



Use of historical records from infant health visits and school health and conscription board examinations to elucidate the obesity epidemic and its health consequences. Copenhagen 1930-2016

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Health sciences aim at understanding the causes and consequences of health-related traits, such as obesity, including implications of secular trends in the occurrence of these traits. It is a fundamental requirement for such research to have access to information that has the appropriate temporal relation to the trait. Thus, to understand the causes of obesity, we need to have access to information on putative causal factors that are present before obesity develops in such settings and format that the risk of development of obesity in relation to different levels of the putative causal factor can be assessed. Similarly, to understand the consequences of presence of obesity for the later life, we need to have similar type of information about obesity and these later consequences. For many health-related traits, and also for obesity, the temporal relationships obviously is extended over very long time periods, possibly the entire life span, and possibly even across generations. In addition, it is of paramount importance that the sources and nature of information are providing unbiased relationships securing both the internal and external validity of the results and that the sizes of the populations available are large enough to allow reliable statistical analyses. To achieve results of the research on such long-term relationships within a foreseeable future, the only way is to get access to unbiased historical data so far back in time that the relevant time span is adequately covered. Our research on causes and consequences of obesity has greatly benefited from access to various archives including systematic and pertinent information from the following historical sources: The Danish Conscription Database (1-3), The Copenhagen School Health Record Register (4-6), The Copenhagen Infant Health Visit Record Register (7-8), The Danish Adoption Register (9-10). On the other hand, it must be emphasized that the mere existence and retrieval of the archives has in some cases been dependent on lucky co-incidences, and that the work required to prepare the information in the old record for the types of analyses needed achieve the results has been very demanding and taken years under the given circumstances. A major also quite demanding step in the process has been translation of the name and birthday to the currently used person identification number (the 10-digit cpr-number) for those individuals alive at or being born after the introduction of this system in April 1968. When this number is known, it allows record linkage to current registers providing additional information that allow broadening of the scope of research questions that can be addressed, for example social factors as both putative causes and consequences, and morbidity and mortality as consequences. Overall, there is no doubt about the scientific value of the outcome of the efforts.

References:

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