NIH PERSPECTIVES ON WOMEN’S WELLNESS & HEALTH DISPARITIES:
FROM RESEARCH TO POLICY

Building Multicultural Women’s Health
Setting an Agenda
2007 Women’s Health Policy Summit

Los Angeles County Department of Public Health
Office of Women’s Health
May 2007

Vivian W. Pinn, M.D.
Associate Director for Research on Women’s Health
Director, Office of Research on Women’s Health
National Institutes of Health
Department of Health and Human Services
Japanese Women Show Longest Life Expectancy

Associated Press
Saturday, May 19, 2007, A09

GENEVA, May 18 -- A boy born in San Marino, a tiny republic surrounded by Italy, will likely live to age 80, the world's longest male life expectancy, but newborn girls in Japan and 30 other countries have even better prospects, the World Health Organization said Friday.

Sierra Leone registered the shortest male life expectancy at 37 years -- the same as that of girls in Swaziland, who were at the bottom of the female list, WHO's "World Health Statistics 2007" report shows.

Women in Japan, who traditionally lead the world tables, have a life expectancy of 86 years, the same as last year's statistics. San Marino men, who tie with Japanese men last year at 79, added a year to get ahead.

Men in the United States have a 75-year life expectancy, U.S. women could reach 80.

WHO said the life-expectancy figures were based on 2005, the latest year available. It said statistics kept by its 193 member states may vary in some cases because it had compiled the figures itself to ensure compatibility.

Following San Marino on the male side were Australia, Iceland, Japan, Sweden and Switzerland at 79 years and then Canada, Israel, Italy, Monaco and Singapore at 78. France was tied for 12th place at 77 years with a group of countries including New Zealand and Britain. Germany was at 76 years. Cuba was among the countries that tied the United States for 33rd place at 75 years.

Member states with long-living women include Monaco, 85 years, and Andorra, Australia, France, Italy, San Marino, Spain and Switzerland at 84. Canada tied Ireland and Sweden at 83 years for women, and Germany was in a group at 82 years. Britain came in at 81 years. Costa Rica and Denmark tied the United States for 32nd place at 80 years.
HEALTH DISPARITIES

Why are there differences in life expectancy and quality of life for some American as well as global populations of women, Especially at a time when there is more diversity among the faces of women of this nation???
To Address Diversity & Disparities in Health & Healthcare

Needs & Strategies Must Be Based Upon Scientifically Determined Knowledge, and Thoughtful & Informed Interventions
To Address Diversity & Disparities in Health & Healthcare

And, the diversity of women of the U.S. should have access to state of the art scientifically & culturally appropriate health care and health counseling...
IMPORTANCE OF BIOMEDICAL & BIOBEHAVIORAL RESEARCH IN EFFECTING CHANGE

- Influences standards of care and health care delivery
- Contributes to educational content
- Influences public health policies
- Influences consumer expectations
- Influences our personal behaviors
Research & Health Care in the 21st Century

Utilizing biomedical & behavioral research to eliminate gaps in knowledge &
to address inequities in the prevention, detection, counseling and treatment of illnesses among women & men of all races, cultures, and socioeconomic backgrounds…
WOMEN’S HEALTH and HEALTH CARE in the 21st CENTURY

The last years of the 20th Century brought much PROGRESS
Women’s Health—Advances in Knowledge and Understanding

Catherine D. DeAngelis, MD, MPH
Richard M. Glass, MD

Much has happened in the 5 years since JAMA’s last theme issue devoted to women’s health¹ to advance our knowledge and understanding about medical problems and issues related solely or primarily to women. The keen interest in the topic of women’s health is evidenced by the 412 manuscripts (a record for JAMA) submitted for consideration in this issue. From among the many excellent submissions, we chose the studies, other articles, Research Letters, and Commentaries that appear in this issue. A number of other submissions accepted for publication have been or will be published in other issues of JAMA.

