

Interview with Susan Blumenthal

Susan J. Blumenthal, MD, MPA, served as the country's first Deputy Assistant Secretary for Women's Health, and also as US Assistant Surgeon General and a Rear Admiral in the US Department of Health and Human Services (HHS). She has been a pioneer and major force in bringing women's health issues to the forefront of our nation's health care agenda, envisioning and developing innovative programs to advance women's health in the United States and internationally. She also served as a White House advisor on women's health issues. Dr. Blumenthal is a Visiting IOP Fellow at Harvard University's School of Government, Clinical Professor of Psychiatry at Georgetown and Tufts Schools of Medicine, Distinguished Visiting Professor of Women's Studies at Brandeis University and Visiting Professor at Stanford University in Washington. She is an international leader and champion for advancing a broad range of public health issues including women's health, global health, disease and violence prevention, mental illness, and the national response to terrorism. Her groundbreaking accomplishments include developing a coordinated national approach to women's health that dramatically increased scientific and public attention to these issues, establishing National Centers of Excellence on Women's Health at academic centers to serve as models for women's health care nationwide and fostering public/private sector initiatives and global partnerships on a broad range of public health issues. Dr. Blumenthal was among the first in the government to apply information technology to improve health, establishing several award winning websites. She also initiated a unique collaboration with the CIA, NASA and DOD called "From Missiles to Mammograms" that improved the early detection of breast cancer. Dr. Blumenthal was the Co-Chair of the National Action Plan for Breast Cancer, a Presidential initiative. Prior to this appointment, Dr. Blumenthal served as Chief of the Behavioral Medicine and Basic Prevention Research Branch, Head of the Suicide Research Unit and Chair of the Health and Behavior Coordinating Committee at the National Institutes of Health. A renowned public health expert, prolific author and influential national spokesperson, she has written many scientific articles, served as the health columnist for US News & World Report, and as the Host and Medical Director of a widely acclaimed television series on health. Dr. Blumenthal has received numerous awards, including honorary doctorates, for her pioneering leadership and landmark contributions to improving women's health.

.....
HHPR: *Your extremely successful career has involved work in multiple areas of health care and government. How did you become interested in medicine, especially women's health?*

SJB: When I was ten years old, my mother developed thyroid cancer. I will never forget visiting her at the hospital and feeling helpless against this disease. It was

.....
then that I decided to become a doctor. I spent summers during my teenage years at Stanford University School of Medicine acquiring knowledge and skills about how to conduct research and also worked in the Medical News Bureau there learning about the importance of communicating scientific advances to the public. I chose my college curriculum with medicine in mind. In my first year of college, my mother de-

.....
Conducted by Kate Cembrola, a Senior Biochemical Sciences Concentrator in Leverett House.

veloped breast cancer. In my last year of medical school, the disease metastasized to her spine so that she could no longer walk. She fought the disease with great courage and lived long enough to see her daughter become a doctor. I vowed then and there that no other woman should have to suffer the way she did. So you see, it's not been just a job, but rather a calling and an honor to dedicate my career to improving women's health. I did this first as a research scientist in the 1980s at the National Institutes of Health where I worked with other advocates to expose the inequities in women's health. Then in 1993, I was honored to be appointed as the country's first Deputy Assistant Secretary for Women's Health in the US Department of Health and Human Services (HHS), a new senior level position created to rectify past inequities and to move women's health issues to the forefront of our nation's health care agenda. As Director of the HHS Office on Women's Health, we worked to weave a women's health focus into the fabric of all of the Department's agencies and offices as well as collaborated with other public and private sector organizations to improve women's health across the lifespan and to eliminate health disparities. As a result of this new national focus, women's health is now a top priority, funding has dramatically increased, a broad spectrum of research is underway, and prevention and service delivery programs are targeting women's unique needs.

