# King, Brian (2017). States of Disease: Political Environments and Human Health. Oakland, California: University of California Press. ISBN 9780520278219

## Reviewed by Sue G. Lurie, PhD

This book by a health geographer applies the concept of social ecology, along with interdisciplinary theories of social conditions and determinants of health and health inequity, to analyze the impacts of changing political environments on human vulnerabilities to disease and illness. Key issues in health and wellness and disease prevention and management in South Africa are addressed, which have broader implications for the developing world. Comparative analysis of health policies is centered on political history from apartheid to democratic elections, with effects on changing explanations of disease causation, policies on preventive strategies, and access to antiretroviral treatment for HIV/AIDS. The environmental impacts of economic development and climate change on food insecurity and disease management, roles of non-governmental organizations, foreign aid and international economic development are related to variations in local capacities for improving and maintaining population health and health care.

The author's thesis is that spatial processes of negotiation for resources in political environments are integral in both disease epidemiology and community responses, with long-term implications for health of local populations. Based primarily on his extensive field research on HIV/AIDS and malaria in South Africa over a fifteen year period, this perspective is applied to expand the field of medical geography. The book complements research by physician/ anthropologist Paul Farmer (2015) on HIV/AIDS in rural Haiti, Rwanda and Lesotho since the 1980s, and policy advocacy for reducing poverty and inequity in international health, as cited by the author. Both researchers emphasize the prevalence of disease co-morbidity in developing countries, specifically the heightened vulnerability to HIV/AIDS of persons with tuberculosis.

The introduction reviews recent epidemics and global pandemics from drug-resistant tuberculosis and AIDS in South Africa (2006), to cholera in Zimbabwe (2008), swine and avian flu pandemics, and Ebola in West Africa (2014). Despite the United Nations Millennial Development goals of disease elimination, HIV/AIDS and malaria continue to disrupt social and ecological systems through economic impacts on communities. The author's research in South Africa since 1999 is used to analyze the social and economic effects on health of the political transition from apartheid and rural Bantustans to democracy under Mandela, the African National Congress, and recent administrations. In 2008, government health policy became responsive to needs for treatment, care, and prevention of HIV/AIDS. The author reveals the politics of delayed public recognition and treatment of HIV/AIDS and local impacts of health policy through household surveys on illness, poverty, resource availability, cultural healing, roles of community care workers, and funeral practices. This research is compared with that on environmental effects of climate change and transmission of malaria in northern Botswana since 2008, and analysis of economic impacts and local understandings of health. The finding that political economic and ecological processes lead to inequities demonstrates that achieving the elusive goal of health is a dynamic process.

The first chapter on social and political ecology of health begins with a parallel case: the social and political environment in Zimbabwe that resulted in the cholera epidemic of 2008. It emphasizes the role of spatial processes in creating health inequities, through state and local negotiation of responses to epidemics. The concept of biomedical development - biomedicine and socioeconomic development - is presented as a critique of modernization theory, which assumes health tends to improve. Vulnerability to disease may actually increase, as argued by the environmental justice movement, and as shown in growth of "food deserts" in the United States.

The second chapter on HIV lifeways analyzes the South African HIV/AIDS epidemic and health policy since the democratic transition, and the challenges of change from a fatal illness to a chronic condition to be managed by testing and antiretroviral treatment. In 2013, South Africa had the highest number of persons living with AIDS of any country. New HIV lifeways with enhanced nutritional needs, and variations of local perceptions of infection from government estimates, are related to understandings of health and traditional medicine. Barriers to local resources and treatment access are assessed.

In chapters three and four, the 20<sup>th</sup> century history of colonial rule and creation of Bantustans under apartheid, a spatial regulation system influenced by fear of infectious disease, are found to have lasting effects on contemporary HIV "landscapes". Economic dependency, land policies and population density affect livelihoods, leading to inequality in disease vulnerability and access to care. Traditional foods and healing practices complement Western medical care for HIV; home-care groups serve some communities, and citizens negotiate with the state for use of public or private clinics and regional hospitals. They also choose how to respond to public health campaigns.

