

Editorial

Childhood Obesity: Today and Tomorrow's Health Challenge

**Roya Kelishadi,¹ Sarah D. de Ferranti,² Reza Majdzadeh,³ Jennifer A. O'Dea,⁴
Ajay K. Gupta,⁵ and Khosrow Adeli⁶**

¹ *Pediatrics, Child Growth and Development Research Center, Isfahan University of Medical Sciences, Isfahan 81676-36954, Iran*

² *Pediatric Cardiology, Preventive Cardiology Department, Children's Hospital, Boston, MA, USA*

³ *Epidemiology, School of Public Health, and Knowledge Utilization Research Center, Tehran University of Medical Sciences, Tehran, Iran*

⁴ *Faculty of Education & Social Work, The University of Sydney, Sydney, Australia*

⁵ *International Centre for Circulatory Health, National Heart and Lung Institute, Imperial College, London, UK*

⁶ *Clinical Biochemistry, The Hospital for Sick Children, University of Toronto, Toronto, Canada*

Correspondence should be addressed to Roya Kelishadi; kelishadi@med.mui.ac.ir

Received 29 September 2013; Accepted 29 September 2013

Copyright © 2013 Roya Kelishadi et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

In the current special issue different aspects of childhood obesity and metabolic syndrome (MetS) are being discussed. Childhood obesity is becoming an emerging health problem at individual and public health level. The problem is no more limited to high-income countries and is rapidly growing in low- and middle-income countries [1, 2]. Its early- and late-onset complications warrant studying more about this important issue [3].

Nowadays, the obesity epidemic and its associated complications as MetS, type 2 diabetes mellitus, cardiovascular diseases, and nonalcoholic fatty liver disease are considered as a global health problem. Its etiology is multifactorial consisting of the interaction between genetics and environmental factors, lifestyle behaviors, and sociodemographic background. Risk factors of chronic diseases originate from early life and are tracked from childhood to adulthood [4]. Therefore, prevention, screening, and early control of excess weight and related risk factors might help tailoring intervention strategies against the excess burden of noncommunicable diseases (NCDs) [5].

Health policies for prevention and control of childhood obesity have to be made by developing action-oriented intervention strategies, mainly by community participatory activities in each population. The role of families, notably parents and grandparents, should be highlighted in this regard, and family centered interventions should be encouraged [6].

The rapidly increasing trend of childhood obesity and MetS is alarming and provides information for policymakers and health care providers for interventional preventive programs. Public health and clinical aspects should be considered for evidence-based solutions to the current challenges in health promotion and disease prevention.

The current issue presents papers that seek to define the determinants as well as prevention and treatment of childhood obesity and its various complications in various potential topics including recent developments on the etiology of childhood obesity and metabolic syndrome, reports on determinants of overweight/obesity in the pediatric age group in different countries, action-oriented preventive measures against excess weight in children, and reports on short-term and long-term complications of childhood obesity, as well as therapeutic modalities in this field.

*Roya Kelishadi
Sarah D. de Ferranti
Reza Majdzadeh
Jennifer A. O'Dea
Ajay K. Gupta
Khosrow Adeli*

References

- [1] M. M. Finucane, G. A. Stevens, M. J. Cowan et al., "National, regional, and global trends in body-mass index since 1980:

systematic analysis of health examination surveys and epidemiological studies with 960 country-years and 9.1 million participants” *The Lancet*, vol. 377, no. 9765, pp. 557–567, 2011.

- [2] N. Gupta, P. Shah, S. Nayyar, and A. Misra, “Childhood obesity and the metabolic syndrome in developing countries,” *The Indian Journal of Pediatrics*, vol. 80, pp. S28–S37, 2013.
- [3] R. Weiss and S. Caprio, “The metabolic consequences of childhood obesity,” *Best Practice and Research Clinical Endocrinology and Metabolism*, vol. 19, no. 3, pp. 405–419, 2005.
- [4] A. J. Venn, R. J. Thomson, M. D. Schmidt et al., “Overweight and obesity from childhood to adulthood: a follow-up of participants in the 1985 Australian Schools Health and Fitness Survey,” *Medical Journal of Australia*, vol. 186, no. 9, pp. 458–460, 2007.
- [5] D. Yach, C. Hawkes, C. L. Gould, and K. J. Hofman, “The global burden of chronic diseases: overcoming impediments to prevention and control,” *The Journal of the American Medical Association*, vol. 291, no. 21, pp. 2616–2622, 2004.
- [6] F. Esfarjani, M. Khalafi, F. Mohammadi et al., “Family-based intervention for controlling childhood obesity: an experience among Iranian children,” *International Journal of Preventive Medicine*, vol. 4, no. 3, pp. 358–365, 2013.