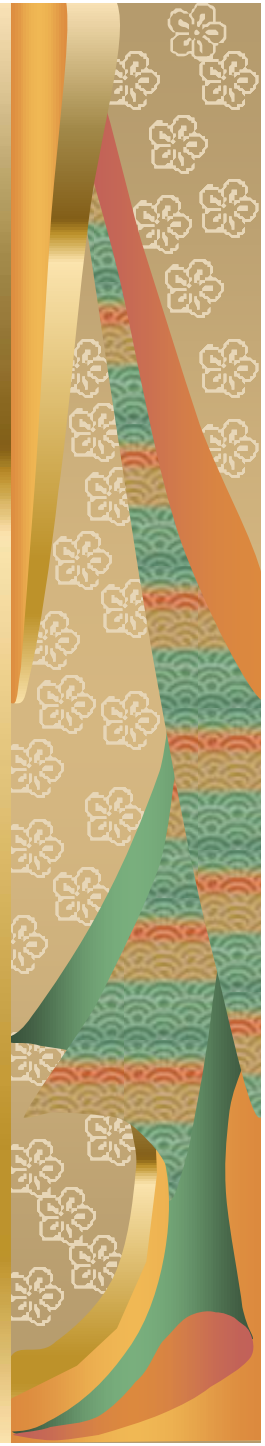
Why Women of Color are Needed in Clinical Trials

Renée Y. Carter, MD
Senior Fellow and Medical Advisor for the National Research Center for Women & Families
Washington, DC

Disparities: Diseases

- In 2003, African-American women were 36% more likely to die from breast cancer, compared to non-Hispanic white women
- In 2003, Hispanic women were 2.2 times as likely as non-Hispanic white women to be diagnosed with cervical cancer
- In 2002, Hispanic women were 1.6 times as likely to have started treatment for end-stage renal disease related to diabetes as compared to non-Hispanic white women
- African-American females were 1.4 times as likely to die from heart disease as non-Hispanic white women