Breast cancer, the most common cancer among women other than skin cancer and the second-leading cause of cancer death in women after lung cancer,² is certainly prominent among concerns regarding women’s health. In 2006, more than 200,000 women in the United States will be found to have invasive breast cancer, and about 41,000 women will die from the disease. The chance of a woman having invasive breast cancer during her lifetime is now about 1 in 8, and the chance of dying from breast cancer is about 1 in 33. Fortunately, breast cancer death rates are decreasing, probably due to earlier detection and improved treatment options.²

In this JAMA theme issue, Walsh et al³ report an important advance in the understanding of cancer-predisposing mutations among breast cancer patients in high-risk families, de-

Author Affiliations: Dr DeAngelis (cathy.deangelis@jama-archives.org) is Editor-in-Chief and Dr Glass is Deputy Editor, JAMA.
WOMEN’S HEALTH
IN THE 21\textsuperscript{ST} CENTURY

*****

- Just a few years ago, women’s health & health research were thought primarily as that of the reproductive system.
- There was little attention given to other areas of ‘women’s health’, e.g. heart disease, stroke, IBS, HIV/AIDS, sports injuries, etc.
- Today’s print and visual media show how that has changed over the past 10 years.
WOMEN, RESEARCH & HEALTH
CARE IN THE 21ST CENTURY

Office of Research on
Women’s Health
Office of the Director
National Institutes of Health

Advocacy Demand
(Inclusion of women in clinical research)

Attention of Women in Congress

Establishment of Federal
Government Attention
to Women’s Health & Scientific
Design of Research
(To address women’s health
issues & Sex/Gender factors in
health and disease)
Innovative interdisciplinary research

Set research agenda: Focus on gaps and emerging areas in women’s health and sex/gender issues

Office of Research on Women’s Health

Biomedical career development for women, & for women’s health researchers

Inclusion of Women & Minorities In Clinical Research

Race/ethnicity, effects of poverty; special populations e.g. Disabled, Immigrants, Etc.
NIH REVITALIZATION ACT OF 1993
(PL 103-43)
NIH Guidelines on Inclusion

NIH must:

- Ensure that women and members of minority groups and their subpopulations are included in all human subject research;
- For Phase III clinical trials, ensure that women and minorities and their subpopulations must be included such that valid analysis of differences in intervention effect can be accomplished;
- Not allow cost as an acceptable reason for excluding these groups; and
- Initiate programs and support for outreach efforts to recruit these groups into clinical studies.

It is the policy of NIH that women and members of minority groups … must be included in all NIH-supported biomedical and behavioral research projects involving human subjects, unless a clear and compelling rationale and justification establishes…that inclusion is inappropriate with respect to the health of the subjects or the purposes of the research…

Federal Register March 1994
Basic questions:

- Do men and women respond the same to all interventions?
- Are there differences in natural history of disease or response to intervention based upon racial heritage?
Race/Ethnic Differences

If ‘race’ is considered a ‘socio-political’ concept rather than a biological reality:

- How will this affect inclusion of ‘minorities’ in clinical research?
- How will this affect medical care of ‘minorities’?
- Can we then be sure that interventions based upon studies reverting again to more homogeneous study populations will be as effective in ‘minority’ populations?
OVERCOMING BARRIERS TO MINORITY INCLUSION IN HUMAN SUBJECT RESEARCH

Need for sex, racial & cultural diversity of those that design, participate in, conduct, and interpret research studies & implement the results into health care practices and public health policies
WOMEN'S HEALTH: the first basic fact...

Men & Women Are Different!!!
the second basic fact...

