Letter to the Editor re: Patient-Centered Care for Obesity: How We Can Treat Obesity While Actively Fighting Weight Stigma and Eating Disorder Risk

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PII: S2212-2672(22)01040-1
DOI: https://doi.org/10.1016/j.jand.2022.09.017
Reference: JAND 55564

To appear in: Journal of the Academy of Nutrition and Dietetics

Received Date: 27 September 2022
Accepted Date: 29 September 2022


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Title: Letter to the Editor re: Patient-Centered Care for Obesity: How We Can Treat Obesity While Actively Fighting Weight Stigma and Eating Disorder Risk

Keywords: Eating disorders, obesity, Treatment, weight stigma

Manuscript word count: 1908

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Statement of Potential Conflict of Interest
M.I. Cardel is an employee and shareholder at WW International Inc. and has served as a consultant for Novo Nordisk (but did not accept personal fees for this work), all outside of the submitted work. F.A. Newsome reports personal fees from Novo Nordisk, outside the submitted work, R.L. Pearl has received grant funding from WW International Inc and has served as a consultant for WW International, Inc and Novo Nordisk, outside of the submitted work. E.J. Dhurandhar is an employee of Obthera, Inc. No potential conflicts of interest was reported by the remaining authors.

FUNDING/SUPPORT
R. L. Pearl is supported by a K23 award from National Heart, Lung, and Blood Institute (NHLBI)/National Institutes of Health (NIH) (K23HL140176). J. F. Hayes is supported by NIH NHLBI (T32 HL076134) and (K23 DK128561). K. N. Balantekin is supported by NIH National
Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) (K01 DK120778). P. K. Keel is supported by the NIH National Institute of Mental Health (NIMH) (R01MH111263), NIMH (R01MH126990) and National Cancer Institute (NCI) (U54CA267730). K. M. Ross is supported by the NIDDK (R01DK119244) and NHLBI (R03HL154272).

AUTHOR CONTRIBUTIONS

M.I. Cardel, J.F. Hayes, K.N. Balantekin, and F.A. Newsome drafted the manuscript. All authors participated in revision of the manuscript and final manuscript approval.
We thank the authors for taking the time to write this Letter to the Editor, because engagement is the first step to growth within our fields. Similar to the authors of this letter, we also have extensive experience as clinicians and scientists in both fields, and some of us have the lived experience of obesity and/or eating disorders. Still, while there is overlap, there are also areas where we interpret the data in different ways or use additional, but related, data to inform ways forward. We are grateful for this opportunity and wish to continue the professional and respectful exchange offered by the authors of this Letter to the Editor.

Intensive, multicomponent behavioral interventions (IBIs) focus on changing energy-balance behaviors to create a caloric deficit which occurs from changing dietary composition (e.g., reducing ultra-processed foods; decreasing sugar sweetened beverages); increasing physical activity, and decreasing sedentary behavior which has been shown to promote overeating.\textsuperscript{1,2,3,4,5} In addition, the encouragement of meals at home improves nutrient quality and reduces the caloric density of foods.\textsuperscript{6,7} These healthful lifestyle changes result in moderate caloric deficits leading to modest, albeit clinically significant weight losses.\textsuperscript{8} Additionally, a focus on the establishment of healthful routines such as regular patterns of eating, sleep, stress management, and activity assist in making these changes sustainable over the long-term.\textsuperscript{1,6,9} Thus, we agree that a tenet of IBIs can include caloric restriction, as this is often a component of weight management.\textsuperscript{10} However, there is a critical distinction between severe caloric restriction that results in perceived deprivation (which can thereby increase cravings and hunger) and the modest reduction in caloric intake that occurs in IBIs. Severe caloric restriction, often a part of self-directed dieting, is usually accompanied by elimination of whole food groups and deprivation.\textsuperscript{11} Conversely, given that a primary goal of IBIs is to sustain changes in weight and healthy habits, dietary intake goals are designed to optimize flexibility and livability and to
prevent deprivation. These treatments focus on improving overall diet quality by increasing intake of nutrient-dense foods and moderating intake of high energy-dense foods;\textsuperscript{10} no food groups are eliminated, and treatment providers work with patients to ensure that they consume a balanced dietary pattern (e.g., using an “all foods fit” approach). As such, research has shown that IBIs are associated with a reduction in cravings and hunger, underscoring that obesity treatment does not necessarily require deprivation.\textsuperscript{12} Moreover, there is nothing unusual about making dietary changes to help manage one’s health. Similar dietary changes are suggested for patients managing blood pressure or cholesterol.\textsuperscript{13}

