondents also reported having high levels of stress. This was particularly true for individuals with temporary or non-tenured positions. (This was in direct contrast to stress among respondents with permanent positions.) Only a few respondents (14%) planned to make no changes to their future research practices; more than half of all respondents indicated that it was too soon to tell what the future of their research projects might be. About a third (30%) of those in permanent positions vs. those in temporary positions expected to make changes to future research projects because of the coronavirus. About half of the respondents had moved their projects online, while 20% to 40% of projects had been shut down due to COVID-19.

The study was anonymous, and only a single overall response was allowed from each group. In addition, the survey was voluntary and included a consent statement.

Effects differed with permanent vs. temporary positions

Far more women than men participated in the survey (women, $n=141$, or 75.4%, vs. men $n=43$; 23%). Men were more likely than women to have held a permanent position within their organization.

By far the most unsolicited comments were about finding and using technologic solutions to continue their research. A smaller number of comments addressed preparing key individuals to form research teams to learn better ways to use technology tools, and ways to keep in contact with study participants to reduce dropout.

Most respondents were female. For most of the respondents the pandemic had disrupted at least part of their research programs, but about half of the respondents reported they were able to move at least part of their programs online. The authors also noted that up to 40% of the ED projects were stopped because of the effects of the pandemic. Another finding was that research activities that were most challenging because of the coronavirus had produced high levels of stress, starting at the onset of the pandemic. A third finding was the effect that the virus had on respondents' future careers. This was particularly marked among those holding non-permanent positions compared with researchers with permanent positions. Overall, women reported greater concerns about their future careers than did men. Instead, men mostly concentrated on problems with staffing.

The authors also received a surprisingly large number of comments in response to the open-ended questions. Overall, respondents expressed having a positive outlook and pledged to carry on with tasks such as learning new skills or learning grant writing while the pandemic continued. The trio of researchers added that COVID-19 has "thwarted opportunities that cannot be overcome, despite the ED professionals' good intentions or positive self-talk." The authors called for support for new ED scholars and additional resources for ED researchers and their work.

Art persists despite the pandemic; it is as if creativity can leap over nearly any barrier. This was true during the two world wars and is just as true today, as each day we read and see new art being created despite local quarantines. In this issue, Art Therapist Eileen Misluk-Gervase illustrates her experience with "Cora," an eating disorder patient. While practicing art therapy with individuals with eating disorders for over a decade, she has seen positive impact of this process on recovery. The nonprofit American Art Therapy Association defines Art Therapy in the following way: "This approach is used to improve cognitive and sensory-motor functions, foster self-esteem and self-awareness, cultivate emotional resilience, promote insight, enhance social skills, reduce and resolve conflicts and distress, and advance societal and ecological change." [<https://arttherapy.org/about-art-therapy/>]

Also in this issue are articles examining the effect of COVID-19 on eating disorders research, the effects of drug therapy in patients with bulimia nervosa, sports and the issue of body weight among young men, and much more. All of these articles reflect the many ways ED professionals are constantly working to improve the lives of patients with eating disorders. Thanks to virtual meetings, ED pros can also share ideas and techniques in small and larger groups. For example, our publisher, the International Association of Eating Disorders Professionals, has opened registration for the 2021 iaedp national symposium, to be held via ZOOM meetings, beginning March 18-21. More information is available via the organization's website, www.iaedp.com.

— MKS

Self-compassion in Anorexia Nervosa Patients

Why some patients do not view developing self-compassion as a worthwhile goal.

The capacity for self-compassion is valuable but can be a challenge for those with eating disorders. Often people with an ED can feel great compassion for others but struggle to show the same compassion to themselves. A recent study by Kelly and colleagues examines factors that may contribute to this (*Brit J Psychology*. 2020; 1).

The authors note that there is some prior work in this area, but the issues examined have perhaps been constrained by the use of pre-existing quantitative measures, which may not examine all factors that an individual views as relevant. For this reason, the authors used a qualitative method in which 37 participants with AN were asked to write down the pros and cons of exhibiting self-compassion. Members of the research team then analyzed the results to identify overarching themes.