Not all women, or men, are the same!!!
**Women’s Health & Sex/Gender Health Research & Care in the 21st Century**

Sex/gender disparities/differences &
Disparities/differences among populations of women and/or men

**********

**Across the lifespan...**

- in health status,
- in health outcomes, and
- in response to environments, interventions, & treatments
WOMEN’S HEALTH
&
THE SCIENCE OF
SEX & GENDER
DIFFERENCES:

The NIH Office of Research
on Women’s Health
Perspective
MAJOR RECOMMENDATIONS
from the
Institute of Medicine Report on Sex & Gender
in Basic Biological Research

Summary of major recommendations:

Differences between the health and diseases of men and women NOT just related to their sex hormones... but to differences in genetic makeup of cells and tissues...
Examples: SEX DIFFERENCES IN HEALTH & DISEASE DOCUMENTED OR UNDER STUDY

- heart disease (CAD)
- depression
- urinary incontinence
- irritable bowel syndrome
- pain
- pharmacologic responses
- diabetes
Examples: SEX DIFFERENCES IN HEALTH & DISEASE - DOCUMENTED OR UNDER STUDY

- chronic fatigue syndrome
- autoimmune diseases
- manifestations of brain disorders
- reproductive endocrine disorders
- musculoskeletal conditions
- manifestation and progression of HIV/AIDS
Leading Causes of Death
Females—United States, 2002

All Races, Females, Percent*

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>28.6</td>
</tr>
<tr>
<td>Cancer</td>
<td>21.6</td>
</tr>
<tr>
<td>Stroke</td>
<td>8.0</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>5.2</td>
</tr>
<tr>
<td>Alzheimer's disease</td>
<td>3.4</td>
</tr>
<tr>
<td>Diabetes</td>
<td>3.1</td>
</tr>
<tr>
<td>Unintentional injuries</td>
<td>3.0</td>
</tr>
<tr>
<td>Influenza and pneumonia</td>
<td>3.0</td>
</tr>
<tr>
<td>Kidney disease</td>
<td>1.7</td>
</tr>
<tr>
<td>Septicemia</td>
<td>1.5</td>
</tr>
</tbody>
</table>
**CVD in Women:**
**Heart Attack, Stroke, & Other CVDs**

- Combined, cardiovascular and cerebrovascular diseases account for about 45% of deaths among women.
- It is the leading cause of death among all women in the United States (except Asian-American.)
- Women have a worse prognosis than men after a heart attack because women tend to be older and have multiple risk factors.
- Yet - heart disease, stroke, and other CVD’s have only recently been recognized as serious health problems for women.
CARDIOVASCULAR RESEARCH: Importance of Knowing About Sex Differences

‘Understanding more about the factors that cause sex differences in mortality from coronary heart disease has important public health implications…’

Lack of Studies on Women Limits Usefulness of Research on Coronary Heart Disease
Press Release Date: July 10, 2003

Although coronary heart disease (CHD) is the cause of more than 250,000 deaths in women each year, much of the research in the last 20 years on the diagnosis and treatment of CHD has either excluded women entirely or included only limited numbers of women and minorities. As a result, many of the tests and therapies that are used to treat women for CHD are based on studies conducted predominantly in men.

Even in studies that include women, the published research often does not provide findings specific to women, according to two evidence reviews on CHD in women, conducted for the Agency for Healthcare Research and Quality and the National Institutes of Health's Office of Research on Women's Health by researchers at the University of California at San Francisco/Stanford Evidence-based Practice Center. Only 20 percent of the articles reviewed for this project provided separate findings on women.
Lack of Studies on Women Limits Usefulness of Research on Coronary Heart Disease

The researchers conclude that even though funding agencies appear to have succeeded in ensuring that some women and minorities are included in randomized trials, data about these populations often are not made clear in the published findings.

They recommend that in addition to requiring participation of women and minorities in research, funding and regulatory agencies should request that outcome data by gender and race/ethnicity be published or made easily available.
Advances in Knowledge from Sex/Gender Research in Women’s Health

- A better understanding of how sex/gender factors matter in health and disease
- Knowledge about genetic, environmental, hormonal and other causative pathways of diseases in males and females
- Clinical Implications: Scientific information for gender-specific (sex-appropriate) medical care
Welcome

The Science of Sex and Gender in Human Health Online Course Web Site was developed as a collaborative effort between the Office of Research on Women's Health, Office of the Director, National Institutes of Health (NIH) and the Office of Women's Health, Food and Drug Administration (FDA). Vivian W. Finn, M.D., Associate Director for Research on Women’s Health, Director, Office of Research on Women’s Health, NIH, and Kathleen Uhl, M.D., Assistant Commissioner for Women's Health, Director, Office of Women’s Health, welcome you to the course Web site.

