## **BOOK REVIEW**



Book Review by Olubukunola Ayeni, Laurentian University, Sudbury, by James Trostle

Cambridge University Press; 1st edition (Feb 21 2005) # ISBN-10: 0521793890 # ISBN-13: 978-0521793896 Listed Price: \$30.95

Throughout life, humans are faced with dualisms: female or male, right or wrong, black or white. However, what accounts for the area between these two distinct points? In the aforementioned examples, how does one interpret androgyny, both right and wrong, or gray areas? In line with the thoughts of Adorno and Horkheimer, many aspects of life present a pseudo-individuality when, in reality, these disparate ideas are quite similar or can be molded to reach the same end result (1). Essentially, synergy is achieved in supplementing benefits from one area with another.

In particular, health and medicine contains many dualistic ideals. For example, whether medicine is an art or a science and whether physicians should base decisions on theory or use practice as a guideline are persistent questions (2). In a recent book, entitled Epidemiology and Culture, James Trostle attempts to rectify a novel medical dualism. He masterfully addresses the division of ideas between epidemiologists and medical anthropologists.

In order to understand the scope of this book, one must first assess the background information, the key themes that are presented, and the future direction of the author's arguments. The purpose of this review is to provide an analysis of Epidemiology and Culture in terms of social dimensions of health and illness. As a result, this discussion will begin with the foundations of health and illness, according to James Trostle.

Trostle describes health as an ideal that is unique to each person and culture. In fact, he claims that there are "distinctions in our seemingly universal view of health and disease.(3)". This belief is shared by many scholars (4, 5) and Trostle presents epilepsy as a prime example

of a disease with multiple meanings and definitions. He notes that epilepsy results from a culmination of social, natural, and cultural forces (3). He argues that no definition of health and illness is complete without taking into account the elements of classification, meaning, risk perception, behaviour, and cultural constructs (3). These pieces of background information are extremely pertinent to the key themes presented within this book.

Trostle defines culture as a dynamic process that produces change. In keeping with this definition is the principle that culture has the ability to shape disease. Unfortunately, clinicians have long had poor training about the multifaceted aspects of culture and how these affect health (3). As a result, culture is treated as a single variable; often referred to as 'race'. In reality, clinicians should aim to understand the effect of culture on disease. There are many associations between culture and illness. For instance, why is it that AIDS was historically associated with homosexuality in Western society?

The cultural perception of death is another issue that is important to address when understanding health and illness. There is no universal definition for death or even a universal guideline to determine if someone is considered dead. Margaret Lock explains that although brain death is the legitimized end of life in North America, the Japanese affirm that the end of life is a social event and reject the notion of death as a measurable endpoint (6). Overall, Trostle (2005) explains how social and cultural meaning can be translated to mortality patterns. Clearly, culture has a significant effect on health and illness. However, it is equally important to understand the meaning and concept of risk amongst different cultures.

Risk is judged and understood differently amongst those from disparate cultural backgrounds. Trostle indicates that risk perception, at times viewed as individual, relies heavily on those around the individual and their culture (3). Deborah Lupton perfectly corroborates this point by adding that, "risk discourse in public health can be separated loosely into two perspectives. (7)" The first she describes as external (environmental), while the other is referred to as individual (focusing on lifestyle choice).

Similarly, Trostle believes that risk should be viewed in two dimensions: individual and social risk (3). The former describes people's motivation to seek treatment or take individual action for their risk, such as

<sup>\*</sup>To whom correspondence should be addressed: Olubukunola Ayeni 256 Caswell Drive Apt 409 Sudbury, ON, Canada P3E 2N9 oayeni@lakeheadu.ca

improving lifestyle practices after the diagnosis of heart disease (3). Social risk explains why some groups are marginalized to unhealthy environments. For example, AIDS among gay men in San Francisco was not labeled a crisis for quite a long time (3). Trostle and Lupton both agree that literature on risk in the health domain fail to explain the significance of social and cultural contexts (3, 7).

Understanding people's conception of culture and risk are central to gaining insight on health and illness at the individual and population levels. Consequently, it is imperative not to undermine such meanings by categorizing them merely as variables. This form of reductionism is often the practice in many research studies (3). Representing a group of people under a single variable such as "race" takes away from the unique attributes of each individual (8). To represent humans as "mass-produced objects on a factory production line" is further reductionist (8). In order to move away from this style of reductionism, Trostle suggests 'unpacking variables' correctly (3).

These variables, such as race or ethnicity, seem to fit perfectly into predictive models and have been used to explain scientific patterns for years (3). Many of today's research studies involve categorizing individual responses based on demographic information including race, gender, and age. However, a more effective and comprehensive approach is to 'unpack' these variables by understanding the social and cultural components of common epidemiologic variables (3). Trostle recommends creating 'auxiliary measurement theories' that take into account the ideas shaped by theories and their relation to the indicators used to measure them (3). In essence, auxiliary theories "guide the selection of specific variables and measures that are said to represent the underlying theory."

The author further explains, through examples, how the variables of person, place, and time can be unpacked incorrectly, resulting in a loss of individual complexity and cultural significance within each variable. Consider how the following ethnic groups are commonly listed within research: African Americans, Asian Americans, Hispanics/Latinos, Native Americans, and Pacific Islanders. Initially, this seems unbiased; however, it is important to note that some groups are listed by geographic region, while others are listed by language (3). This simplified list of groups could easily lead to the preconception that upper class Pakistani Muslims, middle class Thai Buddhists, and working class Catholic Filipinos share a unified Asian identity (3). As a result, evidence about social stratification is often misinterpreted as racial differences (3). With these explanations, Trostle validates the use of auxiliary measurement theory in research design and practice.

