NEW HYPOTHESES

The interface between the eating disorders and obesity fields: Moving toward a model of shared knowledge and collaboration

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ABSTRACT. *As more attention is being directed toward obesity, important questions facing the eating disorders field include: How should the eating disorders field deal with this increased focus on obesity? What are some models for work between the eating disorders and obesity fields? This paper briefly describes four potential models of interaction between the fields and possible scenarios demonstrating each model. The first model is one in which the obesity field overpowers the eating disorders field. In the second model, the two fields have minimal opportunities for interaction and for cross-fertilization of ideas. In the third model, there is antagonism and a lack of respect for the other field. The fourth, and recommended model, is one in which the two fields share knowledge to enhance the difficult work of preventing and treating both eating disorders and obesity. Examples of opportunities for shared knowledge and collaboration, and benefits of this fourth model for both the eating disorders and obesity fields, are discussed.*
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INTRODUCTION

It is difficult to pick up a popular magazine or newspaper and not find an article about the high prevalence of obesity, the dangers of obesity, or how to lose weight. Within scientific circles, there is also a lot of attention being paid to the study of obesity, including its prevalence, etiology, treatment, and prevention. There are numerous grant mechanisms aimed at funding research studies to learn more about obesity and how to reduce its impact on the public health of the population. Important questions that arise are: How should the eating disorders field deal with this increased focus on obesity? And what are some models for work between the eating disorders and obesity fields? This paper briefly describes four potential models of interaction between the fields with a recommendation for the fourth model, in which the two fields share knowledge to enhance the difficult work of preventing and treating both eating disorders and obesity.

MODEL 1: THE OBESITY FIELD OVERPOWERS THE EATING DISORDERS FIELD

The first possible model for interaction between the eating disorders and obesity fields is one in which the obesity field overpowers the eating disorders field, with an imbalance of attention and resources going to obesity instead of eating disorders. Given the high prevalence of obesity (1) and the large amount of interest in obesity within both popular and scientific circles, this certainly is a reasonable fear among those concerned about eating disorders.

One way that this scenario, in which the obesity field overpowers the eating disorders field, could or already has come into play, involves the movement of eating disorders researchers and practitioners into the obesity field. Eating disorders researchers and practitioners may choose to move more of their work into the field of obesity in order to address legitimate concerns about the physical health consequences associated with obesity (2) and the

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psychosocial consequences associated with weight bias (3). Eating disorders professionals may also choose to focus more on obesity because of increased funds in this area. Given that increased funding is being directed toward obesity-related studies, and the difficulties often encountered in obtaining adequate funds for eating disorders research, this phenomenon in clearly understandable.

This scenario, in which obesity gets more attention than eating disorders, also comes into play at professional conferences. There are increased discussions about obesity at eating disorder conferences and at numerous other conferences on child and adolescent health and behavioral health. Although this could be viewed as an opportunity for shared learning, it does not seem as though eating disorders are being discussed nearly as much at meetings addressing obesity. Furthermore, sometimes obesity is discussed at professional meetings (even eating disorders meetings) without addressing factors such as weight stigmatization, body image concerns, and unhealthy dieting behaviors or providing opportunities for discussion of these shared risk factors.

Finally, within the domain of public health, less attention is given, and importance attributed, to risk factors for eating disorders than obesity. For example, although there may be risks associated with the use of body mass index report cards being sent home to parents of overweight school children such as parental promotion of dieting, increased stigmatization of obesity, and the onset of unhealthy weight control behaviors among children (4-9), these risks may be dismissed as "worth taking" given the greater risks and high prevalence of childhood obesity. For example, at a recent scientific meeting in which this issue was discussed at length, individuals from the obesity field commented that given major concerns about obesity... "We need to stop sugarcoating the issue and worrying about hurting people's feelings," and "We know that that a few children may go on to develop eating disorders, but this may be the sacrifice we need to make". Whether or nor a child could go on to develop an eating disorder because of these screenings is debatable; however, if weighing and parental notification are not done in a sensitive manner, these procedures certainly could be problematic for a child with other risk factors for eating disorders.