HHPR: *For many years, medical research included mostly males as subjects. Why did it take so long to recognize the different health needs between the sexes? What is being done to increase studies specifically targeted towards women?*

SJB: Despite the fact that women are 51% of the population, 61% of the population over the age of 65, and comprise 70% of the population over age 85, until fairly recently, women's health was a cause that for all too long was neglected at the research bench, in the halls of public policy, and in clinical settings. Although women seek more medical care, use more health services, and spend more on medications than do men, they suffer greater disability from disease. Additionally inequalities in health care limit women's access to certain diagnostic procedures and therapies proven to be effective for specific conditions. Unfortunately, despite recognized differences in the bodies and experiences of men and women, most research studies in the past were conducted in men only, as if they were the "generic" humans -- but the results were then generalized to guide the diagnosis, treatment, and prevention of disease in women. This omission of women as research subjects and as the focus of prevention campaigns had put women's health at risk -- with rising rates of undetected heart disease, lung cancer, mental and addictive disorders, and the epidemic of AIDS.

What were the reasons for these inequities? Some speculate there was bias. Also, it was more costly to include women in research studies because of variables such as hormonal factors that had to be considered. And just as women have battled for equality in educational and occupational opportunities, those working in the women's health field had to shatter a myriad of barriers and prejudices in health care practice and research to bring women's health to the forefront. When I went to medical school, women's health focused on the reproductive system. So, it's not surprising

that generations of health care providers and researchers, trained with a male model of disease, were not sensitive to sex differences in the causes, treatment, and prevention of illness. Still another piece of the explanation was the dearth of senior women scientists and health professionals in our nation's medical institutions. While today women represent as many as 46% of medical students and the majority of several medical specialty residencies including pediatrics, psychiatry, and obstetrics and gynecology -- there are still very few women in leadership positions. Only 10 Deans of US medical schools are women, and women represent fewer than 14 percent of tenured professors and 11 percent of the over 2070 Departmental Chairs in our nation's medical schools.

The good news is that there has been a dramatic change in the way research is conducted in the United States. Prompted by women's advocacy and activism, a Congressional Report in 1990 showed that women were not being properly studied and led to the introduction of the first Women's Health Equity Act. The law now requires that women and minorities must be included in clinical trials, where appropriate. Additionally, a broad spectrum of research is currently being supported on the conditions and diseases affecting women over the lifespan. Several major studies are underway on the seasons of women's lives including a study of adolescent health, the SWAN study of women at mid-life and the NIH's Women's Health Initiative-- the largest clinical research study ever conducted in either men or women that focuses on the health of post-menopausal women. Findings from this study are changing recommendations for the treatment and prevention of disease in women. For ex-

ample, results found an increased risk of heart attacks, blood clots and breast cancer in women who took hormone replacement therapy for more than five years. Furthermore, a recent Institute of Medicine report has also underscored that sex matters at the molecular, cellular, and organ system levels and in the way people interact with the environment. I believe that the study of sex differences in health and disease is one of the most important and interesting research frontiers of the 21st century.

HHPR: *What were some of the initiatives you established in the Federal Government to improve women's health?*

SJB: Over the past 15 years, a new national prescription has been written to improve women's health both in the Federal Government and the private sector. The guiding principle of this prescription is that our country's research, prevention and service delivery programs must target all of the nation's women, of all races, ages, and socioeconomic and ethnic groups and must address the health needs of the whole woman -- in body and in mind.

Some of the milestones achieved during my tenure as the first Deputy Assistant Secretary of Women's Health include developing a coordinated national approach and governmental infrastructure for women's health. A women's health focus was woven into the fabric of all HHS agencies and many new initiatives were established on a broad range of health issues. Regional women's health coordinators were appointed to work at the local level; scientific and public awareness was significantly increased as well. I established the National Centers of Excellence in Women's Health program to change the way health care is

provided to women. These Centers serve as national models for improving research, services, public and professional education, and community involvement. They also foster the recruitment, retention, and promotion of women in academic medicine and scientific careers. A women's health curriculum was designed and distributed to health professional schools so that tomorrow's health care providers and researchers will address sex differences in disease. National Community Centers of Excellence have also been created to strengthen linkages between community based organizations to enhance women's health care.

