

Plenary Session I
Thursday, April 28, 2011
10:45 – 12:45 p.m.

New Treatment Research on Eating Disorders

Moderators: Jacqueline C. Carter, PhD, CPsych, FAED, Toronto General Hospital/University of Toronto, Toronto, Ontario, Canada; Patricia Fallon, PhD, FAED, Private Practice/University of Washington, Seattle, Washington, USA

In this session, an international panel of leading treatment researchers will present new findings from recent treatment studies on eating disorders. The plenary will address the full spectrum of eating disorders including binge eating disorder, bulimia nervosa and anorexia nervosa.

Following the training, participants will be able to:

- Describe the impact of the combination of low energy density and CBT to CBT and general nutritional counseling on obese patients with Binge Eating Disorder.
- Describe the outcome of patients with anorexia nervosa or EDNOS with CBT-E. Participants will also be able to elucidate predictors of outcome with these patients.
- Describe the differences in long-term outcome between PPT and CBT with BN patients.
- Outline the three phases of UCAN therapy (Uniting Couples (in the treatment of) Anorexia Nervosa).

A Randomized Controlled Trial for Obesity and Binge Eating Disorder: Combining Low Energy Density Nutrition Counseling and Cognitive-Behavioral Therapy

Robin M. Masheb, PhD, Yale School of Medicine, New Haven, Connecticut, USA

The aim of this study was to develop a behavioral treatment for binge eating disorder (BED) that addresses the problem of obesity, as well as the behavioral and psychological aspects of the disorder. A novel dietary approach – lowering energy density – was investigated, and associations between dietary changes and weight loss were explored. To date, there have been no trials investigating dietary interventions for obese patients with BED. This seems to be a relevant area of investigation given that cognitive-behavioral therapy (CBT), the best-established treatment for CBT, as well as other treatments for BED, have demonstrated significant and clinically meaningful improvements for the behavioral and psychological aspects of the disorder, but not for the physical problem of obesity. One concern has been that dietary approaches to reduce energy intake that focus on limitations in portion sizes, food groups, or macronutrients would lead to hunger and disinhibition, making it difficult for patients to achieve or maintain reductions in binge eating, as well as weight loss. Lowering energy density is a promising dietary approach that allows individuals to eat a satisfying amount of food while reducing overall energy intake and maximizing satiety. Studies have shown the effectiveness of this approach for reducing energy intake in short-term laboratory studies and there is some limited evidence for producing weight loss in longer-term clinical trials. It was hypothesized that low energy density nutrition counseling, with a focus on increasing food volume and satiety, would remedy some of the problems associated with restrictive dieting that are particularly difficult for patients with BED. In an attempt to maintain the significant behavioral and psychological changes, low energy density nutrition counseling was combined with CBT. Thus, results of a RCT comparing CBT plus low Energy Density nutrition counseling (CBT+ED) to CBT plus General Nutrition counseling NOT related to lowering energy density or weight loss (CBT+GN) will be presented. Weight loss and BED related outcomes, and associations between dietary changes and weight loss, will be discussed.

Cognitive Behavior Therapy (CBT-E) for Anorexia Nervosa: A Three-Site Study

Christopher G. Fairburn, FMedSci, FRCPsych, FAED, Oxford University, Warneford Hospital, United Kingdom

There is no evidence-based treatment for adults with anorexia nervosa. In this presentation data from a three-site study (Oxford PIs Christopher Fairburn and Zafra Cooper; Leicester PI Robert Palmer; Verona PI Riccardo Dalle Grave) will be presented. 150 patients (BMI ≤ 17.5) with anorexia nervosa or eating disorder NOS were treated with enhanced cognitive behaviour therapy (CBT-E). They were then followed up for 60 weeks. Their outcome will be presented with respect to treatment completion and clinical state. In addition, predictors of outcome will be reported.