This first model, in which the obesity field overpowers, or metaphorically, "swallows up" the eating disorders field, is clearly a model that would be detrimental to the field of eating disorders. Interestingly, reactions by researchers in the eating disorders field to this first model have ranged from one extreme to another. One reaction was, "It is highly unlikely that the obesity field will 'swallow' up eating disorders; each clearly has an identity of its own." In contrast, another reaction was, "Taking steps to avoid being overpowered might be a few years too late and it might now be more a matter of how best to redress the imbalance." Regardless of where exactly one stands, given the large amount of attention being directed toward obesity, we need to make sure that problems such as body dissatisfaction, unhealthy weight control practices, and eating disorders do not get "swept under the rug" and continue to receive adequate attention, funds, and other necessary resources.

MODEL 2: MINIMAL INTERACTION AND SHARING BETWEEN THE FIELDS

The second model of a possible relationship between the eating disorders and obesity fields, is one in which there is minimal interaction between the two fields. In this model, both fields operate independently of each other with little opportunity for sharing and cross-fertilization of ideas.

How might this model come into play? Eating disorders and obesity conferences tend to be separate and conference attendees tend to be from their respective fields. Journals also tend to be separate entities and individuals tend to read journals from their own fields. Furthermore, professionals from within the fields of eating disorders and obesity tend to submit articles to journals that are more likely to publish viewpoints that reinforce the mainstream ideas within the field. Finally, professionals tend to work with others that have similar interests and tend to reinforce similar points of view regarding the importance of different weight-related problems and how best to treat or prevent them. For example, health care providers and researchers working toward the prevention of obesity may have little contact with professionals concerned about the high prevalence of body dissatisfaction and its negative effects. Thus, a health care provider trying to help an adolescent who is overweight may not be familiar with research findings showing that body dissatisfaction strongly predicts weight gain over time among overweight adolescent girls (10), and may not work toward decreasing body dissatisfaction.

This situation, in which the fields of eating disorders and obesity have minimal opportunities for interaction, leads to a perpetuation of

existing ideas and limits the opportunity for expansion of ideas. Given the wealth of knowledge within both fields and the need for creative problem solving in order to develop more effective interventions, this second model is clearly undesirable.

MODEL 3: ANTAGONISM BETWEEN THE FIELDS

The third possible model of interaction between the eating disorders and obesity fields is one in which each field plays down the importance of the other field and there may even be attacks on each other. Some comments made by those in the eating disorders field that illustrate this point include the following: "The risks of obesity are exaggerated." "Fatness doesn't matter – only fitness does." Or one that was stated at a meeting on eating disorders: "Our attention is being diverted away from terrorism to obesity." Comments that have been made by professionals in the obesity field include: "Body dissatisfaction isn't a real health problem. Most women would like to be a little prettier." "The prevalence of eating disorders is so low. It isn't really a problem of public health concern."

These types of comments may be made because of concerns that adequate resources and attention are not being devoted to either eating disorders or obesity. Eating disorders professionals may feel threatened and even angry at the obesity field for sending out messages about obesity that may be dangerous for groups already at high risk for body dissatisfaction, unhealthy weight preoccupation, and eating disorders. For example, a therapist working hard with eating disorder patients to avoid obsessing about weight or caloric content of foods, may feel frustrated when faced with public health obesity prevention campaigns that may increase focus on these topics. Obesity professionals look at the high and continually increasing numbers of overweight individuals in our society, compare the numbers with the numbers of individuals with clinical eating disorders, and based upon the math conclude that the problem of eating disorders is miniscule in light of the huge problem of obesity. This last point illustrates how important it is for eating disorders professionals to speak out about the public health burden of the spectrum of disordered eating behaviors, rather than only focusing on clinical eating disorders.

