WOMEN GET HEART DISEASE TOO: A BRIEF HISTORY OF GENDER DISCRIMINATION IN MEDICAL RESEARCH

*THE HONORABLE DONNA E. SHALALA**

Thirty years ago, I got my first academic appointment as an assistant professor of political science at a well-known university. My Department Chair greeted me by announcing that he was very glad I was joining the University. But he didn't want any misunderstanding: I would not be getting tenure. "Women do not get tenure," he said, as if stating a rule of black letter law. So the message my Department Chair delivered was unmistakable—and typical for that time: the welcome mat is not out. But at least I knew where I stood.

I soon found a better appointment and got tenure in due course. Unfortunately, for many women in the academy, and other businesses and industries, the obstacles were too high—and the resistance to change too strong. That resistance came in many forms: sometimes overt, other times silently and behind closed doors. It also came in places that even today have the power to shock. For example, most people know that for decades women were systematically excluded from medical school. Less well known, but equally insidious, is the tragedy of women being discriminated against in the delivery of health care. I'm not talking about the long history of doctors telling women: "Go home, it's all in your head." That sort of abuse was bad enough. But there are also examples of systemic gender discrimination—tolerated and sometimes encouraged by the very agencies of government that were responsible for protecting the women. One such agency was my own: the United States Department of Health and Human Services (HHS), which has the statutory duty to fund biomedical research and approve the development of new drugs. For many years, this was not a duty that the Department carried out with women in mind.

Fortunately, this shameful period of our history is over. But the story of how women were intentionally and routinely excluded from participating in the development of new drugs and new therapies must never be forgotten, because it must never be repeated.

At the start of the twentieth century, the average woman did not live much beyond her childbearing years. Women were beset with a variety of illnesses and infectious diseases. Many of these killers struck men as

---

* United States Secretary of Health and Human Services.

well. But they often affected women differently—a fact that most women probably recognized even if the health care system did not.

Because twentieth-century medicine for the most part ignored the unique physiology of women, it was easy to take the next step, to test and market drugs, without the participation of women. Men dominated the world of medical research, and these men, in the words of Kierkegaard, busied themselves with themselves—excluding women from their research.

The exclusion was somewhat ironic. After all, the first American human research subjects of the early nineteenth century were slaves—including many women. Similarly,

> Prisoners and other institutionalized U.S. populations provided most of the subjects for clinical research from early in this century to the late 1960s. After World War II, the Nuremberg Code of Ethics established internationally recognized standards for human research. It was not until the 1960s, however, that the first U.S. policy for the protection of human subjects was promulgated through several amendments to the Federal Food Drug and Cosmetic Act.[1]

In 1977, consistent with the movement toward protection of research subjects, the United States Food and Drug Administration (FDA) issued the guideline, General Considerations for Clinical Evaluation of Drugs.[2] This guideline describes the protocols to be followed by pharmaceutical companies when they test new products for FDA approval using clinical trials. One obvious requirement was conspicuous by its absence: the guideline did not require that women be included among the test subjects.

The reason most frequently given for excluding women from drug trials was that a woman could be pregnant, or become pregnant, during the drug testing. Or that the drug once administered might interfere with a future pregnancy.[3] Alternatively, it was thought that hormonal fluctuations in women would make results from drug testing difficult to sort out.[4] That, of course, raised a question that no one was inclined to answer: if hormones

---

[1] David Wright & Nancy J. Chew, Women & Minorities in Clinical Research, Part 1, Applied Clinical Trials 45 (Sept. 1996).

[2] Obligations of Sponsors and Monitors of Clinical Investigations, 42 Fed.Reg. 49,612 (1977) (to be codified at 21 C.F.R. pt. 16).

[3] Judith Levine Willis, Equality in Clinical Trials, U.S. Food and Drug Administration, Dec. 29, 1997 (visited Apr. 12, 2000) <http://www.fda.gov/oashi/aids/equal.html>.

[4] *Id.*

were the culprit, what was the proper therapeutic response? In other words, drugs that were being tested only on men were being prescribed to women—even though researchers recognized that hormone fluctuations could affect how a drug acts in women.