A Randomized Controlled Trial of Psychoanalytic Psychotherapy and Cognitive Behavioral Therapy for Bulimia Nervosa

Stig Poulsen, PhD, Department of Psychology, University of Copenhagen, Copenhagen, Denmark

Whereas cognitive behavior therapy (CBT; Fairburn, 2008) is well established as an effective treatment for bulimia nervosa (BN), longer-term psychoanalytic psychotherapy (PPT) has not previously been tested as a treatment for BN. In the present study, 70 consecutive patients diagnosed with BN were randomly allocated to either individual CBT for 20 weeks or weekly individual PPT for two years. CBT was conducted according to a treatment manual (Fairburn, 2008) and supervised by Christopher Fairburn. PPT was conducted according to a treatment manual developed for the present trial

and co-supervised by Susanne Lunn & Stig Poulsen. The primary outcome measure was the Eating Disorder Examination which was administered at intake, 5 months after intake (termination of CBT), and 24 months after intake (termination of PPT). Secondary outcome measures included EDE-Q, SCL-90-R, BDI, STAI, and IIP. In this presentation, the outcome of the trial at 5 and 24 months on the EDE and selected secondary outcome measures will be presented.

Uniting Couples in the Treatment of Anorexia Nervosa: (UCAN)

Cynthia M. Bulik, PhD, FAED, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

UCAN: Uniting Couples (in the treatment of) Anorexia Nervosa is a novel couple-based intervention for adults with anorexia nervosa (AN). UCAN acknowledges that AN occurs in an interpersonal context, both being affected by the person's social environment and impacting important relationships. Inspired by the potential efficacy of family-based treatment for youth with AN, and in the light of strong empirical support for couple-based treatments for other psychological and medical conditions in adults, we applied cognitive-behavioral couple therapy approaches to the treatment of the core psychopathology of AN, while addressing the unique stresses that AN places on intimate relationships. UCAN's three phases focus on: 1) understanding the couple's experience of AN, providing psychoeducation about AN and the recovery process, and teaching effective communication skills; 2) developing a couple-based approach for dealing with core AN pathology including eating, compensatory behaviors, weight restoration, body image, and sexuality; and 3) relapse prevention, recovery, and termination. Results of a pilot RCT comparing a multicomponent treatment including either UCAN or unstructured supportive couples therapy will be presented. Outcomes of core eating disorder pathology, relationship functioning, and observational coding of couple communication will be addressed.

Plenary Session II

Friday, April 29, 2011

10:30 – 12:30 p.m.

Is Food Rewarding for People with Eating Disorders? Clinical Insights from Brain Imaging Studies

Moderators: Laurel Mayer, MD, Columbia University Medical Center/New York State Psychiatric Institute, New York, NY, USA; Phillipa Hay, DPhil, University of Western Sydney, Sydney NSW Australia

In this session, a panel of leading clinical researchers with expertise in neuroimaging will present new findings from recent neuroimaging studies on eating disorders. Brain imaging technologies and the data they produce, can seem complex and remote from clinical application, and thus run the risk of seeming uninteresting, or worse irrelevant, to the clinician. To this end, each speaker in this symposium is both an imaging expert and a clinician, and will discuss the relevance of their findings to the conference audience. The plenary will focus on elements of reward circuitry across the full spectrum of eating and weight disorders: anorexia nervosa, bulimia nervosa and obesity.

Following the training, participants will be able to:

- Participants will be able to describe the major regions that comprise the reward pathways in the brain, and articulate how the study of reward neurocircuitry is relevant to the study of eating and weight disorders.
- Participants will be able to compare and contrast the functioning of reward neurocircuitry in anorexia nervosa, bulimia nervosa and obesity, and describe how dysregulation in these circuits may contribute to the persistence of these disorders.
- Participants will be able to discuss the value and limitations of sophisticated brain imaging techniques in the elucidation of the neurocircuitry underlying eating and weight disorders.