Clearly, antagonism between the fields of eating disorders and obesity will not serve either field well. It is imperative that both fields to seek out opportunities for building bridges, rather then tearing them down. Hence the fourth model describes the possibilities for building such bridges.

MODEL 4: COMING TOGETHER TO LEARN FROM EACH OTHER: A MODEL OF SHARING AND COLLABORATION BETWEEN THE EATING DISORDERS AND OBESITY FIELDS

The fourth model for interaction between the eating disorders and obesity fields is a model in which the two fields come together to learn from, and enhance, each other (11-20). Although a model of shared learning and collaboration presents a number of challenges, the advantages of such an approach make this model the most desirable one. In working toward such an approach, it may be worthwhile to keep in mind some of the similarities (albeit to different degrees) between the eating disorders and obesity fields, including a shared interest in health promotion; concerns about both physical and mental health outcomes; a tight-funding arena for research, treatment, and prevention activities; and a shared view on the importance of the role of the socio-environmental factors as contributors to both eating disorders and obesity. By focusing on the similarities, rather than on the differences, we may be more likely to bridge our differences and work together for the benefit of both fields. Advantages of this fourth model and examples of steps that are being taken toward a more collaborative model are discussed below.

A collaborative relationship between the eating disorders and obesity fields has the potential to enhance opportunities for the passage of knowledge from one field to the other. In this type of relationship, eating disorder professionals would be more open to learning about the real health risks of obesity (2, 21, 22) and obesity professionals would be more concerned about the fact that half of teenage girls and a fourth of teenage boys are dissatisfied with their bodies (23). Interventions that are sensitive to an array of weight-related outcomes could be more easily developed. For example, parenting interventions within physician's offices could include tips on how to promote healthy eating and physical activity behaviors and a positive body image in their children as they go through adolescence, in order to prevent both obesity and eating disorders (24). Even if interventions were more focused on one problem (e.g., obesity), their evaluations would include an assessment of "no harm done" regarding problems of con-

cern to the other field (e.g., increased body dissatisfaction) (25, 26). Utilizing this fourth model, the eating disorders field could take advantage of the strong interest in obesity to push ahead with an eating disorders prevention "agenda." For example, when a reporter calls to discuss obesity, one might talk about the importance of individuals finding a weight that is healthy for them (but might differ to that of others), strategies for improving dietary intake (without dieting), and the importance of having a positive body image (since feeling uncomfortable with one's body may lead to lower levels of physical activity). Or if one is invited to give a talk to a group of parents or professionals on weight management, one could talk about the importance of striving for balance within a society that places individuals at risk for both obesity and eating disorders.

Fortunately, there appears to be increasing evidence of moving toward this model of collaborative interactions between the fields of eating disorders and obesity. In large part, this stems from the growing interest in binge eating disorder and its co-occurrence with obesity (27, 28). The link between disordered eating behaviors and obesity in binge eating disorder has necessitated the linking of professionals from the eating disorders and obesity fields, discussions of binge eating disorder at both eating disorders and obesity meetings, research exploring the etiology and treatment of obesity in conjunction with binge eating disorder, the linking of treatment strategies, and the sharing of treatment facilities. For example, eating disorder therapists within eating disorder treatment facilities may treat overweight patients with binge eating disorder more often now than was done in the past.