Because knowledge is power when it comes to health, I believed women needed a single user-friendly point of access to state-of-the-art, comprehensive information about their health and was among the first in the government to harness the power of the Internet for health education by establishing the National Women's Health Information Center. The Center, accessible through a toll free telephone number (800-944-WOMAN) and on the Internet at www.4woman.gov, provides consumers, health professionals, and researchers with free, state-of-art information on a broad range of women's health issues linking them to thousands of cutting-edge resources in the Federal government and private sector. Recently, I directed the design of a website for college women's health, 4collegewomen.org, built by Brandeis University students for college women everywhere.

Another focus of my work was to establish public-private sector partnerships on osteoporosis, AIDS, girl's health and the health of older women, eating disorders, mental illness and heart disease. The Heart

Truth Campaign is underway to educate women and their health care providers that heart disease, long considered a disease of men only, is in fact, the leading killer of American women. Violence against women was also made a critical priority. A multifaceted initiative was implemented including the establishment of a National Advisory Council, a domestic violence hotline (800-799-SAFE), increased funding for intervention and prevention programs as well as implementing training initiatives for health care providers and law enforcement officials. A Federal Coordinating Committee on Women's Health and the Environment was convened to evaluate and eliminate environmental factors that might be contributing to increased rates of certain diseases affecting women.

HHPR: *Throughout your career, you have been a pioneer and advocate in emphasizing the importance of disease prevention. Why is this an important issue for women's health? What initiatives have been undertaken?*

SJB: Currently, the United States is a treatment-oriented society rather than a prevention-oriented society. Our nation spends only 3-5% of an over 1.6 trillion dollar health care budget on population-based prevention, yet 70% of deaths in the United States are linked to preventable lifestyle and environmental factors.

Why is prevention so important? One hundred years ago, women and men, on average, did not live beyond their 48th birthday. Then, women died primarily from infectious diseases and also from complications of childbirth. But thanks to the triumph of government sponsored public health interventions including improved sanitation, immunization programs, safer

food and water, environmental and safety regulations, advances from medical research and improved access to health care services, women have gained almost thirty additional years of life expectancy over the course of the past century. Today, the major killers of American women are chronic diseases including heart disease, chronic lung disease, cancer, stroke, diabetes, and also injuries -- conditions for which as much as 50% of the cause is attributable to behavioral and lifestyle factors such as smoking, obesity, lack of physical activity, alcohol and substance abuse, unsafe sexual practices, failure to use seat belts, and get screening exams. While public health interventions have resulted in a dramatic decline in tobacco use over the past 40 years, smoking continues to be the #1 preventable cause of death in the United States and 23% of women are smoking in our country today. Additionally, studies on sex differences have found that nicotine is more addictive and tobacco is more carcinogenic in women as compared to men. In fact, in 1987, lung cancer surpassed breast cancer as the leading cancer killer of women in the United States. Smoking also interferes with a woman's ability to become pregnant, have a healthy pregnancy and a healthy child.

Another enemy to women's health in the 21st century is the growing epidemic of obesity and sedentary behavior, the 2nd leading preventable cause of death in the United States. 400,000 deaths a year in the US are linked to obesity. 61.8% of women are overweight and 34% are obese. 55% of Americans do not get the recommended amount of physical activity by the Federal Government. Nearly 15% of children and teenagers in the United States are overweight. Worldwide, 300 million people

are obese, and 1 billion are overweight. It's leading to an epidemic of Type II diabetes, the sixth leading cause of death in the United States.

These statistics underscore why developing and implementing strategies to reduce health-damaging behaviors are so important and could decrease premature death in America by as much as 50%, reduce chronic disability, as well as dramatically cut health care costs. That's why a critical priority for me as Deputy Assistant Secretary for Women's Health, was to ensure that our national prevention campaigns, whether to stop smoking, to encourage a healthy diet and physical activity, and to prevent AIDS, focused on women's unique needs. For example, I worked with the Girl Scouts to establish a smoking prevention merit badge program that was launched at the White House and collaborated with Federal and private sector organizations and the media to develop eating disorders and osteoporosis prevention campaigns as well as to establish a Women and AIDS Task Force. Prevention begins with ensuring that every girl in the United States has a healthy start in life. HHS developed the Girl Power campaign and has invested in risk avoidance programs as well as strategies to boost girls' self-esteem to promote a healthier future.

