## Bad Day at the Office?



## Research shows that stress on the job affects women and men differently

by Lisa Silver, special correspondent

uring World War II, women flocked to the workplace, and like the newsreel heroine Rosie the Riveter, they flourished. Today the world is not at war, but for many working women, it often feels that way. With its increased job demands

and longer shifts, the workplace has become a source of both physical and emotional strain. Researchers have long known that work-related stress can harm your health. What they're now discovering is that stress affects women and men differently. Whereas more men than women suffer from elevated blood pressure on the job, more women suffer from repetitive strain injuries, irritable bowel syndrome, headaches, anxiety and depression. Fortunately, a range of treatments could offer help for working women.

Repetitive strain injuries (RSIs)—hand, arm and shoulder disorders marked by numbness and severe pain—make up 60 percent of all occupational illnesses, according to recent data from the Bureau of Labor Statistics. And women are the hardest hit: women with RSIs outnumber men three to one.

Why? Explanations once included differences between men's and women's strength and size. Now research suggests it is related to the jobs many women hold—namely, jobs requiring repetitive hand motions such as typing or price scanning.

Furthermore, a worker's susceptibility to RSIs depends not only on what job she has but also on how she does it. Michael Feuerstein and his colleagues at the Uniformed Services University of the Health Sciences studied two groups of computer users to see how forcefully they pounded their keyboards. The first group had severe carpal tunnel syndrome, a common RSI; the second had less severe symptoms. Feuerstein's team found that all the workers who used excessive force while typing aggravated their condition. And although the workers with less severe symptoms hit the keys more gently, they still used four to five times more force than necessary.

Why all this keyboard bashing? "It could be an indicator of stress, brought on by too much work in too little time," Feuerstein says. Adjustable keyboards may help, he remarks, and so might stress-management programs.

Figuring out how best to manage workplace stress could help women with other ailments as well. For instance, three times as many women as men report symptoms of irritable bowel syndrome, a disorder marked by intestinal pain and abnormal bowel movements. Although stress does not cause irritable bowel syndrome, it can trigger it, says Marvin M. Schuster of the Johns Hopkins University School of Medicine.

Anyone who has had butterflies before an important meeting knows there certainly is a relation between mind and gut; for sufferers of irritable bowel syndrome, the connection may simply be tighter, Schuster says. Citing a recent study conducted at the University

of California at Los Angeles, Schuster explains that in healthy people, stress activates a region of the brain that helps to calm the body down. In people with irritable bowel syndrome, however, stress activates a region that controls the body's vigilance and fear responses.

Thus, during stressful times, patients' sensory nerves are on high alert, causing them to experience intestinal sensations more acutely, Schuster explains. New Prozac-like drugs might help, he says, by blocking the reuptake of serotonin, the neurotransmitter involved in, among other things, pain perception. Dietary changes, such as eating more fiber and less gas-producing food, may also help.

Job-related stress appears to play a role in another common ailment seen in working women: headaches. Researchers at the Johns Hopkins University School of Public Health recently found that women are 15 percent more likely than men to have tension headaches. Especially at risk are highly educated women ages 30 to 39.

Female hormones may explain the gender difference but not why headaches cluster in certain women, says Brian S. Schwartz, the study's lead author. "No one knows the cause of tension-type headaches," he comments. "But we found they increased dramatically with education and plateaued during the prime working years. Both these facts suggest that something at work is contributing." Peering at the computer for hours and increased job demands could be factors, he speculates.

These same factors may have psychological effects as well. In a study of female clerical workers, researchers at Duke University found that women who reported high job strain—defined as heavy workload and low decision-making opportunities suffered more from anxiety and depression than women with manageable workloads and more job control. Similar studies of men found no connection between workplace stress and mood disorders, says Redford B. Williams, who led the Duke study.

One reason may be the dual roles women occupy, Williams notes. "Women do the lioness's share of work," he points out. "When work at home is factored in, a woman's workweek is on average 15 hours longer than a man's." More flextime and stress-management training may be a remedy, he suggests.

Another solution may lie in changing a woman's "second" job—the home. "Women aren't unwinding after work," says Gary D. James of Cornell University Medical College. Citing a Swedish study that looked at male and female workers at a Volvo factory, James states that men's stress hormones and blood pressure rise at work, then fall at home. With women, the opposite is true. Indeed, for some women, the levels never fall. "And once you add children into the equation, women's blood pressure and stress hormone levels are elevated even more," he says.

So what's a working woman to do? "Try to get your husband to share more of the work at home," Williams urges. A prescription, he admits, that may or may not be so easy to fill.