Trostle indicates that a prime example of this theory in practice would be to measure religiosity through prayer instead of using church attendance (3). The advantage of this practice would be to link religiosity to performance of faith instead of physical presence and network development within the church. Thus, unpacking variables serves to justify and guide selection of measures and strengthen quantitative research design; a valuable benefit to future research. Contemporary researchers can adopt this method of "unpacking variables" by ensuring that studies incorporate a broad sense of contextual elements (person, place, and time). As an example, a team of physicians, epidemiologists, and biologists would be able to unpack the complex variables involved with the relationship between tuberculosis and physical environment. Consequently, a multidisciplinary approach should be employed to further develop research studies.

The advent of processes such as research design that includes sociocultural variables and technological advances for integrated research, have fostered the development of the epidemiology and anthropology movement throughout the 20th century (3). Both anthropology and epidemiology are disciplines that offer unique contributions to the health care field. However, both also have shortcomings within their structure (3). A potential solution to this issue would be a multidisciplinary field that encompasses the strengths and contributions of both disciplines.

The result of this approach would provide an immense benefit to community-based interventions as well as health education and promotion (3). Two cases that illustrate a multidisciplinary approach are the Five-City Project and the investigation of cholera in Latin America (9, 10). In the Five-City Project, an integrated approach was utilized. Research was conducted by informal and formal networks, and culture was stressed in interpretation, leading to a comprehensive and representative picture of that community (3).

The unexpected resurgence of cholera in the Americas sparked interest and concern. Although the political, emotional, and economical toll was devastating, this incident allowed for a tremendous expansion of knowledge about individual as well as population health and illness. In this case, the researchers uncovered individual and group risk, health system adaptation to disease, government reaction to disease, and population reaction to interventions (3). Consequently, the integrative approach allowed for historical, political, and cultural data to be combined in order to better understand the initiation and spread of epidemic disease (3).

In essence, these studies, with the use of the integrated

approach, permitted anthropologists and epidemiologists to conduct more comprehensive, community-adapted interventions. However, there are still many obstacles in the way of developing a holistic approach. As with any new theoretical development, a novel multidisciplinary field will be met with resistance. One challenge that needs to be addressed is how to unify detailed individual analysis (i.e. case studies) with larger social and cultural constructs across populations. Trostle reiterates the magnitude of this test by adding that a challenge lies in combining individual cases and statistical accounts without distorting either (3). Nonetheless, combining anthropology and epidemiology would form a very comprehensive integrated approach.

Overall, I am thoroughly impressed with James Trostle's discourse on the state of anthropology and epidemiology. He succinctly portrays the necessity for a collaborative approach for understanding health and illness around the world. His masterful writing and ideas are corroborated with well-documented research. He also provides limitations and some areas of improvement within peer-reviewed methodology. Also, an honest initiative by Trostle is evident in his acknowledgement of the limitations and challenges to his idea of a multidisciplinary approach. In fact, it is evident that the style of this book may be repellent to those within the medical forum as it is not presented in a typical scientific configuration. As a result, this may deter many health professionals from reading this piece of work.

Ultimately, this book implies that in order for society to develop heath initiatives progressively from epidemiology and medical anthropology, each field must recognize the unique contributions of the counterpart's discipline instead of competing (3). In reading this book, I have become more aware of the importance of cultural, political, and historical influences on health. I would recommend this book to any health care professional interested in gaining an appreciation of the evolution of cultural epidemiology.

Further, this book is recommended for those who wish to understand the significance of the complex sociocultural variables that exist within medicine.

## **ACKNOWLEDGEMENTS**

I would like to express great thanks and appreciation to Dr. Olufemi Ayeni, an Orthopedic Surgeon, for his insight and contributions to this review.

## REFERENCES

- Adorno, T.W, Horkheimer, M. (1979). Dialectic of Enlightenment, tr. J.Cumming, London, Verso.
- Pope, C. (2003). Resisting evidence: the study of evidencebased medicine as a contemporary social movement. Health -Interdisciplinary Journal for the Social Study of Health, Illness and Medicine 7 (3), 267-282
- Trostle, J. (2005). Epidemiology and Culture. New York: Cambridge University Press.
- Annandale, E. (1998) "The Theoretical Origins and Development of the Sociology of Health and Illness," and "Shattering the Orthodoxy? Foucault, Postmodernism and the Sociology of the Body" In Annandale, Ellen The Sociology of Health & Medicine. A Critical Introduction. Cambridge: Polity Press, pp. 3-32 and 33-60.
- Lupton, D. (1995). "Technologies of Health: Health Promotion and Public Health". The Imperative of Health: Public Health and the Regulated Body. London: Sage, 48-76.
- Lock, M. (1996). Death in Technological Time: Locating the End of Meaningful Life. Medical Anthropology Quarterly, News Series, (10) 4, Critical And Biocultural Approaches in Medical Anthropology: A Dialogue, 575-600.
- Lupton, D. (1993). Risk as moral Danger: The social and political functions of risk discourse in public health. The International Journal of Health Services, 23 (3), 425-35.
- 8. Cronje, R, Fullan, A. (2003). Evidence-based Medicine: Toward a new definition of 'rational' medicine. Health: An interdisciplinary Journal for the Social Study of Health, Illness and Medicine. 7 (3), 353-369.
- Fortman, S, Varady A. (2000). Effects of a community-wide Health Education Program on Cardiovascular Disease Morbidity and Mortality: The Stanfort Five-City Project. American Journal of Epidemiology. 152 (4), 316-23.
- Tauxe, R, Blake, P. (1992). Epidemic Cholera in Latin America. Journal of the American Medical Association. 267 (10), 1388-

**Olubukunola Ayeni** is a a first year medical student at the Northern Ontario School of Medicine. Prior to this, he completed a Master of Public Health degree. His research interests include cultural contributions to medicine and medical practice.