
Eating Disorders Review

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Scott Crow, MD, Editor-in-Chief

From Across the Desk

In this issue, several articles point out ways to improve patients' access to care, including a new algorithm measuring readiness for change and Web programs to encourage patients to go beyond the initial diagnosis of an eating disorder to acceptance of and participation in treatment.

Another very successful IAEDP Annual Symposium has concluded, and plans are already underway for the next Symposium, scheduled for March 26-29, 2020, at the Omni Orlando Resort at ChampionsGate, Orlando, FL. A call for presentations for the 2020 meeting is now open.

Awards to Outstanding Members of IAEDP

Five members were singled out for their special contributions to the organization. Congratulations go out to:

Member of the Year - Jessica Baker, PhD, CEDS

Spirit of iaedp™ - Martha Womack, PhD

Special Recognition - Joel Jahraus, MD, FAED, CEDS

Honorary Certification - Ralph Carson, PhD, RD, LD, CEDRD

Lifetime Achievement - Craig Johnson, PhD, FAED, CEDS

Four Symposium Scholarship winners were announced:

Rachel Rose, MA was awarded the Christine Hartline Scholarship

Emily Gaber, MS, NCC, LPC-IT, and Alicia Jennerjohn, RDN, CD received Erin Riederer Foundation Scholarships

Brooke Savage, RN, received the Richard (Dick) Wilson Scholarship

And finally, the winner of the "**Imagine Me Beyond What You See**" **Body Image Art Competition** is the **Rogers Behavioral Health - FOCUS Adult Residential Program**, for their entry, "Boys in Dresses."

—MKS

UPDATE: Very Early Clues to Later Eating Disorders

Until recently there were few ways to identify children at risk for developing eating disorders later in life.

Now, results of a recent study show that body mass index and growth patterns may give pediatricians helpful clues to children at risk. A child with persistently low body mass index may be at increased risk for development of anorexia nervosa when he or she reaches adolescence. The study was recently reported by Dr. Nadia Micali, professor and head of the Geneva University Hospital's Division of Child and Adolescent Psychiatry, with eating disorders colleagues at the University of North Carolina. The pattern can be seen as early as 2 years of age for boys and 4 years of age for girls, according to the researchers. One of the co-authors, Dr. Cynthia Bulik, Distinguished Professor of Eating Disorders at the University of North Carolina School of Medicine, noted that clinicians need to be particularly alert when a child falls off and remains off the growth curve throughout childhood. She added, "The same holds true for children who exceed and remain above the growth curve—their risk is increased for other eating disorders, such as bulimia nervosa and binge eating disorder." The authors also noted that their study highlights the need to consider metabolic risk factors as well as psychological, sociocultural, and environmental elements in the development of eating disorders. The difference is that childhood body weight changes start to emerge at a very early age—far before social pressures to be thin or to diet. The results of the authors' long-term study were published in the *Journal of the American Academy of Child and Adolescent Psychiatry* (2018; doi: 10.1016/j.jaac.2018.11.008.).

Taking Another Look at Pharmacotherapy for Anorexia Nervosa

A multi-site study showed promising results.

Nutritional rehabilitation and psychotherapy are the mainstays of anorexia nervosa (AN) treatment. In contrast, medications are widely regarded as of little value in AN, either for acute treatment or for preventing relapse. A very wide range of medicines have been tried, and most have shown little benefit.

Recent research has examined the efficacy of atypical antipsychotics, particularly olanzapine, for AN, and this literature is mixed. Some studies have suggested that these agents are beneficial for weight gain or effective against psychological variables, such as obsessionality, while others do not. In a recent large study, Attia and colleagues (Attia, et al., *American Journal of Psychiatry*: doi: 10.1176/appi.ajp.2018.18101125) shed further light on this topic.

A 16-week controlled trial with olanzapine

In this multi-site study, 152 individuals with AN received either olanzapine or a placebo for 16 weeks. The results showed greater weight gain with olanzapine, equating to approximately 1 lb per month more weight restoration in the olanzapine-treated group. There was no evidence of changes in other relevant psychological variables. In particular, improvements in obsessionality (seen in other treatment studies) were not observed. The metabolic disturbance often reported with atypical antipsychotics was not seen in this sample.

This is an important study, with many strengths. For an AN study, the sample was large. In addition, it was a multicenter study conducted in outpatient settings. Many eating disorder medication studies are so brief as not to reflect common clinical use (for example, an 8-week trial has been common in the bulimia nervosa literature). A 16-week study, as in this case, is much more realistic.