Common "pros" of self-compassion included improved health, outlook, social relationships, and intrapersonal growth. Commonly perceived "cons" were "personal shortcomings" (such as lowering of personal standards, low motivation, and failure) because of self-compassion; emotional stresses of developing self-compassion, and doubts about whether any degree of self-compassion would be helpful.

These are very useful results because they help clinicians understand why people with AN may not view efforts to develop self-compassion as a useful goal. Moreover, these may be factors to address in treatment in order to help people move toward greater self-compassion.

Managing Symptoms in BN: Is Drug Therapy Useful?

A host of underlying factors must be addressed first.

Only about half of patients with chronic bulimia nervosa (BN) fully recover. In addition, from 40% to 80% of these patients have comorbidities such as anxiety, and mood, impulse control, and substance abuse disorders. In a thoughtful editorial, Dr. Guido K.W. Frank of the University of California, San Diego, recently explored a major question in BN management: Is it possible to manage BN with currently available drug therapy? (*Expert Opinion on Pharmacotherapy*. 2020; 21:2073).

First, the author notes that the etiology of BN is still not well understood. Research has highlighted inadequate mechanisms to control food intake beyond physiologic needs, and behavioral traits may also be contributing factors (*Binge Eating. A Transdiagnostic Pathology*. Springer Nature Switzerland, 2020). One behavioral trait is altered regulation of emotion. That is, BN patients have difficulty handling their emotions and controlling rash impulsive responses. It is hypothesized that an imbalance between reward sensitivity, impulsivity, and inhibition are driving factors in binge-eating episodes.

According to Dr. Frank, effective psychopharmacology must target the many factors present in the course of BN, at different time points in the illness. Thus, psychopharmacology for BN has a role but usually not as the only treatment for BN. Added to the better-known comorbid depression, anxiety, obsessive-compulsive and impulse control problems is post-traumatic stress disorder, which can also trigger symptoms.

When SSRIs may be helpful

Research suggests several key areas that underlie disturbances in BN. Behavioral traits for emotional instability, changes in brain regions that affect self-regulation and impulse control, the neurotransmitters dopamine and serotonin, as well as gut hormones—all can affect development and maintenance of BN behaviors. Selective serotonin reuptake inhibitors, or SSRIs, are important in the process, as shown by the effectiveness of fluoxetine (Prozac®), at high doses (FDA, 2016). Currently, the only approved medication for BN is fluoxetine, usually started at 20 mg daily or up-titrated over several days to 60 mg daily. Although the mechanisms for fluoxetine's effectiveness are unknown, its effects on mood and anxiety probably play a role.

Dr. Frank notes that antidepressant/antianxiety medication has been superior to placebo in improving BN symptoms (*Cochrane Database Syst Rev*. 2003; 4:CDE00339). While only one true long-term study (52 weeks) has been done, and fluoxetine showed superior efficacy, a large drawback was the 80% attrition rate by the end of the study (*Am J Psychiatry*. 2002; 159:96). Because all measures of efficacy worsened over time, fluoxetine alone may not be adequate after its initial effectiveness. In addition, because many BN patients have high rates of depression, aggressively increasing SSRI doses may also trigger suicidal behavior. Thus, it becomes ever more important to search for other medications that may be safe and effective.

BN is a multifactorial problem, and a single drug alone may not effectively target the biological, psychological, and social factors involved. Also, a better understanding of the underlying pathophysiology must come before choosing pharmacologic interventions, according to the author. He notes that psychopharmacology has a clear role to play in BN treatment but should not be the only treatment. Because binge eating and purging modulate brain biology, it may be necessary to use different treatments at different time points during the illness.

Mood stabilizers

Mood stabilizers like lamotrigine (Lamictal®) may be helpful, and all uncontrolled studies thus far

suggest that this agent could effectively control BN behaviors (*Int J Eat Disord.* 2014; 47:329). Lamotrigine is used alone or with other agents to prevent and control seizures, and can be used to prevent extreme mood swings of bipolar disorder (<https://www.webmd.com/bipolar-disorder/default.htm>) in adults. It is believed to work by restoring the balance of certain natural substances in the brain. The stimulant methylphenidate has been beneficial for patients with comorbid ADHD, and it targets executive function and impulse control (*Innovations in Clinical Neuroscience.* 2013; 10:30).