We appreciate the point that weight loss maintenance following participation in supervised obesity treatment is challenging. Indeed, it is commonly cited as the most substantial problem with IBIs by the scientists who develop and study them.\textsuperscript{14} The meta-analysis referenced by the commenters was published in 2001 and reviews studies from the 1980s and 1990s.\textsuperscript{15,16} Since then, the field has changed considerably and has been modified in response toward consideration of a health promotion paradigm.\textsuperscript{17} Nevertheless, the numbers are more promising than suggested. The meta-analysis from 2001 demonstrated at 5 years following treatment, participants had maintained, on average, a weight loss of 3.2\% of their initial body weight.\textsuperscript{15} Weight losses of this magnitude are clinically meaningful, as they are associated with beneficial improvements in risk factors for type 2 diabetes and cardiovascular disease, particularly for triglycerides and fasting plasma glucose concentrations.\textsuperscript{15,18} Studies examining IBIs that include continued treatment show better outcomes, such as the Look AHEAD study, which found that 50\% of intervention participants maintained a weight loss of more than 5\% at 8 years.\textsuperscript{19} It is important to note that the Look AHEAD trial was ended early when the intervention did not have an effect of the primary outcome of mortality from cardiovascular related events.\textsuperscript{20} However, the
Look AHEAD IBI had very positive effects on changes in long-term measures of A1c, which is important given an increased A1C is related to significant complications (e.g. retinopathy) and reduced quality of life.\textsuperscript{20,21,22} Additionally, the IBI group was more likely to go into partial diabetes remission at year four.\textsuperscript{23} Compared with the control over 10-years, the IBI group also had sleep apnea remission, fewer hospitalizations, fewer medications, and lower overall healthcare related costs.\textsuperscript{24,25}

The issue of relapse or recurrence of disease is also not unique to IBIs; it is the norm, rather than the exception, in the treatment of many physical and mental health conditions. For instance, treatments for substance use show relapse rates of 40-60\% and, at 9 years, 40-60\% of individuals who attend eating disorder treatment are not recovered.\textsuperscript{26,27} However, these relapse rates do not preclude the use of these treatments. On the contrary, it would be considered unethical to not provide such a treatment just because some individuals experience relapse. Importantly, weight loss alone does not describe the full picture. Sustained changes in health-related behaviors such as increasing activity, improving diet quality or sleep, improving stress management skills, and/or improvements in health-related markers should also be considered when thinking about the effectiveness of an IBI.

Weight cycling is also not an inevitable outcome of weight regain. The Look AHEAD study, as described earlier, demonstrated that the majority of participants did not experience any weight cycling over 8 years following participation in an IBI; rather, rates of weight cycling in the intervention group were actually lower than those in the control group.\textsuperscript{28} Moreover, the body of literature on weight cycling and health outcomes is also mixed, with some studies showing neutral or even beneficial effects of weight cycling on indicators of health.\textsuperscript{29,30,31,32,33} Importantly, cross-sectional data supports a relationship may exist between weight cycling and
adverse psychological outcomes, however there exists no causal evidence to date that weight cycling increases internalized weight stigma.\textsuperscript{34,35,36} Thus, conclusions citing negative outcomes of weight cycling are premature.\textsuperscript{37}