In 2002, HHS launched an important new initiative, the Healthier US campaign to encourage Americans to engage in physical activity, eat right, obtain life-saving screening exams, and avoid other risky behaviors. This year, a blueprint for action was released with recommendations for various sectors of society, challenging individuals and families, schools, communities, the media, healthcare providers, researchers and businesses to put prevention

first. Many new activities are underway in the public and private sectors to help women make smart and informed health decisions for themselves and their families and to ensure that the prevention of disease and the promotion of good health is a top priority.

HHPR: *You have played an important role in increasing awareness about breast cancer, as well as improving medical technology used in its detection. What inspired you to take on this project, and how do you think the program has fared?*

SJB: A decade ago, there was controversy surrounding the age at which women should obtain their first screening mammogram. What struck me in this debate was that mammography, the current “gold standard” for detection, was a 40-year-old technology, and that 3 out of 4 lesions it finds were benign leading to many unnecessary biopsies. Additionally, the technology misses about 15% of breast cancers. I thought that if scientists could see the surface of Mars with the Hubble telescope, then perhaps it was possible to more accurately detect small tumors in women’s breasts right here on earth. That’s why in 1995, I contacted the Director of the CIA, the Administrator of NASA and the General in charge of the Department of Defense’s Medical Research Command, to explore whether these agency’s imaging technology used for missile detection, intelligence purposes and space exploration might be applied to improve breast cancer detection. In 1996, the HHS Office on Women’s Health under my direction convened a conference with scientists from the intelligence, space, and defense communities along with our nation’s top

radiologists. Recommendations from this meeting resulted in an initiative that I called “From Missiles to Mammograms.” This unique program transferred imaging technology used by spy satellites to find tanks camouflaged behind trees to find small tumors camouflaged by dense breast tissue yielding a peace dividend from our national investment in defense.

Today, the war against breast cancer is a top national priority. Government and private sector funding has increased to find the causes, to improve early detection, and to improve treatment and prevention strategies. And for the first time in recent history, our national investment is yielding lifesaving dividends: the death rates from breast cancer have decreased by 2.3% per year from 1990 to 2000. Technologies including ultrasound, MRI, PET scanning and molecular imaging are improving the diagnosis of this disease. Knowledge about the biology of cancer is leading to the development of a whole new generation of therapies with fewer side effects based on an understanding of how cancer arises and may lead to the customization of therapies for individual patients. The ultimate goal in the war against breast cancer is to prevent the disease from occurring in the first place. Studies have found that certain medications and also behavioral strategies can help reduce the risk of breast cancer in some women.

Much progress has been made since my mother developed the disease. Then, we could not say the word “cancer” out loud nor share her struggle with others. Today, knowledge has been expanded, the stigma has been shattered, and there is now an entire generation of women who call themselves, “cancer survivors”. However, much more needs to be done to eliminate the

suffering and death caused by this international enemy of women.

HHPR: *In your work as a researcher at the National Institute of Mental Health, you were a pioneer in advancing women's mental health issues. Do you feel that public awareness of these concerns has increased? What measures are necessary to further promote understanding and treatment of mental illness?*

SJB: According to a World Health Organization report, five out of the ten leading causes of disability globally are mental illnesses and one out of five people in the United States will have a mental disorder during any year period. Yet, twenty years ago, when I began my career at the National Institute of Mental Health, there was a powerful societal stigma surrounding mental illness. At that time, these disorders were considered by many as character flaws or personal weaknesses, rather than as real, disabling illnesses just like heart disease or diabetes, for which there were established causes and effective treatments.

Thankfully, over the past two decades, much has changed in our understanding of mental illness. In 1999, the first ever Surgeon General's Report on Mental Health was released that encouraged Americans to get help if they are experiencing emotional problems. The report also underscored that mental health is fundamental to overall health and reviewed the scientific advances that have occurred in our understanding of the brain and behavior and in the causes and treatment of mental disorders over the life cycle. This new knowledge provides hope for shattering the stigma that has surrounded mental illness in the past.

