

**Gender, Behavior and Health: Schistosomiasis Transmission and Control in Rural Egypt**, by Samiha El Katsha and Susan Watts. Cairo: The American University of Cairo Press, 2002. Pp. xxii + 200 pages + appendix, bibliography and index. \$24.50.

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In *Gender, Behavior and Health: Schistosomiasis Transmission and Control in Rural Egypt*, Samiha El Katsha and Susan Watts examine schistosomiasis (commonly known as bilharzia) in two semi-rural villages in the Nile Delta, employing gender analysis in order to better understand human behaviors that lead to infection, transmission, and prevention. It is one study among a very select few that examines the socio-behavioral and gendered aspects of schistosomiasis, a parasitic disease found predominantly in tropical and sub-tropical countries that infected over two hundred million people world-wide during the mid-1990s while three times that amount were estimated to be at-risk (p. 1). This multi-disciplined and multi-faceted study, conducted between 1991-1996, explores individual and social behaviors while also examining the complex interactions between gender, behavior, biomedicine, the environment, agriculture, and economic factors that relate to schistosomiasis.

It is important to draw attention to the fact that the authors are not epidemiologists. Rather, one is a social anthropologist while the other is a health geographer. From their perspective, schistosomiasis is a “disease of human behavior” and therefore socially patterned (p. 3). They also view it as an “illness,” a term that signifies the individual’s interpretation of their condition and the disease, as opposed to viewing it solely as a pathogen. Equally important to this extraordinarily thorough and developed study is the use of gender analysis at every stage of the project. As it relates to schistosomiasis, gender is crucial precisely because gender affects the behavior of males and females. These behaviors are key to understanding schistosomiasis since human behavior directly relates to the “exposure to infection at a water source and contamination of the water source” (p. 36).

For both schistosomiasis haematobium and schistosomiasis mansoni, the two major forms of the disease found in Egypt, the parasite first enters the individual via the skin, eventually reaching the bladder in the first form (haematobium) and the intestine in the latter form (mansoni). In the case of schistosomiasis haematobium the schistosome eggs are dispersed through the urine while for schistosomiasis mansoni the eggs are dispersed through the feces. Water sources such as canals serve as the sites of contagion. Once infected, if the individual remains undiagnosed and the infection goes untreated, he/she may further contaminate water sources thus aiding in future transmission.

Although they employed both quantitative and qualitative methods, El Katsha and Watts relied heavily upon the qualitative ones. In order to examine schistosomiasis from transmission to treatment they needed to know, inter alia, what went on at contamination sites, during visits to local health clinics, during school-based screening programs, after individuals became ill from infection, and they needed to know what all of these events meant to the individuals involved. Gender was also important because, as the researcher team found, “Meanings and expectations were often based on gender roles” (p. 75). This draws attention to the need for qualitative research through observation and in-depth discussions, for it is through qualitative research that the meanings attached to the various stages of the disease and to the activities that lead to infection can be discerned. Simply put, qualitative research helped them to provide information that could not be expressed numerically (p. 75). Through the use of these methodologies in both their research and action-based interventions, El Katsha and Watts were able to fill in gaps left by previous research projects and national initiatives.

For example, gendered domestic responsibilities coupled with a lack of water connections such as taps and/or drains within households, or safe methods of waste removal, have necessitated

women's continued use of the canals, thus risking exposure to infection. The common assumption is that if households had better access to water connections within the home and to waste removal systems, then this would reduce incidence rates by reducing women's exposure to canal sites.

However, research for this study found that women who do have access to such technologies in the home still preferred using the canals, the site of infection. El Katsha and Watts identified a variety of reasons why women would continue risking exposure. Canals, it seemed, provided the women with more space to do their work than the small sinks or basins available in their homes, making washing easier. Disposing of sullage in the canals meant they did not need to worry about overflowing septic tanks with wastewater. The researchers also found that many women felt that the canal water aided them in their responsibilities as housewives by, for example, making the clothes they washed cleaner, the pots and pans shinier. For women whose pride and power are associated with their achievements in the domestic sphere, these reasons are not to be underestimated. Socializing with other women was a significant factor too and was enabled by their use of the canals which also served as public gathering sites.

As part of their action-oriented research model, El Katsha and Watts developed strategies based on their research findings in order to help prevent the transmission of schistosomiasis. In one action-oriented strategy they addressed the factors contributing to women's continued exposure at canal sites by creating a community-designed laundry, which reduced women's risk of contamination by providing a safe and accessible public laundry center that was desirable to local women. In another major intervention, El Katsha and Watts offered a gender-sensitive initiative to school-based screening programs - which constituted the second most used method of diagnosis in the two surveyed villages - that surprisingly required no additional costs or staff.

The book provides illustrations, figures, tables, maps, a list of acronyms, and a glossary, all of which help to render the intense amount of information contained in the book comprehensible to readers regardless of their academic discipline. Furthermore, the Table of Contents is highly developed and specific, breaking down each chapter into subheadings, which makes referencing the wealth of information provided accessible to the reader. At times, information presented in the book is a bit dry and certain parts do not always appear relevant to the main purpose of the study. Overall, however, the entire book works to create a solid understanding of the highly complex relationships that contribute to the continued presence of schistosomiasis (*bilharzia*) in Egypt today.

*Gender, Behavior and Health* is an excellent example of the potential of multi-disciplined, action-oriented, participatory research. It demonstrates why gender analysis is crucial to the field of public health studies and not, as is often thought, only necessary when examining women's health issues. It is successful precisely because, as the authors explain, the study focuses on "what actually happens in practice, in contrast to a unified model which presents a top-down view of what planners consider ought to happen" (p. 70). This study is recommended to all those interested in applied social sciences, public health, gender and/or development studies.

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