This site was developed for researchers, clinicians, and members of academia to gain a basic scientific understanding of the major physiological differences between the sexes, the influences these differences have on illness and health outcomes, and the implications for policy, medical research, and health care. Unless otherwise noted, the content on the site is in the public domain and can be duplicated. However, a citation is appreciated.

The site currently offers one course titled, The Basic Science and the Biological Basis for Sex- and Gender-Related Differences. The course includes six lessons, each of which will take from 20 minutes to an hour to complete. Taking the course is free and continuing education credit can be awarded for successful completion of the course. To receive credit, participants will be required to complete all six lesson quizzes with a score of at least 70 percent, and to complete a brief course evaluation form. Partial credit will not be awarded to participants who complete only selected lessons and not the entire course. Please see the continuing education page for more information.

For additional information on what you’ll need to know before you get started, please review the about this site page. To begin taking the course for credit or non-credit, please set up your account by completing the registration form, or if you have already created an account, please login.
THE SCIENCE OF SEX AND GENDER IN HUMAN HEALTH

NIH-FDA Course 1 Content

- Understanding the Importance of Sex and Gender in Biomedical Research (NIH and FDA)
- Federal Requirements for the Inclusion of Human Subjects in Clinical Research (NIH and FDA)
- Cell Physiology (Carmen Sapienza, Ph.D. and NIH)
- Developmental Biology, including Psychological and Social Development (NIH)
- Pharmacokinetics and Pharmacodynamics (FDA)
- Clinical Applications of Pharmacogenomics (AHRQ)
DIVERSITY IN HEALTH

Given:
All women are not the same…
So, …
How do we prepare our public health policies and health interventions to address a multicultural society???
Health Disparities

- Despite notable progress in the overall health of the Nation, there are continuing disparities in the burden of illness and death experienced by African Americans, Hispanics, Native Americans, Alaska Natives and Asian Pacific Islanders, compared to the U.S. population as a whole.

- The largest numbers of the medically underserved are white individuals, and many of the same health care access problems exist as for members of minority groups.
<table>
<thead>
<tr>
<th>HEALTH CONDITION AND SPECIFIC EXAMPLE</th>
<th>INDEX IN SELECTED POPULATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WHITE</td>
</tr>
<tr>
<td>Infant mortality rate per 1000 live births$^1$</td>
<td>5.9</td>
</tr>
<tr>
<td>Cancer mortality rate per 100,000$^2$</td>
<td>199.3</td>
</tr>
<tr>
<td>Lung Cancer - age adjusted death rate$^3$</td>
<td>38.3</td>
</tr>
<tr>
<td>Female Breast Cancer age adjusted death rate</td>
<td>18.7</td>
</tr>
<tr>
<td>Coronary Heart Disease mortality rate per 100,000$^2$</td>
<td>206</td>
</tr>
<tr>
<td>Stroke mortality rate per 100,000</td>
<td>58</td>
</tr>
<tr>
<td>Diabetes diagnosed rate per 100,000</td>
<td>36</td>
</tr>
<tr>
<td>End-Stage Renal Disease rate per million$^4$</td>
<td>218</td>
</tr>
<tr>
<td>AIDS – percentage of persons with AIDS$^4$</td>
<td>44.9</td>
</tr>
</tbody>
</table>