One would have hoped to see cognitive changes with olanzapine treatment. It certainly seems plausible that the main role for medications in AN treatment may be indirectly influencing weight restoration by directly influencing related cognitive variables, such as obsessionality, cognitive rigidity, and anxiety, etc., yet evidence for that was not seen here. Nonetheless, the results of this study should reinvigorate interest in pharmacotherapy for people with AN.

Long-term Effects of Anorexia Nervosa on Bone Health

Changes were traced after 5 and 10 years of recovery.

Interference with bone development and attaining peak bone mass and peak bone strength can have dramatic effects on development of osteoporosis and fracture risk later in life. Development of effective treatment has proven to be highly difficult, and we still know too little about the long-term course of bone health among those who once had AN.

Interference with bone development and attaining peak bone mass and peak bone strength can have dramatic effects on development of osteoporosis and fracture risk later in life. Results of a longitudinal study that followed 41 teenage girls with AN for 5 and 10 years after recovery has shown persistent negative effects on bone health (*J Adolesc Health*. 2019; 64:305).

A team of Australian researchers led by Jessica Mumford, MBBS followed the participants for 5 (28 girls) or 10 years (13 girls) using dual-energy x-ray absorptiometry (DXA) of the total body, lumbar spine, and proximal femur, and with peripheral quantitative computed tomography (pQCT) at the radius and tibia, along with serum biochemistry, physical measurements (height, weight, and body mass index), and patient questionnaires, including the *Eating Disorder Examination Questionnaire* and a customized questionnaire to assess menstrual, fracture, and exercise history. pQCT is a radiographic scanning modality that enables discrete analysis of the cortical and trabecular bone compartments

DXA body composition was done using retrospective data (obtained at the initial diagnosis of AN), and from the 5- and 10-year follow-up data. Baseline mean age was 14.6 years, mean body mass index, or BMI (kg/m²) was 16.6, and mean Fat % was 15.9%. At the follow-up appointments, mean BMI was 21.2 and Fat% was 30.5%. At baseline, the entire cohort's body weight, BMI, Fat%, were lower than those of controls. While there was no significant reduction in BMD, BMD in the upper arms, RFN, and spine were significantly reduced across the cohort.

BMI and body weight returned to healthy values in the 5- and 10-year cohorts; however, bone health appeared to be impaired compared to normal standards, suggesting that adolescent AN has an impact on long-term bone health. The prevalence of fractures in the study cohort was 36%, similar to the normal range of between 30% and 50% in the general female population. However, among the study participants one subset reported 4-6 fractures, an abnormally high number.

One unexpected finding, according to the authors, was that serum-insulin-like growth factor-1 (IGF-1) showed a strong correlation with BMD. IGF-1 is a circulating hormone that plays a critical role in childhood growth and is reported to have an anabolic effect on adults and is a primary mediator of the effects of growth hormone. These are important and concerning findings.

In an editorial in the same issue, Drs. Amy D. DiVasta and Catherine M. Gordon of Boston Children's Hospital and Harvard Medical School point out that this study's results once more remind clinicians of the importance of helping teenagers with eating disorders "get on the road to recovery just as soon as possible."

Measuring Recovery

A new questionnaire seeks to define recovery from an eating disorder among patients, family, and clinicians.

Defining recovery from an eating disorder is critical for clinical and research purposes. Dr. Rachel Bachner-Melman and colleagues at Ruppin Academic Center, Hebrew University of Jerusalem, and the University of Haifa argue for the importance of accepted outcome definitions; however, to arrive at consensus definitions, useful measures of potential recovery defining factors are needed.

Dr. Bachner-Melman and colleagues described the results of their study of 213 volunteers using a 28-item multidimensional questionnaire, the *Eating Disorders Recovery Endorsement Questionnaire*, or EDREQ, which covers the main features of recovery from an eating disorder (*Front Psychol.* 2018;9: article 2456). The EDREQ is a refinement of a recovery checklist proposed by Noordenbos and Sebring in 2006 (*Eat Disord.* 2006; 14:41), which was further refined in 2012 by Emanuelli et al. (*Eur Eat Disord Rev.* 2012; 20:363).

Most studies of recovery have used a medical model including behavioral and physical symptoms; some, focusing on patients with anorexia nervosa, have used body mass index alone. However, the authors' questionnaire sought to rate how important the participants thought each of 56 criteria was for recovery. The participants included 118 patients with a lifetime eating disorder diagnosis, 58 healthy family members of patients with eating disorders, and 37 eating disorder clinicians. All participants also completed the *ED-15* (<https://doi.org/10.1002/eat.22430>).