Over the course of my career, I have worked to increase scientific and public

attention about mental illnesses, particularly sex differences in these disorders. For example, why do women experience eating disorders nine times more often as do men? Why do women suffer from depression twice as often as men? Why are men's suicide rates four times higher than women, but women attempt suicide four times as often as men? Why do boys have higher rates of learning disabilities and ADHD? Why do some diseases have their onset in childhood and adolescence and others later in life? What are the biological, psychosocial and environmental factors and their interactions that contribute to these differences? Today, a broad spectrum of research is being conducted that is increasing knowledge about sex differences in the causes and treatment of mental and addictive disorders. National education campaigns and service delivery programs are being supported that target the unique needs of women. Challenges ahead include increasing knowledge about prevention of mental disorders as well as achieving parity in health insurance coverage for these illnesses.

HHPR: *Given that significant health disparities exist not only for women, but for minorities as well, what do you think needs to be done to address the health of women of color?*

SJB: Despite spending twice as much on health care as compared to any other nation, the US ranks 37th on a World Health Organization report of the health status of our citizens and 18th on life expectancy. These statistics are linked to significant health disparities that exist in our country for the poor and for minorities. One of the most notable features of the health land-

scape in the 21st century is the changing face of our nation with growing diversity. By the year 2025, it is estimated that minorities will constitute 50% of America's children and over half of all Americans by 2065 – minorities no longer. Yet, in the United States, there are significant disparities in the health status for some racial/ethnic groups. African American, Hispanic and Native American women have higher maternal mortality rates than Caucasian women. African American and Hispanic women have higher death rates from AIDS, heart disease and some types of cancer; Native American women have 2-3 times the rate of diabetes as compared to white women; and Vietnamese women have 5 times the death rate from cervical cancer as compared to Caucasian women.

A top priority today for women's health is to eliminate these health disparities. This is being accomplished through a broad range of Federal and private sector initiatives and partnerships. As Deputy Assistant Secretary of Health, I convened a National Conference on Minority Women's Health and established a Women of Color Advisory Board that engaged a broad coalition of organizations to work together to improve minority women's health. Funding has also been increased for research on racial/ethnic differences in the causes, treatment and prevention of disease. Training initiatives are being expanded to ensure culturally competent care in meeting the health needs of women of color. Our goal must be health equality for all women early in the 21st century.

HHPR: *What is slowing down progress in improving women's health?*

SJB: There are several obstacles slow-

ing down progress in improving women's health. Socioeconomic status is the most powerful predictor of health globally. Yet, worldwide, 70% of the 1.2 billion people living in poverty are women. Globally, women are paid 30-40% less than men for comparable work. In the United States, women still earn 76 cents for every dollar earned by men. Additionally, in America today, 45 million people – a large proportion of them women – lack health insurance; and the number is growing. Therefore, ensuring educational and economic opportunities for women and improving access to quality health care across the life cycle are critical to achieving a healthier future for women.

Another obstacle is low health literacy. There are an estimated 876 million illiterate individuals in the world. Sixty six percent of them are women. Nearly one half of American adults face higher risks of health problems because they have trouble understanding medical terms and directions. Women – and men – require education when it comes to their health including the medications they use. It's our job to make that kind of health information meaningful, helpful, and easy to read and use. Several initiatives are underway to improve health literacy in the U.S. Department of Health and Human Services and in the private sector.

There's another challenge for women's health summed up by the author, Goethe, who once wrote, "Knowing is not enough; we must apply; willing is not enough; we must do." An estimated 15-year science to service gap exists from the time of a new scientific discovery to its wide application in the community. In the information age, why shouldn't it be 15 seconds? A lot of important information about preventing

and treating disease--the best practices of public health and evidenced based medicine--are currently available and could be used today to improve women's health in our country and globally. HHS has recently released a report, *The Decade of Health Information Technology*, with recommendations about how to create a seamless information infrastructure to increase the efficiency of the health care system, to decrease medical errors, and to disseminate life saving information quickly and effectively in the United States and worldwide. Developing innovative strategies to speed the time from scientific discovery to the application of new knowledge in communities is a critical priority for women's health in the 21st century.