*DSU = Data are statistically unreliable
DNA = Data have not been analyzed


LA County: Health Outcomes

- Asian/Pacific Islander
- African American
- White
- Latina
- Total Females

- Low Birthweight
- Cholesterol
- Hypertension
- Heart Disease (diagnosed)
- Diabetes
- Asthma
- Depression
- Arthritis
- Osteoporosis
WOMEN’S HEALTH RESEARCH as a paradigm for
Utilizing Research To
Address Gaps in Knowledge About Sex/Gender Differences in Health,
Eliminate Disparities in Multicultural Health Outcomes,
&
Effect Change In
Public Health & Public Policy
Building Multicultural Women’s Health

NOT JUST STRATEGIC PLANNING, BUT LEADERSHIP AND SUBSTANTIVE INVOLVEMENT AT ALL LEVELS, WITH COMMITMENT TO MAKING A DIFFERENCE, AND STRONG AND VISIBLE EFFORTS, AND, WITH ACCOUNTABILITY BASED ON AN INFORMED DESIRE FOR CHANGE...
Factors Contributing to Differences in Health Status of Sexes & Sub-populations

Genes

Biology

Environment

Behavior

Hormonal Milieu

Race/Ethnicity/Culture

Access to Health Care

Education & Poverty
Influences Contributing to Differences in Genetic Risk Manifestations and ? Health Disparities

Biology

Behavior

Genes

Environment

Hormonal
WOMEN’S HEALTH
An Expanded, Inclusive Concept

Healthcare approach now must focus across the lifespan, & beyond biology, to include:

- Behavioral & social factors
- Social & family roles
- Ethnicity, race & culture
- How women relate to their bodies
- Occupational factors
- Access to medical care services
  - Insurance
  - Community resources
  - Public Health Policies
THE RESEARCH AGENDA FOR WOMEN’S HEALTH IN THE 21ST CENTURY

Funding Research that Addresses Health Disparities
In order to address the constant and confounding problem of health disparities experienced by the affected communities including the medically underserved population, the NIH is committed and remains vigilant in supporting research to understand biological, socioeconomic, cultural, environmental, institutional, and behavioral factors affecting health disparities. Research is only one solution in a multifaceted effort.
Women & Their Health in the 21st Century

Women of Color Health Data Book (ORWH)
Women’s Health and the Research Agenda for the 21st Century

Current Priorities for 2007
PRIORITIES FOR RESEARCH ON WOMEN’S HEALTH

YEARLY CONSIDERATIONS

- Base upon the ‘Research Agenda’ as foundation
- Determine areas of special importance for expanding current initiatives or developing new research programs
- Consider published research results or pending scientific advances
- Acknowledge emerging areas of science and/or diseases
- Collaborate with broader scientific, health professional, public policy and advocacy communities
Priorities for women's health research now emphasize chronic and preventable illnesses and complex multisystemic conditions, in addition to focusing on specific diseases & conditions across the lifespan. Biomedical, behavioral and societal factors must be considered…
Women’s Health Research Priorities

2006 Overarching Themes

- Lifespan
- Sex/Gender Determinants
- Health Disparities/Differences and Diversity
- Interdisciplinary Research
Using Knowledge About Women’s Health to Improve Women’s Health

If girls & women know more about lifestyle behaviors that can improve their health, and know the major threats to their health, they are more likely to adopt health-related behaviors...
WOMEN’S HEALTH & ORWH INTERDISCIPLINARY RESEARCH & Career Development PROGRAMS
WOMEN’S HEALTH RESEARCH & CAREER DEVELOPMENT PROGRAMS

Interdisciplinary Research & Collaboration

New energies and fresh insights into women’s health, in general,

and

A classic example of synergy at work:
Contributions of multiple individuals & organizations joining to create a more powerful effect on progress…

And provide a foundation for integrated, comprehensive health care for women
OVERARCHING ORWH RESEARCH PRIORITIES

➢ **Sex/Gender Differences** in health & disease and therapeutic interventions at genetic, molecular, cellular, and functional levels…

➢ **Health Disparities/Differences & Diversity** among different populations or subpopulations of women…
Methodological Advances: statistical analysis methodology that addresses ethical and study design issues specific to studies of women/females in basic & clinical research; develop new methodologies for animal model studies of diseases and normal development of women, including use of female animals.