Reward Processing in Anorexia Nervosa and the Problem with Refeeding

Guido K.W. Frank, MD, Departments of Psychiatry and Neuroscience, Developmental Brain Research Program, University of Colorado Denver, Aurora, CO, USA

Anorexia Nervosa (AN) is a highly deadly disorder and affected individuals commonly have great difficulties engaging in re-feeding and letting go of AN behavior. We have recently found that AN individuals are behaviorally highly sensitive to punishment and reward, and we wanted to investigate whether we could tie AN behavior to brain neurobiology, specifically brain dopamine (DA) function. Brain DA is important for learning, it responds to novelty and unexpectedness and drives motivated behaviors. Thus, altered DA function could contribute to difficulties individuals with AN have in the treatment process. We studied women with restricting type AN in a brain imaging paradigm that involves the ingestion of taste stimuli, and found that the AN group was highly sensitive to unexpected receipt or omission of sweet taste stimuli compared to controls in brain regions that code for DA activation. The application of a computational algorithm on the brain imaging data supported the notion of hypersensitive DA function in AN. Further, sensitivity to punishment explained DA hypersensitivity in the AN group compared to controls. Thus, these results suggest DA hypersensitivity in AN that is related to heightened sensitivity to punishment, and both factors could provide new angles for treatment.

Bulimia Nervosa and Addictions: Insights from PET Imaging Studies

Allegra Broft, MD, Clinical Psychiatry, Columbia University Medical Center, New York, NY, USA

Clinically, bulimia nervosa (BN) and addictive disorders share some overlapping features. A link between these two disorders has been supported by some, albeit limited, data. The purpose of the study to be presented was to utilize PET imaging, in translation from previous studies in addictions research, to study dopamine (DA) systems in BN. Patients with BN (n=16) and control subjects (n=17) underwent 2 PET scans with the tracer [¹¹C]raclopride, before and after pharmacological “challenge” with methylphenidate, which allows for the measurement of striatal DA release. Measurement of dopamine type 2 (D2) receptor binding potential (BP), a measure of D2 receptor density, was also obtained. Primary outcome measures were striatal DA release to psychostimulant challenge (measured as the percent change in BP between scans 1 and 2), and striatal D2 receptor BP (measured as the baseline BP measured during scan 1). These measures have previously been shown to be decreased in studies of patients with addictive disorders, and alterations in these levels have been associated with addictive behavior. Results indicated a trend towards blunted DA release in the striatum of patients with BN, and significant blunting of DA release in response to pharmacological challenge with methylphenidate, in associative and sensorimotor portions of the putamen. Results also indicate a trend towards decreased D2 receptor BP in some striatal subregions. These results are consistent with results seen in addictive disorders. Future studies are warranted to replicate these findings, and to draw functional conclusions about these neurobiological findings.

Functional Neuroimaging Studies of Food Motivation in Obesity: Implications for Weight Control

Cary R. Savage, PhD, Center for Health Behavior Neuroscience, University of Kansas Medical Center, Kansas City, KS, USA

Obesity arises from chronic imbalances between energy intake and expenditure. Health-related decisions impacting energy balance are influenced by a convergence of processes in the brain, as individuals weigh reward intensity and immediacy. Functional magnetic resonance imaging (fMRI) studies are identifying brain mechanisms underlying health behaviors. This presentation will summarize findings from fMRI studies of food motivation in obese and healthy weight groups and present results from a new study examining brain function predictors of weight loss from a longitudinal diet study. The food motivation study found hyperactivation among obese in cortical regions rich in dopaminergic projections from ventral tegmental reward circuits, especially the medial prefrontal cortex and anterior cingulate cortex. In the longitudinal weight loss study, participants were scanned with a food motivation paradigm before and after a 3-month diet intervention. Obese participants were divided into successful and unsuccessful groups based on outcome at 3 months. Preliminary results from the baseline scanning session indicate that unsuccessful dieters showed greater baseline activation in orbitofrontal cortex than successful dieters. These findings add to growing evidence of altered sensitivity to food reward in obese groups and suggest that increased reward-related brain activation may be associated with difficulty losing weight.

Bringing It All Together: The Reward for the Audience

Discussant: Ken Nunn, FRCPsych, Royal Alexandra Hospital for Children, Parramatta, NSW Australia

What do we really mean by reward and what is the reward system in the brain?