There are several other examples of crossing fields, sharing knowledge, and more collaborative work that offer promise for this fourth model. Although, for the most part, as previously stated, journals dealing with obesity and eating disorders tend to be separate journals, there is at least one journal that explicitly crosses the fields. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity* (Editrice Kurtis s.r.l., Milan, Italy) is a scientific journal whose main purpose is "to create an international forum devoted to the several sectors of eating disorders and obesity and the significant relation between them". Furthermore, there certainly are articles in eating disorder journals that deal with obesity-related topics and articles in obesity journals that deal with topics of relevance to eating disorders. For example, Puhl and Latner have recently compiled a supplement to the journal *Obesity* that focuses on weight stigmatization (29). The supplement is called "Weight Bias: New Science on a Significant Social Problem", and includes studies examining the nature and extent of weight stigmatization and its consequences for children, adults, and bariatric surgery candidates. The supplement also highlights research on measurement design and methodological challenges in assessment of stigma, and examines policy implications for weight bias. Thus, they have made use of a vehicle that reaches a large audience of researchers and practitioners interested in obesity to expose them to the research on weight stigmatization and its consequences, and ideas for decreasing weight teasing and other forms of weight stigmatization. Indeed, the topic of weight stigmatization is a topic of great relevance to both the obesity and the eating disorders fields and, thus, an excellent place for the sharing of knowledge and collaboration.

Additonally, Puhl, Schwartz, Brownell and other members of their group at the Rudd Center for Food Policy and Obesity have a website that includes information on both weight bias and obesity prevention (30). With regard to weight bias, the website includes an online course entitled, "Weight bias in clinical settings: improving health care delivery for obese patients," an online toolkit on weight bias for health care providers and parents, and a weight bias policy brief for policy makes and legislators.

The American Psychological Association (APA) is also taking steps to work toward the prevention of obesity and disordered eating and has a website that includes relevant resources and information about APA's work in this area (31). APA's Public Interest Government Relations Office supports initiatives to encourage positive body image, healthy eating habits, appropriate levels of physical activity, and improved self-esteem. In its work to promote the joint prevention of obesity and disordered eating, this office has identified the following six key areas to address with Congress and federal agencies: poor nutrition and physical inactivity; body dissatisfaction; teasing and weight stigmatization; targeted marketing and advertising to young children, home environment; and cultural and socioeconomic factors.

A very exciting development toward the sharing of ideas and collaboration between the fields was a meeting in 2007 meeting in Calgary, Canada, entitled, "Obesity and Eating Disorders: Seeking Common Ground to Promote Health: A National Meeting of Researchers, Practitioners and Policy Makers." The meeting brought together professionals from both fields to hear talks about obesity, eating disorders, and their interface, and to engage in

a full-day discussion about future directions and challenges to be overcome. A description of the meeting and a comprehensive document can be found on their website (32). The website also provides a video that graphically depicts the complex etiology and interplay of eating disorders and obesity, which can be used to facilitate discussions about the interface between the fields.

In order to guide the development of interventions aimed at preventing and treating a broad range of weight-related problems, research examining the overlapping of these problems and their shared risk and protective factors is needed. Our research team has studied patterns of co-occurrence, cross-over, and shared risk factors for obesity and disordered eating behaviors, such as unhealthy weight control behaviors and binge eating, in Project EAT, a large population-based study of adolescents. Findings have indicated that weight-related problems tend to overlap (e.g., overweight adolescents engage in disordered eating behaviors) and cross-over (e.g., adolescents using unhealthy weight control behaviors gain excessive amounts of weight over time) (23, 33). Similarly, Fairburn and colleagues found that individuals can cross over from one condition to another. For example, in a community-based sample of women, a much higher percentage of women with bulimia nervosa had been overweight as children (40%) as compared to health and psychiatric controls (15% and 13%, respectively) (34). Using data from Project EAT, we conducted a five-year longitudinal examination of shared risk and protective factors for being overweight and engaging in disordered eating behaviors (35). We found that weight-specific variables from within socio-environmental, personal, and behavioral domains were strong predictors of overweight status and disordered eating behaviors. Specifically, weight-teasing by family, weight concerns, dieting, and unhealthy weight control behaviors, consistently predicted the three outcomes of overweight status, binge eating, and extreme weight control behaviors. Although more work is needed to explore shared risk and protective factors, these types of findings are beginning to inform interventions aimed at preventing a broad spectrum of weight-related problems.