Education and Career Development of Women in Science: explore factors that affect the selection and advancement of women’s careers.

Diseases and Conditions that Affect Women: including, but not limited to, metabolic, inflammatory, endocrine, autoimmune, gastrointestinal, liver, urologic, ophthalmic, oral, reproductive, musculoskeletal, neurological, psychiatric, addictive, and cardiovascular diseases.

Quality of Life: Develop approaches to management of disease and promotion of wellness that are directed at women and their unique issues.
Women’s Health Research Priorities

2007 Special Emphasis Areas

➢ The NIH is especially interested in fostering research in women’s health in the high priority areas of prevention and treatment…
Examples of Priority Areas of Research in 2007
WOMEN’S HEALTH RESEARCH AND HEALTH CARE FOR THE 21\textsuperscript{ST} CENTURY

Prevention

Especially, behavioral factors…
Figure 1. Proportion of US deaths attributed to selected preventable causes

Adapted from Mokdad et al. JAMA. 2004.
CVD Risk Factors: Preventable and Modifiable

- Cigarette smoking
- Physical inactivity
- Poor diet
- Overweight and obesity
- Diabetes
- High blood cholesterol
- High blood pressure
33% of adult U. S. women are obese, compared with 28% of men... (CDC/USA Today)

Obesity linked to multiple risk factors for heart disease and other conditions
National Institute of Child Health and Human Development

*Understanding Disparities in Growth and Development - Obesity and Nutrition*

- The disparity in obesity is greatest among low-income teens, where the percentage of obese teens is twice that for middle/upper income teens.
- The increase in obesity rates is fueling an epidemic of Type 2 diabetes in Hispanic and Native American teens.
- NICHD plans studies to identify how social and cultural factors interact with food availability to influence the development of dietary habits in infancy through adolescence.
>60% of U.S. women do NOT engage in enough physical activity

>30% of U.S. women not active at all
NO MORE EXERCISE EXCUSES!

WHAT HAPPENED WHEN WE GOT FOUR READERS TO DROP THE ALIBIS AND START WORKING OUT

Without breaking a sweat, most of us can rattle off a hundred reasons for not working out regularly, from the rational to the ridiculous. "I don't have time," "I don't look good in spandex," "I'm not trying to sweat out my perm" are all excuses we've heard, and used, before. But truth be told, for every reason we can dream up not to exercise, there are five reasons why we should make fitness a regular part of our lives. For starters, exercise can help control weight, decrease obesity and reduce the risk of the diseases that hit African-Americans hard, like diabetes, heart disease, hypertension, stroke and cancer.

Still, once you've got those fitness roadblocks in your head, it's hard to get past them. To help you get started, we asked a team of experts for their advice on conquering the most common exercise excuses. Then we asked four readers to test the experts' excuse-busting strategies to see how well they work in the real world.

BY ANNE MARIE O'CONNOR

Self-described workaholic Regina Lynch-Hudson discovered that carving out time for a morning walk toned her legs and improved her mood.
Girls Health Enrichment Multi-site Studies (GEMS)

- This multi-center research program is developing and testing interventions (involving diet, physical activity, and psychosocial and familial influences) to reduce weight gain in African-American pre-pubertal girls in order to prevent future obesity.
- A 2.5-year intervention development and pilot phase will be followed by randomized trials in four sites, each testing a unique intervention.
IRAQ: INSIDE THE OCCUPATION / THE SEARCH FOR SADDAM

WOMEN & HEART DISEASE

Is your biggest worry breast cancer? Think again. ONE OUT OF THREE women will die of heart disease. What you can do to protect yourself
CAMEL Mellow TURKISH BLENDS

SURGEON GENERAL'S WARNING: Cigarette Smoke Contains Carbon Monoxide.