http://www.omhrc.gov/templates/browse.aspx?lvl=1&lvlID=5

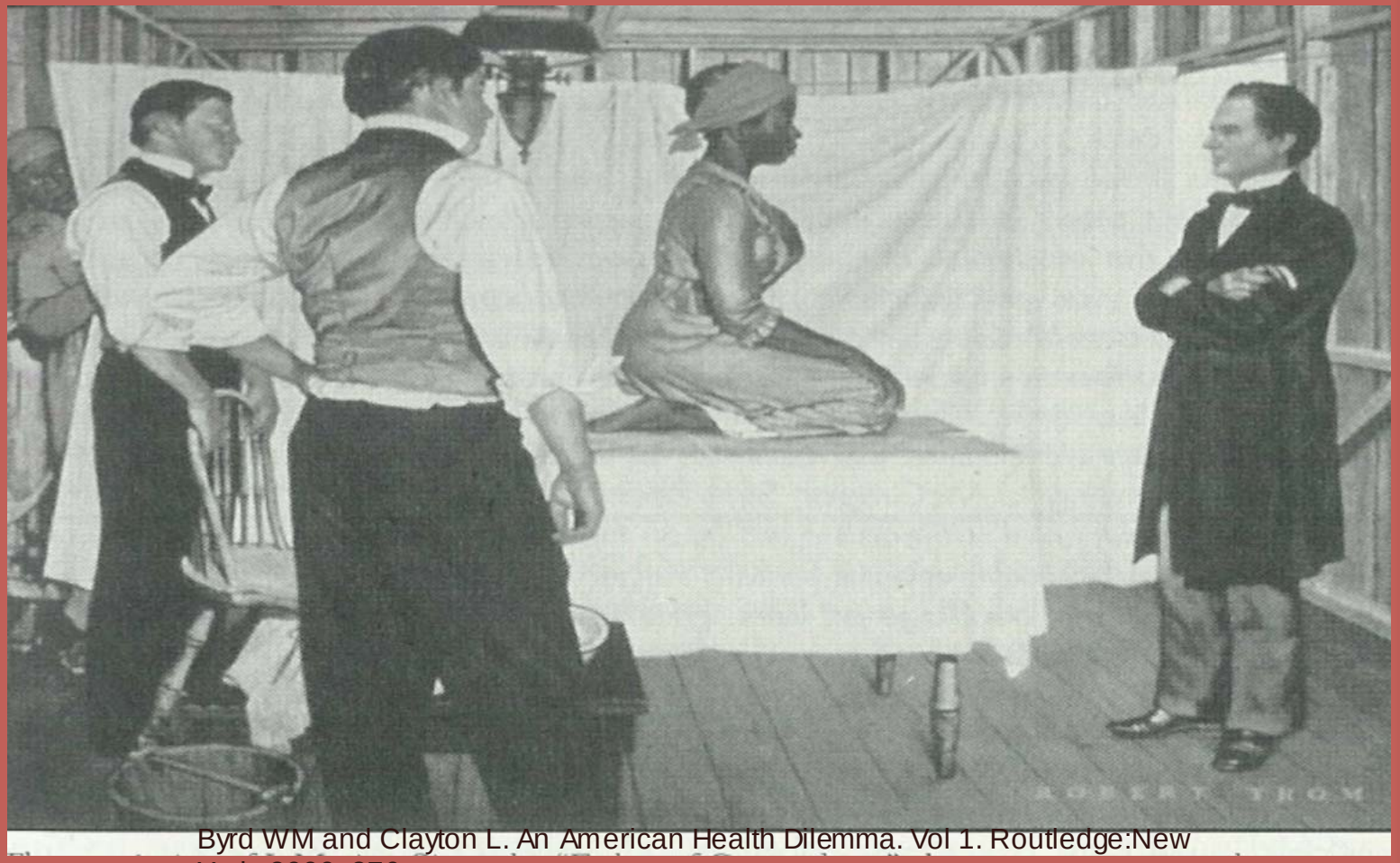


Disparities: Drug reactions

- In treating tuberculosis, Chinese and Japanese metabolize Isoniazid faster, compared to whites
- In treating congestive heart failure, Angiotensin-converting enzyme inhibitors alone are not as effective among African Americans
- Many Asians may have a weaker response to antidepressants
- In treating Alzheimer's disease, Tacrine is less effective in African Americans and Africans

History

Experimentation During Slavery



Byrd WM and Clayton L. An American Health Dilemma. Vol 1. Routledge:New York. 2000: 276

The Tuskegee Study of Untreated Syphilis

http://www.brown.edu/Courses/Bio_160_Projects2000/Ethics/TUSKEGEESYPHILISSTUDY.html

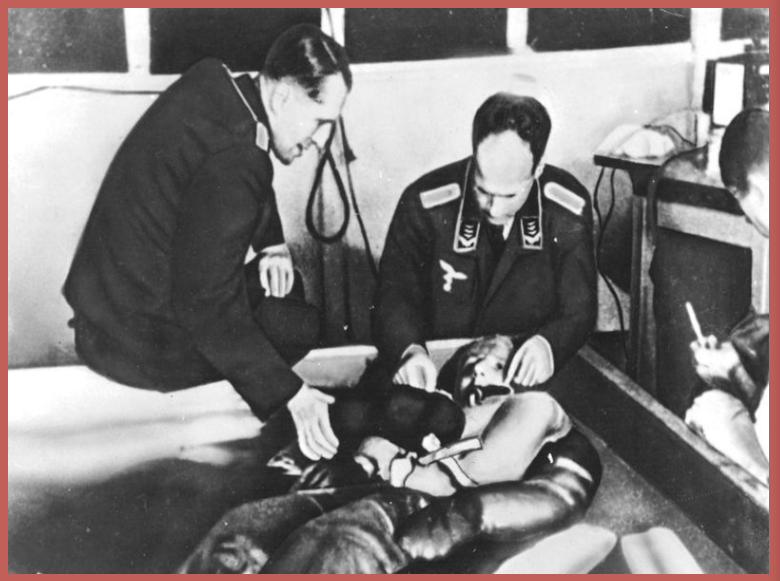
- Sponsored by the US Public Health System
- 40 year study with unknowing subjects
- Stopped only after public outcry

Ethical Beginnings

"And what, prithee, thinks our Royal Ethics Commissioner of our little plan?"