One of the most exciting, important, and challenging areas for linking the eating disorders and obesity fields regards prevention. Ideally, we want to be able to develop interventions that are effective in preventing a broad spectrum of weight-related interventions. Austin and her colleagues have linked the fields by examining the impact of obesity prevention programs on disordered eating behaviors (25, 36). Their findings suggest that obesity prevention interventions that focus on behaviors, rather than on weight per se, may have benefits for preventing the onset of disordered eating behaviors, at least in girls. It would be of interest to similarly examine the effects of eating disorder prevention programs on weight gain. Given that dieting has been identified as a risk factor for excessive weight gain (32, 37-39), eating disorder prevention programs that are truly effective in reducing the prevalence of unhealthy dieting behaviors, might be expected to also be effective in preventing the onset of obesity. In order to achieve and be able to detect such an effect, interventions would have to be intense enough to be effective, comprehensive enough to address alternative behaviors to dieting, and have long-term evaluations to detect changes in weight status over time.

Our research team has been involved in the implementation of several school-based interventions aimed at preventing risk factors for a broad range of weight-related problems (40-44). For example, the Very Important Kids (V.I.K.) program aimed to decrease teasing, including weight-based teasing, among 4th-6th grade students in elementary schools (41). In a pilot study, V.I.K. was successful in significantly decreasing overall teasing in the intervention school, as compared to the control school, and there was a trend (albeit not statistically significant) toward less weight-based teasing. New Moves, is funded as an obesity prevention intervention and targets high school girls at risk for being overweight because of sedentary lifestyles (42). New Moves targets risk factors for obesity and eating disorders. For example, dieting is discouraged and girls receive support for engaging in positive alternative eating and physical activity behaviors. Furthermore, a key tenet of the program is to help girls feel better about their bodies. We are also exploring avenues for reaching parents, who are clearly interested in preventing a broad spectrum of weight-related problems in their children. While this type work aimed at the prevention of a broad range of weight-related problems has many challenges and will need much effort to achieve meaningful changes in health-related behaviors and outcomes, it seems to strike a cord with children and adolescents, and with their teachers and parents.

CONCLUSIONS

In spite of the differences between the eating disorders and obesity fields, and a need for each field to maintain itself as its own separate

TABLE 1
Suggestions for enhancing the interface between the eating disorders and obesity fields.

Training
- Incorporate information on eating disorders, obesity, and the intersection between these fields into basic training of health care providers dealing with mental and physical health issues, educators, public health workers, and researchers. When possible, introduce these topics into the training of others (e.g., within the fields of market research, advertising, journalism, urban development)
- Provide opportunities for cross-training of professionals to ensure that those in the eating disorders field learn about obesity and visa versa. For example, offer shared conferences that address both eating disorders and obesity, with experts from both fields. At obesity conferences offer workshops on eating disorders and at eating disorders conferences include workshops on obesity. Within such settings, provide opportunities for open discussions about similarities, differences, potential problems, and strategies for improved interfacing between the fields

Clinical care
- Train health care providers to work toward the prevention of both eating disorders and obesity by identifying and addressing risk factors identified to be relevant for both conditions (e.g., improving body image, modifying the home environment of adolescents in terms of family weight talk and family meals)
- Train health care providers on how to provide a comfortable environment for patients of different sizes and talk with overweight patients in a manner that is both effective in healthy weight management and takes into account the sensitivity of the topic
- Incorporate strategies found to be successful in treating eating disorders for improving overall self-acceptance and mental health into the treatment of obesity, with appropriate modifications
- Work with patients to help them feel better about their bodies so that they will want to engage in healthy eating and exercise behaviors and avoid behaviors that may be physically or psychologically harmful
- Direct patients away from dieting behaviors, which tend to be short-term, interspersed with overeating episodes, and ineffective for long-term weight management or can be a first step toward a more serious eating disorder. Instead encourage the implementation of healthy eating and physical activity patterns that are flexible, reasonable, enjoyable, and suitable to one's lifestyle

