A Modern Environments and Human Health. Revisiting the second epidemiologic transition

Elżbieta Żądzińska

Department of Anthropology, Faculty of Biology and Environmental Protection, University of Łódź


A Modern Environments and Human Health. Revisiting the second epidemiologic transition edited by Molly Zuckerman, biological anthropologist, assistant professor in the Department of Anthropology and Middle Eastern Cultures at Mississippi State University is a very useful book to address the world second epidemiological transition which in a modified form is still ongoing in many developing low- and middle-income countries “from multi-regional, comparative, and interdisciplinary perspective”. This book represents partly the contributions of scientists who attended the Conference “Moving the Middle to the Foreground: Re-visiting the second epidemiological transition” which was held at the University of South Carolina (USA).

This volume consists of twenty one chapters which have been grouped in six separate parts presenting interdisci-
plinary approaches to the area of second epidemiological transition.

The editor, Molly K. Zuckerman writes in Introduction that “this volume is not comprehensive and does not represent the full scope of research on the transition or all of the disciplinary approaches that can be brought to bear on it. [...] it demonstrates how interdisciplinary approaches can elucidate several specific neglected or poorly understood areas of the transition, such as the experiences of women, children, and ethnic minorities, and regional and temporal variation in the mode and pace of the transition. It also demonstrates how they can be used to investigate unexplored aspects of the transition, such as chronic disease from industrial toxicants during the industrial revolution, which are wholly inaccessible through traditional materials but can yield powerful insights for modern populations”.

The first part entitled Causes of the Second Epidemiologic Transition is an introduction to the topic and addresses the background of the second transition in Europe and North America as well as presents controversies about its causes, focusing on the decline in infectious disease. Authors concentrate on modelling the second transition based on: mean stature reconstructed from skeletal material derived from over 480 archaeological sites distributed through three major regions in Europe (Mediterranean, Central-Western Europe and Northern-Eastern Europe, including Poland); infectious disease observed in the turn of 17th and 18th century in Philadelphia; patterns of mortality and frailty during industrialization era in 16th–19th century London and exploration of 19th century Massachusetts Death Registration. The second part entitled Epidemic Infectious Disease and Second Epidemiologic Transition covers two chapters. First chapter addresses the 1918 Spanish influenza pandemic, the great burst of epidemic crisis mortality, and its role in causing the transition. The second, very interesting chapter of this part addresses the connection between the exposure to influenza very early in life and mortality risk during a subsequent epidemic. Author analysing the 1890 and 1918 pandemics in Canada and demonstrates that “the exact age at which they met the previous pandemic strain of influenza in 1890 could have been the deciding factor as to whether they survived the pandemic of 1918”. The third part entitled Regional and Temporal Variation in the Second Epidemiologic Transition and the following part entitled Marginalized and Underrepresented Communities in the Second Epidemiologic Transition concerns issues of regional and temporal variation in the process of transition and, what is important, “the implications of this variation for models of the second transition and epidemiologic transition theory”. One of the chapter in this part concerns transition in Western Poland. In the next part Authors concentrate on the role of environment (industrial pollutants specifically lead exposure, parasite load, hygiene hypothesis) in patterns of infectious and chronic disease.

The last part of the volume – Epilogue consisting of four following chapters written by George J. Armelagos, Nancy L. Fleischer, Robert E. McKeown, Richard Steckel and Timothy B. Gage provides an overview of current knowledge on the second epidemiologic transition. This part is also an individual attempt of each Author to evaluating “where research on the transition currently stands and where it should proceed from here”.
I agree with editors that this volume “address the second epidemiologic transition from multi-reginal, comparative, and interdisciplinary perspective” and will be useful for academics and students interested in biological anthropology, medical anthropology, public health, demography, epidemiology, human ecology.

**Corresponding author**

Elżbieta Żądzińska, Department of Anthropology, Faculty of Biology and Environmental Protection, University of Łódź, Banacha 12/16, 90-237 Łódź, Poland