The discussant response will aim to briefly contextualise the presentations within modern neuroscience, as we understand them, in plain, non-technical language and in relation to modern clinical practice.

The role of dopamine as the chemical of reward will be outlined with the actual structures of the brain involved - striatum, ventral tegmentum, ventral prefrontal cortex and nucleus accumbens - in non-jargon terms and with pictures.

A summary of what the presenters are arguing for in the understanding of anorexia, obesity and bulimia will be given with similarities and differences between speakers highlighted.

Plenary Session III

Friday, April 29, 2011

2:00 – 4:00 p.m.

“Growing Up”: An Update on Adolescent Eating and Weight Disorders

Moderators: Nadia Micali, MD, MRCPsych, PhD, Institute of Psychiatry, King’s College London, London, UK; Lucy Serpell, PhD, DCLinPsy, University College London and Eating Disorders Service, North East London NHS Foundation Trust, London, UK

Adolescence is a critical period as it represents the peak age of onset for disordered eating. This plenary provides a unique perspective on risk factors, long-term outcomes and treatment of disordered eating across the weight spectrum in

adolescence. New perspectives and research on adolescent disordered eating and weight will be presented.

This session will be of interest both to researchers and clinicians across disciplines, integrating epidemiological, prevention and treatment research with a focus on clinical perspectives and implications.

Four multidisciplinary speakers from across the world will share their more recent research efforts with the audience as well as distil the current evidence to cover both research and clinical aspects of their specific topic.

The first part of the session will focus on risk factors, prevalence and trajectories of adolescent disordered eating: the first presentation will be on risk factors for adolescent weight and shape concern. The second will focus on clarifying longitudinal trajectories of eating and weight disorders across adolescence.

The second part of the session will move towards highlighting prevention and treatment efforts for disordered eating, with a presentation reviewing the evidence for prevention programs for adolescent eating and weight disorders and pointing towards newly developed programs. The last presentation will provide new evidence on care pathways and treatment provisions for adolescent eating disorders.

Following the training, participants will be able to:

- Describe risk factors and summarize what is known about the epidemiology of adolescent disordered eating and weight.
- Explain and illustrate the evidence for prevention programs for adolescent weight disorders.
- Demonstrate knowledge of new treatments for adolescent ED and possible care pathways for adolescent AN.

Risk Factors for Adolescent Weight and Shape Concern: The Effects of Genes and Environment

Tracey Wade, BSc, M. CPsych, PhD, FAED, Flinders University, Adelaide, Australia

An overview of the evidence suggests that weight concern is one of the strongest risk factors for the development of eating disorders, along with negative affect. Our understanding of risk factors for this concern about weight and shape is limited, and a better understanding is required in order to usefully inform the content of prevention approaches. This presentation will first examine the definition of weight and shape concern and its inclusion of items related to the DSM criteria of “undue influence of weight and shape”, and differentiate it from body dissatisfaction. Evidence will be reviewed showing that in terms of shared genetic risk, undue influence and concern appear more closely related than body dissatisfaction, while body mass index and body dissatisfaction appeared to share common sources of risk. The trajectory of growth of weight and shape concern in an Australian female adolescent twin sample over three waves of data collection will be examined, along with its relation to the growth in disordered eating, where the adolescents were a mean age of 14 years at Wave 1 and 17 years at Wave 3. Finally, the Wave 1 predictors of weight and shape concern at Waves 2 and 3 are examined, controlling for Wave 1 weight and shape concern. Predictors that will be examined include environmental events, temperament of the parent and twin, attitudes toward weight and appearance, and family factors. The implications for the development effective prevention packages will be examined.