IRAQ: INSIDE THE OCCUPATION / THE SEARCH FOR SADDAM

WOMEN & HEART DISEASE
Is your biggest worry breast cancer? Think again. ONE OUT OF THREE women will die of heart disease. What you can do to protect yourself.
Preventive Behaviors Reduce Risks

- Physical activity reduces heart disease, stroke, diabetes, obesity.
- Cholesterol screening reduces deaths from heart disease.
- Smoking cessation can help prevent lung cancer and CVD.
- Cancer screening can reduce deaths and increase treatment options.
- Blood stool testing reduces deaths from colorectal cancer.
- Prenatal care improves pregnancy outcomes.
Current Research Priority & Health Education:

Prevention, Better Treatments, More Effective Cures
Health Outcomes: Cancer Mortality Among Women in LA County
Among women, incidence rates decreased for:

- Breast cancer
  - 1975 - 105.4
  - 1998 - 140.8
  - 2003 – 124.2/100,000
- Colon and rectal cancers
- Cancers of the uterus
- Ovarian cancer
- Oral cancers
- Cervical cancer
- Stomach cancer
Mammography Headlines: June 2004

‘Too many women are skipping mammograms…”’
IOM Report, June 2004

▶️...becoming harder to get because of growing shortage of providers

▶️...not perfect, BUT no better technology to detect breast cancer early when easier to treat

▶️...only about 60% of women who need routine screening get them because of:
  ▶️lack of insurance
  ▶️ineffective health care system
  ▶️public confusion or fear of cancer screening
WHI E+P Trial Findings, July 2002 (aver. 5.2 yrs)

Risks

- 29% Increase in Coronary Heart Disease
- 41% Increase in Stroke
- 41% Increase in Pulmonary Emboli
- 26% Increase in Breast Cancer

Benefits

- Fracture Reduction
- Colorectal Cancer

STOPPED Early, Clear Harm

Also: DVTs

Stopped 3.3 yrs early
* had 0.4 more yrs of data

*Risks vs. Benefits: Threshold Level

*Adapted from: Writing Group for the Women’s Health Initiative. JAMA. 2002;288:321-333;
Courtesy of M. Stefanick
Among women, incidence rates increased for:

- Non-Hodgkins lymphoma
- Melanoma
- Leukemia
- Lung
- Bladder
- Kidney
- Thyroid

A further decline in 2004 of mortality from breast cancer – 666 fewer women died, probably related to increased detection and better treatment…

From Jemal, Washington Post, 1/18/2007
Increased but now declining incidence, as of latest data, and also... Decreasing mortality...

Improved Options for Management & Treatment:
  Increase in new drugs and drug effectiveness;
  Participation of women in decision making...

&

Survival Increasing:
  Better detection, clinical management, understanding of risk factors, especially genetic, and prevention...
Cervical Cancer

- Caused by a common virus (HPV)
- >95% of women and men exposed to HPV develop no health problems from the virus
- Pap smear is a good screening test if done regularly
- 1st or 2nd cause of cancer deaths among women in many developing countries
- Screens for cervical cancer at age 25 and 45 could prevent 70% of deaths
The incidence of cervical cancer is higher in less developed nations.

Approximately 600,000 cases diagnosed yearly; 200,000 deaths.

From Globocan 2002 Database, www.dep.iarc.fr/globocan/database.htm
CHICAGO - Data from a national study suggests that about one in four U.S. females between the ages of 14 and 59 years may have the sexually transmitted infection human papillomavirus (HPV).

HPV is estimated to be the most common sexually transmitted infection in the United States. However, there have been no data on the prevalence of HPV among women across a broad age range and representative of the U.S. population.

High-risk HPV types can cause cervical, anal, and other genital cancers. High-risk HPV types are detected in 99 percent of cervical cancers, and worldwide approximately 70 percent of cervical cancers are due to HPV types 16 and 18.

