

## Prevalence of excessive preoccupation with body image and health eating among dietitians in hospitals in the East of England: a cross sectional study

T McBean-Willis, A Mashanova and L Blanchard

School of Life and Medical Sciences, University of Hertfordshire, Hatfield AL10 9AB

**Corresponding Author:** T McBean-Willis, [tamica2007@hotmail.co.uk](mailto:tamica2007@hotmail.co.uk)

**Background:** Studies have reported a high prevalence of body image dissatisfaction or obsessive preoccupation with “healthy” eating among dietitians and students in nutrition and dietetics<sup>(1-2)</sup>. The situation in the UK is not documented. This project aimed at exploring the prevalence of appearance anxiety and excessive preoccupation with healthy eating (EPHE) among dietitians working in hospitals in the East of England.

**Methods:** Dietitians working in hospitals in the East of England were invited in January-March 2020 via the British Dietetics Association East of England Branch to participate in a cross-sectional online survey. The latter included the Appearance Anxiety Inventory (AAI)<sup>(3)</sup>, the widely used Orthorexia Nervosa Assessment Scale 15 (ORTO-15)<sup>(4)</sup>, and a classification of dietetics specialisations based on being typically associated with advising patients to lose weight or not. The scores for each tool were calculated by two researchers independently. Two thresholds were used to suggest EPHE with the ORTO-15: <40 and <35<sup>(4,5)</sup>. Data were analysed in SPSS using the Spearman’s rank test, independent t-test, and Mann-Whitney U test. Ethical approval was granted by the University of Hertfordshire (LMS/UG/UH/03982).

**Results:** Twenty-eight dietitians completed the questionnaire, with a median (IQR) of 8.0 (3.3-13.0) for the AAI, and a mean (SD) of 39.4 (3.6) for the ORTO-15. The ORTO-15 suggested that 53.6% were at risk of EPHE using the <40 cut-off, and 11.0% with <35. The AAI and ORTO-15 scores were not correlated ( $r_s=-0.16$ ,  $p=0.42$ ,  $n=28$ ). 21.4% had a specialisation related to weight loss, while 60.7% did not. No difference was found between these groups for both the AAI ( $U=56$ ,  $p=0.76$ ) and ORTO-15 ( $t(21)=-0.71$ ,  $p=0.48$ ). Among the remaining participants, three reported having both types of specialisation, and two did not have one. There was a statistically significant negative relationship between the AAI and ORTO-15 in the weight-loss specialisation group ( $r_s=-0.88$ ,  $p=0.02$ ,  $n=6$ ).

**Discussion:** The AAI scores were low compared to those of groups with a clinical diagnosis of body dysmorphic disorder<sup>(3)</sup>. Similar proportions of dietitians at risk of EPHE have been reported with the ORTO-15 and a threshold of <40<sup>(2)</sup>. However, since the ORTO-15 does not measure clinically significant impairment on health and psychosocial dimensions<sup>(5)</sup>, the <35 threshold might provide a more realistic picture.

**Conclusion:** Few dietitians in the region appear to be highly preoccupied with their body image whereas more might be at risk of EPHE; this needs to be examined on a greater scale and to consider clinical impairment.

### References

1. Toral N, Bauermann Gubert M, Spaniol AM et al. Eating disorders and body image satisfaction among Brazilian undergraduate nutrition students and dietitians. *Arch Latinoam Nutr.* 2016;66(2):129-134.
2. Tremelling K, Sandon L, Vega GL et al. Orthorexia nervosa and eating disorder symptoms in registered dietitian nutritionists in the United States. *J Acad Nutr Diet.* 2016;117(10):1612-1617.
3. Veale D, Eshkevari E, Kanakam N et al. The Appearance Anxiety Inventory: validation of a process measure in the treatment of body dysmorphic disorder. *Behav Cogn Psychother.* 2014;42:605-616.
4. Donini LM, Marsili D, Graziani MP et al. Orthorexia nervosa: Validation of a diagnosis questionnaire. *Eat Weight Disord.* 2005;10:e28-e32.
5. Dunn T & Bratman S. On orthorexia nervosa: A review of the literature and proposed diagnostic criteria. *Eat Behav.* 2016;21:11-17

**Acknowledgements:** The authors would like to thank Joanne Malocca from the BDA East of England Branch for her feedback on the questionnaire and for distributing it.