The consequences of excluding women from drug trials were significant. In 1993, the Institute of Medicine (IOM) produced a Report of a Workshop on Women and Drug Development that contained the following findings regarding hypertension:

> Physicians generally do not vary their treatment approaches to this disease according to a patient's sex. Yet, of the seven large studies often cited as the rationale for treating hypertension today, three included no women subjects . . . . One study that did include women found that although mortality was reduced in black women following a "monitored step care" program, mortality increases slightly among white women. A 1985 study of the blood pressure-lowering drugs propranolol and bendroflumethiazide found mortality from causes dropped by 15 percent in men, but increased by 26 percent in women.[5]

The IOM report on hypertension highlights just one of numerous examples of how men and women differ in their susceptibility to disease—and their response to treatment. Consider heart disease. Most people know it is the leading cause of death among men. Fewer know it is also the leading killer of women. But there are important differences. Heart disease develops later in women. Accordingly, women diagnosed with heart disease are typically 10 years older. They are also sicker, often show different symptoms, and may be treated less aggressively. Forty-four percent of women who suffer heart attacks die within a year—compared to twenty-seven percent of men.[6]

Women have stronger immune systems than men, giving them better protection against disease. However, that strengthened immune system means that women are more likely to get autoimmune diseases such as rheumatoid arthritis, lupus, scleroderma, and multiple sclerosis.[7]

This growing understanding of the unique health attributes of women eventually led to important changes in women's health research. In

---

[5] Institute of Medicine, National Academy of Sciences, Women and Drug Development 1 (1993).

[6] Alan F. Holmer, 1999 Survey, Survey Finds Dramatic Increase in Research on Women's Health; 348 Medicines in Development <http://www.phrma.org/charts/w_i99.html>.

[7] Society for the Advancement of Women's Health Research, Ten Differences Between Men and Women that Make a Difference in Women's Health (visited Apr. 12, 2000) <http://www.womens-health.org/insertB.html>.

1995, the FDA proposed a regulation to require drug sponsors to include observed safety and efficacy data by gender, as well as age and race.[8] That proposal became final in 1998.[9]

Parallel developments were occurring at the National Institutes of Health (NIH), the nation's premier research and funding source for biomedical research. In 1986, for the first time, NIH required that women be included in all clinical research funded by that agency.[10]

We have also dramatically increased our focus on women's health throughout the Department. In addition to our departmental level Office on Women's Health, most public health agencies in HHS now have an office devoted to women's health issues, including the FDA, the NIH, the Centers for Disease Control and Prevention (CDC), and the Substance Abuse and Mental Health Services Administration (SAMHSA). Other HHS agencies have a full time women's health coordinator. Also, as of this writing, the Secretary of the Department of Health and Human Services, the Commissioner of the FDA, the Administrator of the Health Care Financing Administration, the Assistant Secretary for Aging, the Assistant Secretary for Policy and Evaluation, the Acting Director of the NIH, and the Administrator of SAMHSA are women.

With strong leadership and new rules governing the funding of clinical research, the days of second class citizenship for women's health research are over. We have learned the hard lessons of history: gender discrimination costs lives, limits opportunity and is unworthy of a great nation. We've made great progress over the last ten years. Now, at the dawn of a new century, we are firmly committed to achieving the best outcomes in the health and well-being for women and men.

The *Columbia Journal of Gender and Law* has made similar great strides in the ten years this journal has been documenting legal issues related to women. On your tenth anniversary, I wish you continued success in the years ahead. Keeping focused on the need for gender sensitivity and equity is a task we all share, and the only way I know to improve the quality of our decisions, our institutions and our lives.

---

[8] Investigational New Drug Applications and New Drug Applications, 60 Fed. Reg. 46,794 (1995) (to be codified at 21 C.F.R. pts. 312 and 314).

[9] Investigational New Drug Applications and New Drug Applications, 63 Fed. Reg. 6854 (1998) (to be codified at 21 C.F.R. pts. 312 and 314).

[10] National Institutes of Health and Human Services, NIH Guide for Grants and Contracts, Inclusion of Women in Study Populations 1 (1986).