PEDIATRIC OBESITY/ADDICTIVE BEHAVIOUR



Prevalence of food addiction in children and adolescents: A systematic review and meta-analysis

Mir Saeed Yekaninejad¹ | Negin Badrooj² | Fardis Vosoughi³ | Chung-Ying Lin⁴ Mac N. Potenza^{5,6} Amir H. Pakpour^{7,8}

Correspondence

Chung-Ying Lin, Institute of Allied Health Sciences, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan. Email: cylin36933@gmail.com

Amir H. Pakpour, Social Determinants of Health Research Center, Research Institute for Prevention of Non-Communicable Diseases, Qazvin University of Medical Sciences, Email: pakpour amir@vahoo.com

Summary

Food addiction (FA) has been as a construct that is associated with childhood obesity. However, relatively little is known regarding the prevalence of FA among children and adolescents. An instrument designed to assess FA among youth, the Yale Food Addiction Scale for Children and Adolescents (YFAS-C), has been developed and used to estimate FA prevalence among pediatric populations. The present systematic review and meta-analysis aimed to synthesize the results of FA prevalence among youth. Using keywords related to FA and children to search PubMed, Embase, Scopus, and Web of Science, we identified and analyzed 22 cross-sectional studies. No longitudinal studies were identified in the search. Meta-analysis with Freeman-Tukey Double Arcsine transformation was conducted to estimate FA prevalence. Meta-regression was applied to understand whether weight status (i.e., data from community samples vs. overweight/obese samples) is associated with FA. Eligible studies (N = 22) were analyzed using 6,996 participants. The estimated FA prevalence was 15% (95% CI 11-19%) for all samples, 12% (95% CI 8-17%) for community samples, and 19% (95% CI 14-26%) for overweight/obese samples. Meta-regression indicated that weight status was associated with FA severity (p = 0.002) and marginally with FA prevalence (p = 0.056). Healthcare providers should consider and address the high FA prevalence among pediatric population.

KEYWORDS

addictive behaviors, adolescent, child, food addiction, obesity, prevalence, systematic review

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Authors. Obesity Reviews published by John Wiley & Sons Ltd on behalf of World Obesity Federation.

¹Department of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

²Department of Community Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences (TUMS), Tehran, Iran

³Department of Orthopaedic and Trauma Surgery, Shariati Hospital and School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

⁴Institute of Allied Health Sciences, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan

⁵Departments of Psychiatry and Neuroscience and the Child Study Center, School of Medicine, Yale University, New Haven, Connecticut, USA

⁶Connecticut Council on Problem Gambling. Wethersfield, Connecticut, USA

⁷Social Determinants of Health Research Center, Research Institute for Prevention of Non-Communicable Diseases, Qazvin University of Medical Sciences, Qazvin, Iran

⁸Department of Nursing, School of Health and Welfare, Jönköping University, Jönköping, Sweden