

GEOGRAPHIC METHODS FOR HEALTH SERVICES RESEARCH by Thomas C. Ricketts, Lucy A. Savitz, Wilbert M. Gesler, and Diana N. Osborne. New York: University Press of America, 1994.

This book describes the use of geographical research methods and cartographic presentations of research findings as a means of providing a spatial, regional, or global picture of phenomena in health services research.

The use of the cartographic medium for health-epidemiological mapping is not new. In Germany, a periodically updated epidemiological atlas has been published regularly since 1952. An annually updated atlas documenting the distribution and concentration of health services, diseases, health professions, and the availability of procedures and special treatments in the United States has appeared in recent years. Unlike the atlases mentioned, which present a given situation in cartographic terms, *Geographic Methods* surveys cartography's uses in health services research, with a special focus on rural areas and border settlements.

This volume is not intended for geographers studying health services. It is rather designed for the use of those who are not geographers, such as academics studying health services who can apply the

geographical tools of analysis described in this volume to present their research in cartographic terms, with an emphasis on the regional aspects of their studies. Others who may find the volume useful include politicians, who must understand or present prevailing or changing circumstances and who can analyze needs according to regional data or formulate policy through the employment of the geographic-cartographic methodology suggested in the volume; health systems authority personnel assigned responsibility for planning regional or national health services; and physicians who wish to gain a spatial-regional perspective of their area's population or their patients.

Most of the methods presented in this volume are not complicated and do not require complex computer software. Examples from the area of health services that were chosen to present possible uses of geographical-cartographic methods are common to all western health systems.

The first part of the volume is devoted to a discussion and evaluation of health services in agricultural and border settlements. This section deals with the examination and evaluation of provision of health services on a regional basis; the effect of geographic change on the need for and use of health services in a region; an examination of regional health services through comparison with general demographic, economic, and agricultural data; a description and analysis of the distribution of medical and paramedical personnel within a given region; and an examination of attempts to regulate health services. In this manner, it is possible to examine and compare provision of services with their accessibility, and the relation between the periphery and regional urban centers. To illustrate the various possibilities, the authors have presented the use of such data by the state of South Carolina in the United States.

The latter portion of the volume deals with more general aspects of health services from a geographical-cartographical standpoint, such as the spread of epidemics (tuberculosis, AIDS) and the use of geographical databases to provide epidemiological information and to aid in epidemiological evaluation (for example, mapping cancer mortality through the United States, not just in South Carolina, as a tool for researching the spread of the disease and its spatial distribution).

The book's summary offers up-to-date information on computerized tools, software, and geographical data centers that can be of use to the scholar who wishes to obtain additional information or to employ the geographical methodology presented in his/her own research.

While the book's introduction states that it is intended for politicians and administrators of health services, I believe the contents will be most useful as an additional tool for academics, particularly epidemiologists and scholars of health services. Health policy-makers and health system administrators will undoubtedly find the cartographic aspects of the studies useful in formulating policy or explaining changes and trends, though not as a tool for daily use as presented in the volume. While the authors do not state so, their book should be recommended to students who are planning research in health services and epidemiology. The volume can provide students with ideas and ways to organize their research papers and present their findings in a clear and illustrative manner. It is recommended particularly to students researching health care services in border regions and rural areas, such as Israel's Negev.

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FLOODPLAIN PROCESSES by Malcolm G. Anderson, Des E. Walling, and Paul D. Bates. Chichester: John Wiley and Sons, 1996.

This is yet another welcome addition to the manifold array of books edited by British geomorphologists and published by Wiley. The subject matter, floodplain processes, is relatively modern, as the references seldom predate 1980. The book's 19 chapters are assembled in four sections as follows: floodplain evolution (3 chapters), hydrologic modeling (6), sediment and water quality (4), and management of the floodplain environment (5). This unequal distribution of topics demonstrates that the volume has much more to present on hydrology, hydraulics and management than on the classical geomorphological theme of evolution.

The chapter by Howard in the first section treats channel evolution and floodplain morphology theoretically, as that author has done during the past quarter century. Howard utilizes computer techniques such as random walk models, and also more novel ones, while considering bank vs. bed erodibility, types of cutoffs, and oxbow lake plugs. Some of these spatial heterogeneities are applied to high energy, braided, large spatial domain and mainly meandering river systems. Overbank sedimenta-