Eating Disorders in Children, Adolescents and Young Adults: One Size Does Not Fit All. Age-Related Differences in Definitions and Risk Factors

Alison Field, ScD, FAED, Harvard Medical School, Boston, US

One of the challenges to preventing eating disorders is identifying true risk factors. Eating disorders are relatively rare, so large general population samples must be followed over time in order to determine risk factors or one must rely on equally accurate recall between treatment-seeking cases and controls. An additional, but less discussed, challenge is that risk factors and the presentation of disorders may vary by age or developmental stage. In this presentation, data from 15-years of following 7,843 males and 9,039 females since they were 9-15 years of age will be presented. Data come from the Growing Up Today Study (GUTS), a prospective cohort study of youth and young adults throughout the United States who were assessed up to nine times over a 15-year period. Examples of developmental and gender differences in risk factors will be presented, as will preliminary results suggesting that the presentation of eating disorders is different between preadolescents and older adolescents and young adults. Implications of these observed differences will be discussed.

Preventing Eating and Weight-Related Problems in Adolescents: Have Things Gotten Better or Worse in The Past Decade? And Where Do We Go From Here?

Dianne Neumark-Sztainer, MPH, PhD, RD, FAED, University of Minnesota, Minneapolis, US

Over the past decade there has been increased attention directed toward obesity in both the scientific and lay media. During this time period, there has also been a counter-movement within the eating disorder field, which has aimed to help young people feel better about their bodies and prevent unhealthy weight control practices and other disordered eating behaviors. How have things changed in the past decade among young people? Has the situation gotten better or worse?

The answers to these questions have important implications for understanding what has happened and for informing an agenda moving forward. In this presentation, data on 11-year secular trends in weight status and various weight-related attitudes and behaviors will be presented. Data are drawn from the Project EAT studies in 1999 (N=3,072) and 2010 (N=2,793) in which middle school and high school students participated. Adolescents had their height and weight assessed and completed surveys on weight-related variables including body image, weight perceptions, weight control behaviors, binge eating, and self-weighing. An initial look at the data suggests some positive trends, particularly for adolescent girls. The data also suggest areas where further work is needed to prevent and reduce the prevalence of harmful weight-related outcomes. Findings on these trends will be presented and implications for preventing a broad array of eating and weight-related problems in adolescents will be discussed.

Evidence Based Treatments or Evidence Based Services: Have We Lost Sight of the Broader Picture?

Ivan Eisler, PhD, CPsychol, AcSS, King's College London, London, UK

While there has been considerable amount of research in recent years evaluating the efficacy of different treatments for eating disorders very little research exists examining the context in which treatments are delivered and what impact this might have on who receives the treatments and its outcome. This paper will present the results of a health service evaluation study of the impact of the availability of specialist outpatient services on the provision of treatment child and adolescent eating disorders.

The study collected information on all cases of adolescent ED seen over a 2 year period in services beyond primary care across Greater London. A total of 42 services took part in the study identifying 479 cases of whom 378 met the study inclusion criteria. Three main care pathways were identified depending on the whether the initial referral was made to 1) a generic CAMHS team, 2) a CAMHS team that included a "mini-specialist ED team" or 3) a specialist out-patient child and adolescent ED service. The study found that areas of London with access to specialist outpatient services had significantly higher rates of ED referrals, lower rates of admissions to hospital and offered considerably higher continuity of care suggesting that investing in specialist outpatient services is likely to lead to better identification of those requiring treatment, better treatment outcomes, while at the same time reducing health service costs.

The paper will argue that while knowing which treatments are effective is undoubtedly important, the overall benefits derived from treatment may be determined as much or more by the service context in which the treatments are provided and that future studies (including dissemination studies) need to look at factors such as accessibility, referrer and patient/family confidence in services, the impact of continuity of care as well as issues of health economic costs for different service.

Plenary Session IV

Saturday, April 30, 2011

1:30 – 3:30 p.m.

Public Policy Approaches to Eating Disorder and Obesity Prevention: Global Perspectives

Moderators: S. Bryn Austin, ScD, FAED, Children's Hospital, Boston, MA, USA; Debra Franko, PhD, FAED, Northeastern University, Boston, MA, USA

This plenary is designed to introduce the audience to the array of public policy initiatives emerging globally to prevent eating disorders and obesity. Through the public policy arena, there is potential to achieve high impact changes that can affect whole communities, states, or even countries. Presenters will describe specific initiatives being developed and implemented in a range of countries, and offer the audience guidance on how to bring their expertise in eating disorders and obesity to bear in the public policy arena to shape the future of prevention efforts.