Community-based prevention and health promotion
- Utilize environmental approaches being used in obesity prevention for eating disorders prevention. For example, work toward decreasing advertisements that utilize unhealthy models or make unrealistic promises for weight loss. Develop and enforce policies within schools that ban weight-teasing. Work with families to provide a healthy home environment in terms of the types of foods served, discussions about weight, and opportunities for physical activity
- Take steps toward decreasing weight stigmatization within educational and employment settings, and within our larger society. Do this through daily actions and speaking out, and also on a larger scale through the implementation of interventions and policy changes
- Work toward the development of interventions that have relevance for both fields or, at the very least, do not increase risk for the other field. Within schools, avoid overemphasizing weight (e.g., by notifying parents about overweight status of children) and, instead, help children to engage in healthier eating and exercise behaviors through on-site clinics, increased opportunities for physical activity at school, and improved food quality
- Speak out about the public health burden of "normative" attitudes and behaviors such as body dissatisfaction and unhealthy dieting
- Change your own behaviors with regard to how you talk about weight and your own eating and exercise behaviors. Catch yourself when you are saying something that may lead others around you to feel badly about their bodies or eat in an inappropriate manner

Research
- Provide funding opportunities for studies aimed at exploring the intersection between eating disorders and obesity, and for treating and preventing the broad spectrum of eating and weight-related problems
- Enhance study of shared risk and protective factors for both eating disorders and obesity to learn more about the potential for developing treatment and prevention strategies of relevance to both conditions
- Explore the role of the family in increasing or decreasing risk for eating disorders and obesity, including genetics, family eating patterns, family weight discussions and overall familial functioning
- Conduct in-depth evaluations of interventions aimed at preventing a broad spectrum of weight-related problems. In addition to evaluating program impact, evaluate pathways of possible influence (e.g., did a change in body satisfaction predict changes in weight status and, if so, in what direction?)
- In the evaluation of both treatment and prevention interventions within one field, evaluate the impact on the other field… at least to ensure things haven't gotten worse

entity, both fields have much to gain by sharing with each other and seeking out opportunities for collaborative efforts.

The eating disorders field has much to gain from the knowledge being obtained through obesity-related studies. For example, a lot of work is being done within the field of public health to bring about environmental changes to decrease the risk for obesity (45-47). Levine has written about the importance of utilizing similar environmental strategies within the field of eating disorders prevention (48). But, the eating disorders field also has a lot to offer the obesity field, which is struggling with how best to prevent and treat obesity. The eating disorders field needs to be more vocal about issues such as the importance of positive body image, strong emotional well-being among people of different shapes and sizes, supportive family relations, and the need to stop talk-

ing about weight and engaging in weight-teasing. Furthermore, given that health care providers treating eating disorders have typically dealt with improving complex mental health outcomes, they also have a lot to offer health care providers working with overweight patients, who tend to focus primarily on the physical outcome of weight status and often feel frustrated when successful weight loss is not achieved. It may be that interventions that extend beyond making changes in eating and exercise behaviors are needed, as well as broader measures of "success" in obesity treatment.

Suggestions for further enhancing the interface between the eating disorders and obesity fields within the domains of training, clinical care, community-based prevention and health promotion, and research are listed in Table 1. The list of ideas is not meant to be exhaustive, but rather is provided to stimulate thought and discussion. In trying to implement some of these ideas and build bridges, it is important to recognize that although there may be extreme voices within each of the fields, those voices should not be viewed as the most prevalent views. Thus, it is important for those with more moderate viewpoints on how to address the broad spectrum of eating and weight-related problems to speak up a little louder to be heard. Both the eating disorders and obesity fields can gain from the fourth model described in this paper, in which there is interaction between the fields, mutual respect even when discussing differing opinions, sharing of ideas, and enhanced partnerships within practice and research.

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