Relatedly, the authors rightly highlight the harms caused by diet culture. An objective of our original article was to illustrate the differences between the destructive and pervasive messaging promoted by diet culture and the science behind IBIs, which differ significantly from self-directed dieting in terms of harms and its relationship with weight stigma and internalized weight bias. Additionally, we acknowledge that weight is only one of many data points in assessing health risk and that simply looking at a person’s weight or body mass index does not convey information about a patient’s health, behaviors, or habits. Other physiological, psychological, and behavioral parameters are also important in consideration of overall health and well-being, such as use of the Edmonton classification systems, which assess physical, mental, and functional health in the characterization of weight severity.\textsuperscript{38} Though the standard of care should move towards a more health-focused (rather than weight-focused) model of care, the dismissal of weight as a potential health indicator may not be beneficial, particularly for patients who seek weight loss due to physical health reasons.\textsuperscript{39,40} Controlled overfeeding studies have clearly demonstrated a causal link between weight gain and adverse physical health outcomes.\textsuperscript{41} Qualitative research has revealed there are many reasons an individual may choose to pursue weight management treatment, ranging from physical or physiological health to psychosocial health factors.\textsuperscript{42,43} For patients who do not seek weight loss, weight inclusive care, which places an emphasis on viewing health and well-being as multifaceted while directing efforts toward health behaviors without any focus on weight, is an excellent option. However, weight-inclusive interventions currently have no long-term data and have not been tested among marginalized or
minoritized racial and ethnic groups, those with severe obesity, or those with co-morbidities. Future research is warranted, and funding is needed, to evaluate hard outcomes of weight-inclusive approaches.

The commentators state that focusing on weight loss as treatment increases the risk of weight stigma and eating disorder development. However, the few studies that have included measures of weight stigma in IBIs have shown modest decreases (not increases) in perceived and internalized weight stigma.\textsuperscript{44,45,46} A recent randomized controlled trial tested the effects of adding an intervention to reduce internalized weight stigma to a group-based IBI, compared to IBI alone, in a sample of adults with obesity who reported personal experiences of weight bias and high levels of internalized weight stigma. Results showed significant improvements in internalized weight stigma in both conditions following approximately 6 months of treatment, and after an additional 6-month non-intervention follow-up.\textsuperscript{47,48} Treatment acceptability ratings were high across conditions, and qualitative responses described a supportive (not stigmatizing) treatment environment.\textsuperscript{47,48} More studies with long-term follow-up are needed to fully understand the relationship between weight management and internalized weight stigma. Still, these findings suggest that, for patients, weight loss and stigma reduction are not necessarily contradictory efforts and can indeed be complementary, especially when treatment is delivered in a compassionate and respectful manner. With a more balanced focus on the use of weight as only one (of many possible) indicators of overall health and a call to stop the perpetuation and proliferation of weight stigma, we believe it is possible to reverse the internalized bias and shame that can result from struggles in managing one’s weight. However, continued research is needed in the weight management field on the topic of weight stigma and eating pathology.
Ultimately, we believe providers should have collaborative relationships with their patients, providing patient-centered care that meets the desired goals of the patient and promotes overall health and well-being. This means encouraging patients to challenge the goal of a thin ideal and move towards a healthy ideal, getting away from a “one-size fits-all” approach regarding treatment, and pursuing behaviors to achieve patient goals. However, systematic reviews show that for most adolescents and adults, IBIs do not worsen eating disorder risk, at least during the intervention and early follow-up period, and result in modest improvements.\textsuperscript{49,50}

Other markers of psychosocial health related to the development of eating disorders, such as depression, anxiety, self-esteem, body image, and quality of life, also show modest improvements after a weight management intervention.\textsuperscript{50,51,52} Nevertheless, people with eating disorders are more likely to present for weight loss support than for eating disorder treatment and individual trials have identified a small subset of people who experience the onset of symptoms of eating disorders during, or following, weight management.\textsuperscript{53} Considering the serious and potentially lifelong consequences of eating disorders, it is important that individuals are screened and those at risk are identified as a standard of care before initiating an IBI, that treatment addresses the shared-risk factors between obesity and eating disorders, and that the longer-term outcomes of weight management interventions be adequately assessed.\textsuperscript{54}

We recognize that access to the patient-centered care that we described in the original article and herein may be limited, particularly among under-resourced communities. Thus, addressing social determinants that create barriers to care for both weight management and eating disorders is essential, as is advocating for increased access to evidence-based care and patients’ rights to choose or refuse weight management treatment.\textsuperscript{55} Development and implementation of evidence-based IBIs that screen for and mitigate eating disorder risk, while
actively continuing to fight weight stigma and discrimination, can be achieved when healthcare
providers across fields work together and have productive and respectful conversations for
reaching the shared goals of our patients- which include physical, social, and mental health
through the use of safe and effective interventions. Additionally, we recognize there is more
work to do in bettering weight management treatment options and we encourage continued
conversations among clinicians and scientists. We also support elevating patient voices and
experiences in these important conversations, in research, and among professional conference
presentations.

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