The fifth chapter on health and ecological change expands the analysis beyond management of HIV in South Africa to the case of periodic river flooding in northern Botswana, illustrating differential adaptation to environmental fluctuation, resources for livelihoods, and perceptions of health. International research on impacts of global climate change on vulnerable populations is presented. The final chapter on states of disease reviews case study conclusions on the effects of spatial processes on disease and the relationship between health and local environments, and advocates a holistic approach.

Research methodology is based on a series of structured surveys using interviews and focus groups by the author and research assistants, with health care workers and household heads in South African communities. The explicit assumptions are that health is an ideal, not fully achievable; pursuing health is a dynamic process; and spatial processes are formative in producing states of health and disease. The school of thought, social ecology, as defined by Singer (2009), focuses on the context of social epidemiology to investigate the relationship between environment, host, and agent of disease, and social determinants of specific health outcomes in populations.

The primary significance of this book is its integration of social ecological with political contexts of health and infectious disease in developing countries. Its main strength is concise analysis that applies history, relevant theory, and research to public health and infectious disease control policy in sub-Saharan Africa. It complements interdisciplinary research and analysis in public health, medical anthropology, sociology, economics and global health policy, including that by Amartyas Sen from the 1970s through the 1990s, as cited by the author.

Current health policy debates weigh the effectiveness of behavioral health change as opposed to social, economic, political and environmental policies for disease prevention and transmission. Recent fatal epidemics, such as Ebola in West Africa, have renewed international concerns for public health policy and infrastructure. The timeliness of this book for HIV/AIDS programs in Africa is affirmed by recently mandated HIV/AIDS testing in Zambia, Centers for Disease Control's support for treatment in Rwanda, and the sponsorship of sex education for youth in Senegal by OXFAM.

The book draws on interdisciplinary literature in health ecology, fully referenced in chapter notes and documented in a comprehensive bibliography. In medical anthropology, a

comparative study of South African communities by Karl Kendall is cited, but seminal field research on HIV/AIDS by Doug Feldman in Rwanda, Zambia, Senegal, and the United States and Hungary, from the 1980s to the present is omitted. The concept of syndemics, or negative effects of disease co-morbidity in socioeconomic contexts introduced by Merrill Singer in the 1990s, is included and has also been applied to social epidemiology of HIV/AIDS and tuberculosis (Singer, 2009).

Historical impacts of apartheid on environmental health and healthcare are shown to be devastating for South African rural communities. However, political opposition to the community-oriented primary care system for rural areas that was developed by South African physician Sidney Kark (1974) in the 1940s, adopted in Israel and promoted in the United States since the 1960s, is omitted. From a broader perspective, the book's focus on local social and political environments tends to obscure regional impacts of warfare, famine, and population displacement on health across Africa.

Methodologically, interviews with household heads and residents could be enhanced by ethnographic descriptions of family, household and occupational roles and relationships. A major topic for further study is mental health of persons with HIV/AIDS and caregivers. Although the author references the holistic World Health Organization definition of health as well-being, mental health is assessed as the stress effects of HIV/AIDS on individuals with an inability to provide for families. The extent of depression and anxiety related to illness and its management should be explored in future research.

This volume is valuable as a complementary text in global health geography, public health, medical anthropology, and medical sociology. It is well-organized, concepts are

explained clearly, and the writing is systematic; readability is occasionally reduced when it becomes overly repetitive or didactic, as in the concluding chapter.

Health policy implications of this analysis should be further explored. Potential political impacts on national and global health policy center on improving local capacities to meet critical needs for infectious disease prevention, treatment and management, in alignment with social, economic and environmental policies. This is underscored by current international programs, such as agendas of the African Union, the *Lancet* Commission to achieve longer and healthier lives for sub-Saharan Africans, World Health Organization regional office (WHO/AFRO) programs, and United Nation's 2030 Agenda for Sustainable Development for regional collaboration to improve health and health care (Horton and Lo, 2017; Moeti, 2017).

## References

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