

Introduction: Epidemiologic Research on Occupational Health in Women

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*“Who built Thebes, the city of the seven gates?
The history books quote the names of kings
But did the kings drag along blocks of stones?”*

Bertolt Brecht

Epidemiological research on occupational health has traditionally focused on those who drag blocks of stones . . . but only on some of them. Women have always worked (though not necessarily dragging stones) and it has been decades since they entered the labor market on a massive scale. Health and disease in relation to work has not been, however, well-evaluated in women [Messing et al., 2003]. In the past, the relatively few extensive studies focused on occupational cancer and on reproductive health [Gunnarsdottir et al., 1999]. The dramatic changes in work conditions of the last decades have resulted in a reshaping and widening of epidemiological research on occupational health. The development of extensive and elaborate epidemiological research in areas such as psychosocial factors and work, or musculoskeletal disorders have also helped develop studies that focus on the work environment of women.

This issue of the *American Journal of Industrial Medicine* includes selected peer-reviewed papers presented at the 3rd International Congress on Women's Health: Occupation, Cancer, and Reproduction, Barcelona, September 13, 2002 which was organized in conjunction with the 16th Congress on Epidemiology in Occupational Health and the 20th Scientific Meeting of the Spanish Society of Epidemiology. The first conference in Baltimore (1993) and the second in Reykjavik (1998) promoted the enhancement

of epidemiological research on women's work and health, initially cancer and reproduction, but were increasingly broadened to include other major occupational health and methodological areas.

The issue presents three review papers on gender differences in methods for exposure assessment in the occupational environment [Kennedy and Koehoorn, 2003], on exposure to pesticides [García, 2003], and on occupational cancer [Zahm and Blair, 2003]. These papers summarize the results of increasingly productive research on health effects associated with the work environment among women. All three papers conclude that sex and gender do matter when evaluating work exposures and health and point to the need to develop more, and more elaborate, studies on occupational health in women. They also point to the need for research in newly industrialized countries where conditions of work are less controlled. A second focus of the conference is presented in a series of papers on occupational cancer in women that covers both traditional and less traditional exposures in industrialized and newly industrialized countries [Labrèche et al., 2003; McGeoghegan et al., 2003; Miligi et al., 2003; Shaham et al., 2003a,b; Veyalkin and Milyutin, 2003; Wernli et al., 2003]. Reports of research on respiratory health, psychosocial factors, musculoskeletal diseases and injuries [Brisman et al., 2003; Cardoso-Sales and Sousa-Santana, 2003; Dunning et al., 2003; Gunnarsdottir et al., 2003] conclude the issue.

Based on the findings in these presentations, there is a clear need to extend these studies and evaluate jobs and work environments where women traditionally work. Work at home is an example of an environment that has been repeatedly claimed as part of the work environment but that has been little investigated. There is clearly a need to re-evaluate the research approaches applied in epidemiological studies on occupational health. We should evaluate sex and gender differences through a wider perspective that includes the way we select the populations studied and, indeed, the research questions we pose, the instruments we use and the way we contact the study populations, the analysis we apply and the way we report results. A better understanding of the causes of diseases will be achieved through a more thorough and

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creative evaluation of gender and sex differences in disease. The papers presented at the conference and those published in this issue reflect the increased interest in research on the occupational health of women that will certainly lead to a more efficient prevention of disease in women and men.

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