As for patients with substance use who are not good candidates for stimulant treatment, other non-habit-forming treatments might be considered. If such patients continue to respond poorly to SSRIs, the author points out that lamotrigine can be tried, to stabilize mood and to aid impulse control over urges to binge eat. This agent also has a low risk of weight gain—a frequent reason why patients with eating disorders refuse other medications.

Long-Term Risk of Heart Disease and Death among Women with BN

A Canadian study follows the risk over 12 years.

The short-term risks for cardiovascular complications among women with BN are well known, but few studies have taken a longer view. What happens as time passes? Does the risk increase or lessen?

To assess the risk of cardiovascular disease among women with BN, a group of Canadian researchers headed by Rasmi M. Tith, RD, MPH, designed a 12-year follow-up study of 416,709 Canadian women hospitalized with BN and 415,891 women without BN hospitalized with pregnancy-related conditions (*JAMA Psychiatry.* 2020. 77:44). The participants were followed from their first admission, and follow-up ended at the first incidence of cardiovascular disease, death, or the end of the study on March 31, 2018, whichever occurred first. The authors' results suggested that women with BN can benefit from closer management of cardiovascular complications after treatment, and should be regularly screened for risk of ischemic cardiovascular disease.

The risk for cardiovascular disease among BN patients was greater early on

The women were hospitalized from 2006 to 2018 in Quebec, Canada. The final study group included 818 women with BN and 415,891 women without BN but with pregnancy-related problems. Initially, the women hospitalized with BN had a greater initial incidence of cardiovascular disease than the comparison group.

The risk for developing cardiovascular disease among the women with BN was greatest in the early months of follow-up, and later became similar to that among the women with pregnancy-related hospitalizations. In the early years of follow-up, women hospitalized with BN had a 5.48 times greater risk of developing cardiovascular disease than did the women hospitalized for pregnancy-related problems. The authors concluded that BN might be an important contributor to premature cardiovascular disease in women. The authors also recorded 16 deaths among women in the study group and 299 among women with pregnancy-related hospitalizations.

According to the authors, in addition to immediate complications such as oropharyngeal and gastrointestinal disorders, vomiting and use of laxatives can lead to electrolyte imbalances, and can increase the short-term risk of arrhythmias (*J Eat Disord.* 2015; 3:25866627). In addition, damage to cardiac myocytes, or muscle cells, can lead to congestive heart failure, ventricular arrhythmias, or even to sudden cardiac death. Development of psychosocial stress and anxiety are additional risk factors for

cardiovascular disease and death (*Am J Hypertens.* 2015; 28:1295; *Int J Eat Disord.* 2005; 38:99).

The key to changing the statistics, according to the authors, is closely following BN patients at risk. This includes watching for metabolic changes, such as low estrogen levels, and being aware of patients' adverse lifestyles, including heavy cigarette smoking, or excess drug and alcohol use, which also contribute to development of cardiovascular disease.

Oral Health and Eating Disorders in Australia

No guidelines yet exist for dietitians working with persons with eating disorders.

Eating-disorder-related behaviors, including binge eating and purging, can lead to significant oral and dental complications. To make matters even worse, many people with eating disorders ignore their oral health due to general anxiety about dental care, or fear, or even embarrassment. This is certainly the case in Australia, according to the results of a recent study. Although Australian dietitians are well positioned to provide basic dental screening in general practice, their role has not yet been established, say researchers at Western Sydney University, Sydney, Australia (*J Eat Disord.* 2020; 8:49).

Tiffany Patterson-Norrie of the School of Nursing and Midwifery, Sydney, Australia, and a team of researchers recently reviewed major databases, and then performed a literature review to find guidelines and recommendations to better define the role of dietitians in treating oral health problems, including those in patients with eating disorders. The authors also sought to review the knowledge, attitudes, and practices of dietitians and current models of oral health care and resources.