Four areas emerged

Exploratory factors analysis was used to examine the structure of the questionnaire, and 4 main factors were identified. The most popular was Absence of Symptomatic Behavior. Following this were Acceptance of Self and Body, Social and Emotional Connections, and Physical Health. According to the authors, the respondents thus reconfirmed the medical model that recovery is foremost an improvement in symptoms, while physical health is given less importance.

The authors noted that the original version of the EDREQ questionnaire contained 56 items, but using the 7 strongest items in each factor gives a measure only 28 items long. Despite this, the 28-item version still had strong psychometric characteristics. Periodically assessing recovery during therapy and follow-up with the EDREQ could provide a measure of recovery from an eating disorder for use in research studies, program outcome monitoring, and tracking the progress of therapy in individual patients. The authors noted that the study results were limited by the small sample size and that the eating disorder patient and clinic groups were overwhelmingly female and thus larger studies including more diverse groups are warranted.

Comparing Objective and Subjective Binge Eating

A combination of the two types of binge eating led to higher BMIs.

Episodes of objective binge eating (OBE) are among the core diagnostic criteria for bulimia nervosa and binge eating disorder, and can also occur in persons with anorexia nervosa (AN). (Coincidentally, the abbreviation OBE was coined in the EDE to signify "objective bulimic episode.") The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* defines OBE episodes as a sense of loss of control over eating in a specified time frame, during which the amount of food consumed is definitely larger than what most people would eat under similar circumstances. The definitely large amount of food is not only subject to clinical judgment but also excludes the other form of binge eating, subjective binge eating (SBE). SBE is also closely related to an OBE that is a common experience among many people with eating disorders and in the general population.

Dr. Natalie Li and colleagues at Western Sydney University, Penrith, New South Wales, and Macquarie

University, also in Sydney, recently compared the sociodemographic profiles and burden of OBE vs. SBE in a population-based survey of 3028 adult men and women (*BMJ Open*. 2019;9e024227; doi:10.1136/bmjopen-2018-024227). The Australian researchers sought to determine whether there are differences in sociodemographic profiles, such as age, gender, educational attainment, and levels of distress about binge eating episodes, overvaluation and health-related quality of life among three study groups. The groups included people with recurrent OBEs only, people with recurrent SBEs only, and those with a combination of the two binge-eating types. The authors also hypothesized that while there would be no difference in outcome with either type of binge-eating, those persons who had forms of combined SBE and OBE would have poorer outcomes than those with either binge-eating type alone.

The authors point out that the World Health Organization now recognizes the potential clinical significance of SBEs, and has removed the essential requirement for a binge to be large in the *International Classification Diseases (ICD)* for BEDs. In the proposed *ICD-11* criteria, a binge eating episode is defined as "a distinct period of time during which the individual experiences a subjective loss of control over eating, eating notably more or differently than usual, and feels unable to stop eating or limit the type or amount of food eaten." The study used data collected in 2016 in the Health Omnibus Survey, which involved face-to-face interviews conducted annually in South Australia.

The study results

Dr. Li and colleagues found significant similarities between the OBE and SBE groups across all measures, which supported previous research indicating that SBE is associated with similar health consequences and eating-related psychopathology as DSM-5 recognized OBEs.

One area the researchers assessed was the demographic profiles of the study groups. Participants from the SBE and OBE groups were similar in age, but those in the non-binge-eating group were an average 7 and 10 years older than those in the OBE and SBE groups, a finding that differed from earlier studies. Was this due to a smaller sample size in earlier studies or to the fact that binge eating may disproportionately affect younger persons? There was no marked effect by gender. Also, there were no significant differences by educational level attained, or quality of life.

As for body mass index, (BMI), no significant differences were shown between those in the OBE and SBE groups, which was surprising because the behaviors in the two groups differed based on the amount of food consumed. As expected, participants in the combined group were found to have significantly higher BMIs than participants who only reported one form of binge eating. People who endorsed both types of binge eating generally had the poorest outcomes in health-related measures such as BMI, quality of life, and overvaluation. The authors pondered whether those who reported both OBEs and SBEs (2.5% of the study participants) engaged in more frequent binge eating, a factor that warrants further study.

A final finding of note: gender differences in binge eating were not seen in this community sample. This argues that the typical gender disparity in those receiving eating disorders treatment is largely reflective of factors affecting case-finding and care seeking rather than true variation in prevalence.

