



Journal of Epidemiology and Global Health

ISSN (Online): 2210-6014 ISSN (Print): 2210-6006

Journal Home Page: https://www.atlantis-press.com/journals/jegh

Socioeconomic status and obesity: Causality of the association

Tomoyuki Kawada

To cite this article: Tomoyuki Kawada (2014) Socioeconomic status and obesity: Causality of the association, Journal of Epidemiology and Global Health 4:4, 327–328,

DOI: https://doi.org/10.1016/j.jegh.2014.07.005

To link to this article: https://doi.org/10.1016/j.jegh.2014.07.005

Published online: 23 April 2019





http://www.elsevier.com/locate/jegh

LETTER TO THE EDITOR

Socioeconomic status and obesity: Causality of the association



Tomoyuki Kawada *

Department of Hygiene and Public Health, Nippon Medical School, 1-1-5 Sendagi, Bunkyo-Ku, Tokyo 113-8602, Japan

Received 11 May 2014; received in revised form 18 July 2014; accepted 26 July 2014 Available online 2 September 2014

Mowafi et al. reported that no significant association was observed between socioeconomic status (SES) and overweight/obesity in Cairo, Egypt, using education, household expenditures, household assets, subjective wealth, and father's education as indicators of SES [1]. Meanwhile, Ramsay et al. presented data indicating that socioeconomic position (SEP) was not significantly related to the prevalence of metabolic syndrome (MetS) when adjusted according to behavioral factors [2], although it was mentioned that behavioral factors such as physical activity, smoking, and alcohol consumption were responsible for the relationship between SEP and MetS.

Mowafi et al. mentioned that the selection of specific SES groups for obesity control intervention was difficult, and it is believed that the SES indicators should have been more widely selected in their study. This author has had the experience of performing a 3-year follow-up study to identify the effect of occupational position and shiftwork on the incidence of abdominal obesity after adjustments for lifestyle factors such as smoking, drinking, physical activity, and sleep. Occupational position, which is an SES indicator, did not

contribute significantly to the incidence of abdominal obesity, although this finding should be validated in a longer follow-up study.

The relationship between SES and obesity seems to be complicated, and evaluations should also be adjusted according to ethnic and developmental factors. An exhaustive review on this topic has been updated by McLaren [3]. Obesity is a physical indicator, and various psycho-social factors influence obesity. For example, mental disorders are related to obesity [4,5], although a causal relationship cannot be clearly inferred. In author's opinion, the observed relationship between SES and obesity may be confounded by unmeasured factors, such as personality and mental health states. These possible relationships should be explored by conducting careful surveys [6,7].

Disclosure statement

The author has indicated no financial support.

Conflicts of interest

There is no conflict of interest in this study.

^{*} Tel.: +81 3 3822 2131; fax: +81 3 5685 3065. E-mail address: kawada@nms.ac.jp

328 T. Kawada

References

- [1] Mowafi M, Khadr Z, Kawachi I, Subramanian SV, Hill A, Bennett GG. Socioeconomic status and obesity in Cairo, Egypt: a heavy burden for all. J Epidemiol Glob Health 2014;4(1):13—21.
- [2] Ramsay SE, Whincup PH, Morris R, Lennon L, Wannamethee SG. Is socioeconomic position related to the prevalence of metabolic syndrome? Influence of social class across the life course in a population-based study of older men. Diabetes Care 2008;31(12):2380—2.
- [3] McLaren L. Socioeconomic status and obesity. Epidemiol Rev 2007;29:29—48.
- [4] Gariepy G, Nitka D, Schmitz N. The association between obesity and anxiety disorders in the population: a systematic review and meta-analysis. Int J Obes (London) 2010;34(3):407–19.
- [5] Lopresti AL, Drummond PD. Obesity and psychiatric disorders: commonalities in dysregulated biological pathways and their implications for treatment. Prog Neuropsychopharmacol Biol Psychiatry 2013;45:92—9.
- [6] Hernán MA, Taubman SL. Does obesity shorten life? The importance of well-defined interventions to answer causal questions. Int J Obes (London) 2008;32(Suppl. 3):S8—S14.
- [7] Hernán MA, VanderWeele TJ. Compound treatments and transportability of causal inference. Epidemiology 2011;22(3):368-77.

Available online at www.sciencedirect.com

ScienceDirect