The authors found that current national and international position statements encourage dietitians to conduct basic oral health screening and to promote oral health in high-risk populations, such as in persons with eating disorders. However, there was no evidence to indicate that most Australian dietitians performed oral health screenings or offered education for patients with eating disorders. Some oral health promotion resources existed for dietitians working in pediatric, HIV, and geriatric clinical areas; however, no resources were identified for dietitians working with eating disorders patients.

Research uncovers two statements on oral health, none related to EDs

The authors found two position statements on oral health and the role of dietitians, a joint position statement and guideline from the Dietitians Australia (Dietitians Association of Australia) and the Academy of Nutrition and Dietetics (<https://daa.asn.au/what-dietitians-do/dietitian-or-nutritionist>; Canberra: Dietetics Association of Australia, Dental Health Services Victoria; 2015. p. 32). Both official statements supported the belief that nutrition is an integral part of oral health across all stages of life, and emphasized a shift toward multidisciplinary collaboration for patient-centered care.

The statements support and stress the need for collaboration between dietitians and dental practitioners for promoting oral health, and show that dietitians can play an important role in oral health care. However, no models of care yet exist where dietitians promote oral health among individuals with eating disorders. There are also no training resources and screening tools for dietitians in this area. Further research is required to develop this model of care and assess its feasibility and acceptability.

Sports and Body Image, with Weight Gain or Loss among Young Males

Too many athletes unsuccessfully try to design their own nutrition programs.

The mention of "eating disorders" often brings to mind adolescent girls or young women, but at least two-thirds of young men are also dissatisfied with their bodies. Fifty percent or more want to lose weight, and the others wish to build muscle mass (*J Psychosom Res.* 2004; 56:853). As a result, they may turn to excessive exercise and use of nutritional supplements, even those that contain banned drugs or substances, as well as anabolic steroids. In one study of 212 male and female athletic competitors, those taking nutritional supplements were 3.5 times more likely to admit doping and had a more positive attitude about using drugs in their sports (*Psychol Addict Behav.* 2012; 26:955). This practice is not limited to young men; young women also turn to these supplements for energy and weight loss (*Inquir Sport Phys Educ Psychol Rev.* 2013; 11:65).

Easy access to the Internet also plays a role. Many commercials for weight gain products purport to enhance performance and body image as well. Information about side effects of these products is usually lacking; one study showed that none of a group of teens could name any negative effects from taking such supplements (*Health Educ Res.* 2003; 18:98).

A unique profile among males

A team at the University of California, San Francisco, and UCLA recently published an update on eating disorders in adolescent boys and young men. Dr. Jason M. Nagata and colleagues at Simmons University, Boston, and the University of Toronto reviewed the recent literature on eating disorders and disordered eating behaviors among adolescent boys and young men, including epidemiology, assessment, medical complications, treatment outcomes, and special populations (*Curr Opin Pediatr.* 2020; 32:476). The authors found that eating disorders and disordered eating behaviors in boys and men might present differently than in girls and women, particularly with muscularity-oriented disordered eating. They also suggest that treatment of eating disorders in boys and men should be adapted to address their unique concerns.

In one of the earlier studies of the relationship of between doping and body dissatisfaction, use of weight gain supplements and attitudes toward enhancing performance by using performance-enhancing drugs, Drs. Zali Yager and Jennifer O'Shea of Victoria University, Melbourne, Australia studied 1148 young men. The boys and men, between 11 and 21 years of age, completed self-report questionnaires measuring weight changes, use of supplements, and body dissatisfaction (*Male Body Attitudes Scale*, or MBAS), and then recorded their attitudes toward doping in sports (the *Performance Enhancing Attitudes Survey*, or PEAS) (*J Int Soc Sports Nutr.* 2014; 11:13). The researchers found a positive correlation between total MBAS and PEAS scores. Thus, young men who were attempting to lose or gain weight and those drinking energy drinks and taking vitamin-mineral supplements were also significantly more supportive of some degree of doping in sports. Two exceptions were men involved in weight lifting and those taking protein powders.