Total Body Fat Percentage and Return of Menses in Anorexia Nervosa

A simple test was helpful for defining balanced return of menses.

Return of menses is commonly viewed as a sign of improving health for people with AN. A team of Israeli clinicians recently reported their results from a study examining whether use of total body fat percentage

(%TBF) estimated with bioimpedance analysis (BIA) could accurately predict return of menses. The study group included 62 female teens hospitalized with anorexia nervosa (*J Adolesc Health*. 2019; 64:454). Dr. Itay Tokatly Latzer and colleagues found the test to be a safe and accurate way to assess the return of balanced menstrual cycles.

All female adolescents hospitalized at the authors' medical center from 2012-2017 were evaluated in this longitudinal prospective study. The study participants were analyzed with anthropomorphic data, body fat measurements made with BIA, and hormonal tests, in addition to routine medical and gynecological tests. Sixty-two women presented with secondary amenorrhea, and 29 continued to be amenorrheic, while 42 had return of menses during hospitalization.

Characteristics seen at discharge

Certain characteristics emerged at discharge. For example, women who had return of regular menses regained significantly more weight and had higher body mass indexes, BMI standard deviation scores, and TBF% than did women who continued to be amenorrheic. Of these three methods, %TBF measured with BIA had the strongest relationship with return of menses, and 21.2% represented the best cutoff level.

Is Yoga Beneficial for Eating Disorders Patients?

A Norwegian study investigates a little-studied area.

Could regular sessions of yoga be beneficial to patients with eating disorders? Psychologist Kari Ebbesen Karlsen and collaborators at the University of Norway, Helgeland Hospital, and the Institute of Eating Disorders, all in Oslo, Norway, recently found that yoga sessions produced a positive effect on patients with bulimia nervosa (BN) and eating disorders not otherwise specified (EDNOS) (*Int J Yoga*. 2018; 11:168).

A small (but growing) literature has examined the effects of yoga and eating disorders, but this has largely focused on AN. Dr. Karlsen and colleagues report on the effects of yoga for patients with BN or EDNOS (now renamed in the *DSM-5* as Other Specified Feeding or Eating Disorder, or OSFED).

To test their theory, the authors recruited participants through ads at hospitals, and ads directed to physicians, students at the University of Oslo and to members of a Norwegian nonprofit organization for patients with eating disorders (www.iks.no). Participants were included if they were female, 18 years of age or older with a *DSM-IV* diagnosis of BN or EDNOS, and no prior experience with yoga. There were 38 volunteers.

At the beginning of the trial, post-test and at 6-month follow-up, all participants were administered the *Eating Disorder Examination* (EDE) Interview and *Eating Disorders Inventory-2* (EDI-2). Six participants were receiving psychotherapy during the study, and the authors stratified these patients into a control group (n=2) and a yoga intervention group (n=4).

The yoga sessions

Women in the yoga group received 90-minute sessions of Hatha yoga led by an experienced and dedicated yoga teacher (Dr.Karlsen) twice a week for 11 weeks. The class began with relaxation and awareness of the body, followed by different exercises, breathing exercises, concentration meditation, and a longer relation period at the end of the session. During the classes, participants learned about the philosophy of yoga, specifically that is a noncompetitive form of activity and that they needed to be aware of their physical and mental limits while performing the exercises.

Results

At baseline, there were no differences between the yoga intervention group and the control groups. The authors had predicted a high dropout rate, and at the end of the trial, this was 30% and rose to 37% at the 6-month follow-up. The intervention group showed significant reductions in the *EDE global score*, the *EDE restraint subscale*, and *eating concern* compared to the control group. These differences increased at the 6-month follow-up. There were, however, no differences between the two groups in the *EDI-2* score.

Why yoga might have positive effects for patients with eating disorders

Yoga's positive effect may be due to its effect on the patient's experience of his or her body, which may be especially effective for counteracting body dissatisfaction and subsequent development of an eating disorder. It is notable that positive effects persisted at 6-month follow-up. The authors suggest a study of the comparative effects of yoga and psychotherapy, as well as studying additive effects. The latter approach seems the most likely way forward, perhaps in relation to yoga but also a variety of different treatment strategies. (Also see "Questions and Answers" elsewhere in this issue.)

Two Web-based Programs Aim to Help Improve Attendance and to Aid Caregivers

Early results are mixed, but hopeful.