A highly effective vaccine against HPV types 6, 11, 16, and 18 was licensed in June 2006 and recommended for routine use in females age 11 to 12 years in the United States.
Prophylactic HPV/Cervical Cancer Vaccine

Rationale

• Vaccines to prevent other viral diseases are among the most successful and cost effective public health interventions, e.g., smallpox, polio, and measles vaccines

• HPV infection is a necessary cause of cervical cancer

• Preventing sexually transmitted HPV infection should prevent cervical cancer

BUT… even with vaccine – PAP testing must continue…
There are still many unanswered questions

- How long does protection last? Is boosting required & when?

- Are there additional vaccine effects?
  - cross-protection
  - secondary therapeutic effects

- What are the mechanisms of protection and failure?

- Are there immunological surrogates of protection that can be used to accelerate the evaluation of second generation vaccines?

- Does the vaccine work in men?

- What is the cost-effectiveness of vaccination relative to other established methods of prevention?
Uterine Leiomyomas (Fibroids)
African American women have more fibroid disease.
Uterine leiomyomas, commonly called fibroids, are a major health concern for women of reproductive age, especially African American women.

- NIEHS is supporting a study to learn more about why some fibroids grow to become problems while others do not cause problems.
- This study will evaluated fibroid over time by MRI and look at the relationship between fibroid growth and symptoms or outcome. The researchers will also identify markers that may be related to growth and examine the hormone and lifestyle factors that may be related to fibroid growth.
Basic Research on the Molecular Cause of Fibroids

Fibroids and keloids share similar features

Myometrium  Leiomyoma  Keloid

Light Microscopy

Electron Microscopy
ORWH Women’s Health Seminar Series
Women’s Health Research for the 21st Century
VIOLENCE AGAINST WOMEN
Effects of changing family structures, poverty, and lack of health care or insurance...

ELDER OPTIONS AND CARE GIVING
Women as the Portal to Family Health
Successful Aging

Making Informed Decisions
DIVERSITY IN HEALTH CARE: SCIENTISTS, ADMINISTRATORS, HEALTH CARE PROFESSIONALS, ADVOCATES, LEGISLATORS
Recruitment, Retention, Reentry, & Advancement of Girls & Women & Minorities in Biomedical Careers and Health Care Professions

The ORWH Mandate
NEEDED: Diversity of Women & Men in & about Science and Health Care

Source: Unique Opportunities® The Physician’s Resource
NIH Launches New Web Site to Promote the Advancement of Women in Biomedical Research Careers

The National Institutes of Health (NIH) announces a new Web site, “Women in Biomedical Careers,” (http://womeninscience.nih.gov) that provides information about the recently created NIH Working Group on Women in Biomedical Careers. The Working Group was appointed by NIH Director Elias A. Zerhouni, M.D. to develop innovative strategies and tangible actions to promote the advancement of women in biomedical research.

"The Web site is an important new resource that will highlight the activities of the NIH Working Group on Women in Biomedical Careers and provide information about NIH career development programs," says Vivian W. Pinn, M.D., NIH Associate Director for Research on Women’s Health, and co-chair of the Working Group.

The NIH Working Group on Women in Biomedical Careers was created to respond to the challenges issued to federal funding agencies by the National Academies report, Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering, and also to promote the career advancement of women in the intramural research community. The Web site provides information about the Working Group, including the list of members, the subcommittee tasks and members, and the initial charge.

The Web site provides links to useful career development resources from the NIH Offices of Intramural Research, Extramural Research, and Research on Women’s Health. The Web site also provides links to career development and mentoring resources from professional societies and other organizations, including the Association for Women in Science and the Association of American Medical Colleges.

The NIH invites you to explore http://womeninscience.nih.gov and contact us at womeninscience@nih.gov.
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Building Multicultural Women’s Health
Setting an Agenda

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to the Office of Women’s Health
Of Los Angeles County
And to the men and women
Who are supporting and directing its efforts
To improve the health of a
Multicultural society of women,
And their families…
Website URL: http://orwh.od.nih.gov/