A more lenient attitude may play a role in doping in sports

Drs. Yager and O'Shea suggest that more lenient attitudes toward body dissatisfaction, weight change behaviors, and supplement use among boys and young men may play a role in doping in sport. Future research might examine whether combining educational content aimed at preventing body dissatisfaction and the use of drugs in sport may have a greater preventive impact than the current programs designed for young men.

[Note: The International Olympic Committee (IOC) has published a very helpful and thorough article, "Dietary Supplements and the High Performance Athlete" (<https://doi.org/10.1123/ijsnem.2018-0020>). It describes the rationale for using certain nutrients, for example, omega fatty acids, that have documented evidence of improving performance when used in specific scenarios. The IOC group, headed

by Dr. Ronald G. Maughan of the University of Saint Andrews, Scotland, concluded that while a small number of supplements can benefit an athlete's training program, a strict benefit-risk analysis by a well-informed sports nutrition expert is essential before an athlete chooses his or her own nutrition program.]

Sports that may promote eating disorders

- Sports that require competition clothing that reveals body shape, such as swimming and volleyball
- Sports that emphasize muscle mass, such as bodybuilding
- Endurance sports, such as triathlons, cycling, and cross-country skiing
- Aesthetic sports, such as dance, figure skating, gymnastics, synchronized swimming
- Sports with weight categories, such as martial arts, boxing and wrestling. These may lead to bulimic-type behaviors.
- Sports that promote a low body weight, such as riding or cycling

Questions and Answers: A Binge is a Binge is a...?

Q. I am currently seeing a client who has bulimia nervosa and as a part of her treatment we are monitoring her binge eating. It is clear that she often has eating episodes with loss of control but sometimes this involves large amounts of food, and at other times just small amounts. She asked, should she record all binges, or just the large ones. (*LVN, Cincinnati*)

A. The diagnostic criteria for binge eating (in various eating disorders) has historically required consumption of a large amount of food—typically referred to as objective binge eating (OBE)—excluding amounts that are not large (a subjective binge-eating episode, or SBE). Does this distinction really matter?

Several researchers have questioned this distinction, and recent work by Brownstone and Bardone-Cone (*Eat Weight Disord*, online Nov 16, 2020) adds further evidence that the OBE-SBE distinction may not be useful. In this study, people with OBEs (n=132), SBEs (n=35) or neither (n=133) were recruited and assessed online with the *Eating Disorders Questionnaire (EDE-Q)*. The *EDE-Q* assessed eating disorder variables; the Body Shame subscale of the *Objectified Body Consciousness Scale*, the *Depression and Anxiety Stress Scale*, the *UCLA Loneliness Scale*, and *The Multidimensional Scale of Perceived Social Support* were also used.

The results showed that people with SBEs demonstrated more compensatory behaviors (both vomiting and laxative use, as well as exercise), more restriction, more depression and anxiety, and worse body image than those with OBEs or those without loss of control eating. These results certainly suggest that SBEs are not "less severe" than OBE, and seem to argue strongly for monitoring both SBE and OBE during treatment.

— SC

In the Next Issue

IAEDP's national Symposium Goes Virtual

Beginning March 18-21, In response to COVID-19 restrictions, The International Association of Eating

Disorders Professionals' Symposium will go online. The theme this year is very appropriate, "As the World Turns: Unforeseen Challenges and Dynamic Solutions." The extensive program includes presentations by four keynote speakers: Cynthia M. Bulik, PhD, FAED; Emilio J. Compte, PhD, John Cryan, PhD, and Adele Lafrance, PhD.

Also on the program are core courses, and special sessions on nursing, medications, diagnosis, and suicide, as well as ways to handle burnout, transdisciplinary treatment, and black families and body image, among many others. Registration is now open. For more information, see: www.iaedp.com/annual-conference.

PLUS

- Five-Session Body Image Intervention Delivered at Schools
- Eating Disorders and the Sense of Taste
- Pros and Cons of Brain Stimulation for ED Patients
- A Look at Transdiagnostic CBT
- And much more...

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