The world-wide Web has delivered information and education to homes and offices around the world. Two new Web-based programs in Germany and the United Kingdom have sought to improve follow-up by patients and to bring information and support to caregivers of and patients with anorexia nervosa (AN).

The MotivATE program

In the United Kingdom, up to a third of those referred for psychological treatment do not go beyond the initial diagnosis (*Psychiatr Bull.* 2018; 33:26). To study this further, a research team from Bournemouth University and the NHS Foundation Trust, Poole, UK, designed a fully automated, Web-based program, MotivATE, to increase treatment uptake.

The authors note many reasons a person might not follow an initial referral for treatment, including ambivalence about change, denial about the illness, perception of loss of control over life and choices, leading to a passive approach to treatment and recovery, and previous negative experiences in medical settings, among others. MotivATE was designed to address some of these patient barriers by using information, motivational tools, interactive activities, and life stories from others with eating disorders.

The design

Research was conducted using a two-arm, single-consent Zelen randomized controlled study. (A Zelen randomized consent design involves randomizing study participants prior to consent and then only collecting consent from those in the active condition.) All adult referrals to the Kimmeridge Court Eating Disorders service I Dorset UK, from October 24, 2016 to October 23, 2017 were identified for potential inclusion in the study. A total of 313 participants took part in the study; 156 (49.8%) were randomized to treatment as usual, and 157 (50.2%) were randomized to receive the additional offer to access the MotivATE program.

Results were mixed. Overall, uptake of assessments was low, and those who were randomized to MotivATE were not more likely to take the next step, going through with assessment. However, those who actually took the time to register online with MotivATE were about 9 times more likely to follow through. One possible interpretation is that such interventions could be helpful when used, but as currently used, people are not very likely to utilize them

An intervention designed to help caregivers

Caregivers of persons with AN can often be central to recovery, yet they often report high levels of distress, self-blame, and insufficient knowledge to help their loved ones. A group is currently recruiting caregivers for a Web-based program aimed at those who care for individuals with AN (*Internet Interventions*. 2019; 16:76).

Dr. Lucy Spencer and colleagues at King's College, London, and the London School of Economics, the Maudsley Foundation and the University of Dresden, Dresden, Germany, and the Institut für Biometrie und Klinische Forschung, Münster, Germany, have designed a multi-site, two-country, three-country randomized controlled trial comparing three web-based programs. The programs are: (1) We Can (with clinician messaging support), (2) therapist-guided We Can-Ind (with moderated carer chatroom support), and (3) peer-guided We Can-Forum (online forum support only). The researchers are still recruiting participants.

In each of the three conditions, given over 12 weeks, carers will have access to 8 online modules, and a new module will be released one week after completion of the previous module. Carers also will have access to a moderated online forum, where they can communicate with other participants during and after the intervention.

The study will recruit 303 family members and friends who care for adult or teens over 16 years of age with AN. One family member will be eligible to participate. When possible, individuals with AN cared for by these caregivers will also be recruited into the study to assess whether participation in We Can is associated with changes in eating disorder symptoms, or with the experience of receiving care. The participants will complete a number of self-report questionnaires before the intervention begins, then at 4 weeks, 3 months, and 6 months, and 12 months after randomization. Primary outcome variables include carer symptoms of anxiety and depression; secondary outcome variables will be measured in both carers and patients, and include eating disorder symptoms and symptoms of alcohol and drug use and quality of life, caregiving behavior.

These studies demonstrate some of the variety of ways in which technology might assist in supporting eating disorders treatment.

Matching Patients to the Most Appropriate and Cost-effective Care

An algorithm is designed to assess readiness for change.

Eating disorder treatment occurs in a variety of settings, and determining the appropriate level of care is a key clinical decision. Treatment guidelines and (in some health-care environments) insurer decisions play roles in making this determination. An alternative, algorithmic approach, The Short Treatment Allocation Tool for Eating Disorders (STATED), was recently tested in a study of 179 healthcare professionals (*J Eat Disord*. 2018; 6:45).

The STATED algorithm uses three patient dimensions, medical stability, symptom severity/life interference, and readiness/engagement, to assign the level of care for patients with eating disorders. *Medical stability*, defined as the patient's immediate risk, is the only information needed to determine if a patient should be hospitalized, while *Symptom severity* is used to determine whether a patient needs a higher degree of care, such as day, residential, or inpatient treatment, or outpatient treatment with inpatient support. *Readiness* is used to determine higher or lower treatment options and the focus of treatment. In fact, inclusion of readiness as a main component of the STATED algorithm was added after

20 years of research showed the importance of readiness for change and the role it plays in predicting improvement of symptoms.