Following the training, participants will be able to:

- Demonstrate knowledge of the array of public policy initiatives currently emerging across the globe in an effort to prevent eating disorders.
- Describe the specific strategies used in Australia, the U.S., and Austria, in working with government to enact legislation and develop policies toward the prevention of eating disorders and obesity.
- Better understand how to bring their expertise in eating disorders and obesity to the public policy arena in order to influence prevention efforts.

Public Policy and the Prevention of Body Image and Eating Disorders: Australian Initiatives

Susan J. Paxton, PhD, FAED, La Trobe University, Victoria, Australia

This presentation will outline fundamental concepts related to the public policy field and means of achieving public policy action. The advantages of multi-level public policy action will be discussed. Within Australia, public policy action has been initiated in the state of Victoria and at a national government level. The use of voluntary media and fashion industry

codes of conduct and industry engagement, social marketing strategies including billboard and web-based approaches, school-based policy and curricula approaches, and community projects will be described along with their benefits and shortcomings. It will be concluded that ongoing and concerted public policy action is the key to prevention of body image and eating disorders on community and population scales.

Legal Approaches to Obesity Prevention in the United States

Jennifer Pomeranz, JD, MPH, Yale University, New Haven, CT, USA

The retail food environment fosters the purchase of nutrient poor, calorie dense food and beverages (collectively food). Many of the most unhealthy foods are placed in locations or on shelves that are unavoidable or likely to induce impulse purchases or purchase requests from children. Unhealthy food products are also relatively lower in price and come in packages bearing a considerable number of health and nutrition claims. This presentation will review legal solutions to rectify these aspects of the retail food environment at the federal, state and local levels. The presentation will conclude by drawing analogies that can be used to regulate over-the-counter products abused by people for purposes of weight control.

Eating Disorders Prevention: Public Policy Initiatives in Vienna

Beate Wimmer-Puchinger, PhD, Municipal Department, Public Health Services, Vienna, Austria

Eating Disorders are a serious and widespread public health concern. Evidence suggests that societal emphasis on thinness, which may be reinforced and driven by various industries and markets, may increase risk for eating disorders. Additionally, the health burden and economic consequences of eating-related disorders are substantial. This complex problem is beginning to be addressed by focusing on public health and economic policy initiatives. Based on the women's health policy of the City of Vienna, Austria, we have developed measures toward the prevention of eating disorders targeted toward three levels: (1) Individual help for patients, family members and friends, including a toll-free anonymous, counselling hotline staffed by eating disorder experts; (2) Community focus by providing educational workshops for school and health systems; and (3) Societal initiatives, including agreements with the Chamber of Commerce, Austrian Advertising Board, Chamber of Medicine, model agencies, and representatives from the fashion industry as to what constitutes a healthy body image. The presentation will outline further details and results of action plans and measurements.

Public Policy Approaches for Eating Disorders Prevention on the Federal Level in the United States

Gwendolyn P. Keita, PhD, American Psychological Association, Washington, DC

Eating disorders and unhealthy eating and lifestyle behaviors affect not only an individual and their family but they also have devastating consequences for society as a whole. The Public Interest Directorate of the American Psychological Association (APA) applies psychology to the fundamental problems of human welfare and the promotion of equitable and just treatment of all segments of society through education, training, and public policy. Among the priorities of the APA Public Interest Directorate are initiatives to address the promotion of healthy lifestyles and the prevention of eating disorders and obesity. This presentation will highlight some of APA's relevant programmatic activities, including the work of the Task Force on the Sexualization of Girls and the Healthy Media for Youth Act which grew out of that report. In addition, several federal policy initiatives that address eating disorders, obesity, and healthy lifestyles will be discussed.