HHPR: *You have been a leader in global women's health issues. What are some concerns worldwide?*

SJB: In the 21st century, women's health is very much a global issue. There are over 3.1 billion women worldwide and in most regions of the world, women outnumber men. Yet, a number of factors including poverty and discrimination undermine women's health. The health status of women is critically linked to their empowerment and fundamental freedoms. Women's rights – human rights – are essential to national development, economic growth and global progress. However, for women in many countries, discrimination and denial of basic rights, beginning in infancy, negatively impacts the trajectory of their lives. Worldwide, education, occupational opportunities, proper nutrition, family planning, and access to health care are critical components of ensuring a healthier future for women.

The world's population is aging and the incidence and deaths from chronic diseases including heart disease, cancer, diabetes and Alzheimer's disease is increasing dramatically. The number of people over age 60 is expected to rise from 600 million to 1 billion in the next two decades – the majority will be older women. It's why promoting healthy aging must be a top global health priority.

In many developing nations, women are experiencing the double jeopardy of both chronic and infectious diseases. While life expectancy has increased for females in most developed and developing countries, it has decreased dramatically in sub-Saharan Africa as a result of AIDS. In the early 1980's, AIDS was thought to be just in the province of men so that research and prevention efforts targeted only males leaving women unaware that they were at risk. Today, women account for almost 50% of those who have died from the disease since the beginning of the epidemic. Initiatives are underway to prevent and treat AIDS in women as well as to prevent maternal/child transmission.

Furthermore, the spread of infectious diseases (which account for 25% of deaths worldwide), epidemics like tobacco use and obesity, the safety of the food and water supply, violence against women, human trafficking, and the threat of bioterrorism do not recognize national borders. Since we as countries share a common future, solutions – like the problems – must be global in scope. That means our work cannot stop at the United States' borders for humanitarian, economic, and national security reasons. SARS crippled China and Toronto's economies because people were afraid to travel there. Millions of orphans overseas whose mothers have died

of AIDS, malaria or tuberculosis are an invitation to political instability. Caring for millions of women with HIV/AIDS or tobacco and obesity related diseases bankrupts nations of the human resources and the funds needed to build healthy communities, economies, and democracies.

It's why the US Department of Health and Human Services and many private sector organizations support a broad spectrum of international health programs and initiatives to prevent and treat a range of global health threats to women. Improving surveillance of disease, supporting scientific research, strengthening infrastructure including health professional training, cultural sensitivity and emphasizing disease prevention are all critical components. Our common quest for improving women's health in the 21st century must cut across cultures, languages, and governments.

HHPR: *What more needs to be done?*

SJB: Over the past century, advances in women's health in the United States has succeeded in almost doubling the lifespan of the average woman and provided a level of care previous generations could not have foreseen. In 1900, even the most prescient of people could not have imagined the dazzling scientific and technological advances such as mapping the human genome and the impact of computers on health care nor could they have anticipated the toll that tobacco, obesity, motor vehicle accidents, and an aging population would take on the health of women in the 21st century. Madame Curie once remarked, "I never see what has been done, I only see what remains to be done." Yes, much progress has been made in women's health, but much more needs to be done. Increased research

is needed on sex differences in health and disease and on the conditions that affect women across the lifespan. The result will be knowledge that benefits women as well as men. We must also work together to make the shift from a treatment-oriented society to one of prevention; to increase the level of preparedness to meet and beat new threats to women's health and safety; to close the gap when it comes to health care disparities for women of color; and to more effectively translate what we know from science and public health to improve the delivery of services to women. The complex healthcare challenges ahead like the epidemics of smoking, obesity, AIDS, poverty, violence against women, and increasing access to quality health care require a multidisciplinary approach. We can't solve public health problems alone. That's why the perspectives of public health, medicine, science, and technology must be integrated in a new paradigm to address the opportunities and challenges ahead. The good news is that the government and private sector are working together in partnerships, leveraging skills and resources, to fill the gaps in knowledge and to improve prevention and service delivery programs for women in our country and globally. If we remain vigilant, the results of these efforts should brighten the health futures for women in the 21st century. 