Dr. Josie Geller and colleagues at the Eating Disorders Program, St. Paul's Hospital, and the University of British Columbia, Vancouver, noted that concordance between clinical decisions made and the results of the STATED was generally high, most notably for medical stability. The greatest discordance was between clinical decision-making and the STATED in regard to readiness for change. When a stringent coding system was used, high levels of inconsistency were detected in readiness; this affected 58% of patients and 66% of families. Possible explanations include a lack of understanding of the implications of low readiness, and the absence of validated measures of readiness such as lack of alternatives to action-oriented treatment, for example, the quality of life for individuals who are very ill. The authors reported that when a stringent coding system was used, high levels of inconsistency were detected in readiness; this affected 58% of patients and 66% of families. Possible explanations include a lack of understanding of the implications of low readiness, and the absence of validated measures of readiness such as lack of alternatives to action-oriented treatment, for example, the quality of life for individuals who are very ill.

Improving readiness

The authors argue that many patients and families need help in understanding that action-oriented treatment is not helpful when the patient and his or her family do not see themselves as having a problem (defined as low readiness). One potential step way to help clinicians improve assessment of patient readiness is training assessors to use a collaborative/motivational interviewing style. Another helpful step would be providing clear program guidelines with characteristics for each level of care. Finally, the Canadian researchers suggest that such guidelines could facilitate communication among patients, clinicians, and carers.

Questions and Answers: Yoga: Useful in Treatment for Eating Disorders?

Q. I've read many articles about the benefits of moderate and supervised exercise for patients with eating disorders. One of my patients, who has a history of bulimia nervosa (BN), has asked about joining a local yoga class that meets once a week. I haven't seen much in the literature on this topic. Can you help? (*SLW, Houston*)

A. It is true that little has been written about yoga and its effect on treatment of patients with eating disorders. In a recently published study (*Complement Ther Med.* 2019; 42:145), T. Ostermann and colleagues reported good results in their case report of a 38-year-old female patient with anorexia nervosa and several psychosomatic diagnoses in her medical history. The patient reported that yoga "recovered the soul contact" she had lost and as a result of yoga classes she found access to her body and it needs and also helped her deal with her traumatic experiences. She also had changes in her attitude in relation to her stomach during treatment for her anorexia. The authors feel the report confirms the positive effect yoga can have in the treatment of eating disorders. They also suggest that it is important to take into consideration the influence of an individual patient's co-morbidities, which usually occur with eating disorders.

An earlier study explored the effects of yoga sessions provided in a 16-bed residential eating disorders facility (*Eat Disord.* 2017; 25:37). In this study by C.R. Packanowski, of the University of Delaware et al., 20 of the 38 individuals in the study received 1 hour of yoga before dinner for 5 days. Therapeutic yoga classes were taught for 1 hour during the 5-day intervention period immediately before dinner by eating disorder sensitive, trained yoga teachers. The training for this sequence occurred at 3 levels: in person group instruction, a recorded version of selected postures for reference, and a typed sequence. Each

class began with a standing start, to meet clients at a heightened anxiety state and then began to reduce this state with succeeding postures. The postures varied, depending on the size of the class and emotional issues that arose during the class, for example.

Dr. Packanowski and colleagues reported that residential clients with eating disorders showed significantly lower negative affect before dinner when taking a yoga class designed to target eating disorder symptoms compared to a group that received usual care (n=18). The findings were particularly marked, according to the authors because the clients only participated in 5 one-hour yoga classes. Greater negative mood is related to poorer eating disorder symptoms at meals, as shown by Ranzenhofer et al. (*Appetite*. 2013;68:30), and Steinglass et al. (*Appetite*. 2010;55:244).

These results suggest that your patient might benefit from participation in a yoga class, although the yoga in these reports may not be representative of all yoga classes. More research will undoubtedly bring us more information on this promising addition to treatment for eating disorders. (Also see the article, "Is Yoga Beneficial for Eating Disorders Patients?" elsewhere in this issue.)

In the Next Issue

Highlights from the March 16-19, 2019 International Conference on Eating Disorders in New York City

Plus

- **Binge Eating in Adults with Type 1 Diabetes**
- **Disordered Eating, Intimate Partner Violence, and PTSD in Women Veterans**
- **Gender-related Patterns of Regulating Emotion**
- **Self-Compassion, Body Dissatisfaction, and Disordered Eating**
- **Is Feminism a Motivating Factor in Recovery?**

And much more...

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