The Nuremberg Code

- The voluntary consent of the individual is absolutely essential
- The experiment should be conducted in a way to avoid all unnecessary physical and mental suffering
- The degree of risk to be taken should never exceed the determined humanitarian importance of the problem to be solved by the experiment
- During the course of the experiment, the scientist in charge should be prepared to terminate the study…that a continuation of the experiment will likely result in injury, disability, or death of the subject



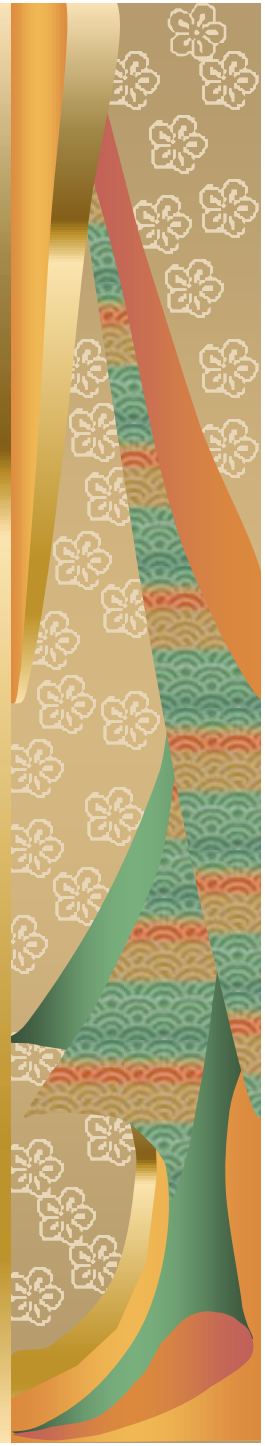
Hanauske-Abel, Hartmut M. "Not a Slippery Slope or Sudden Subversion: German Medicine and National Socialism in 1933." *BMJ British Medical Journal* 313(7070): 1453-1463. 7 December 1996.

The Belmont Report

1. Respect of Persons
2. Beneficence
3. Justice

45 CFR 46

- Regulations issued by DHHS
- Effective 1991
- Apply instruction and guidance for the protection of human research subjects
- Governs Institutional Review Boards (IRB)



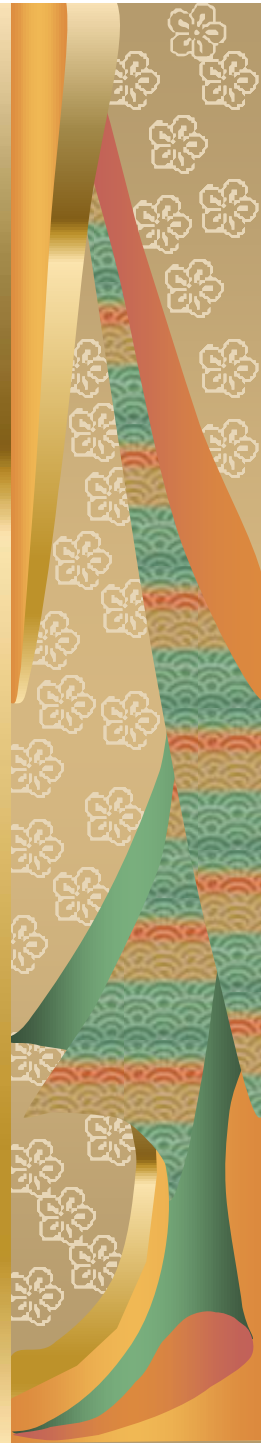
Institutional Review Board (IRB)

- Regulated by the Office for Human Research Protections (OHRP)
- Primary responsibility is to protect the rights and welfare of humans who are the subjects of research
- Any institution that receives federal funds for research that uses human subjects
- Follow ethical principles outlined in the Belmont Report
- Diverse membership- gender, race, and cultural background

National Policy

The National Institutes of Health (NIH)

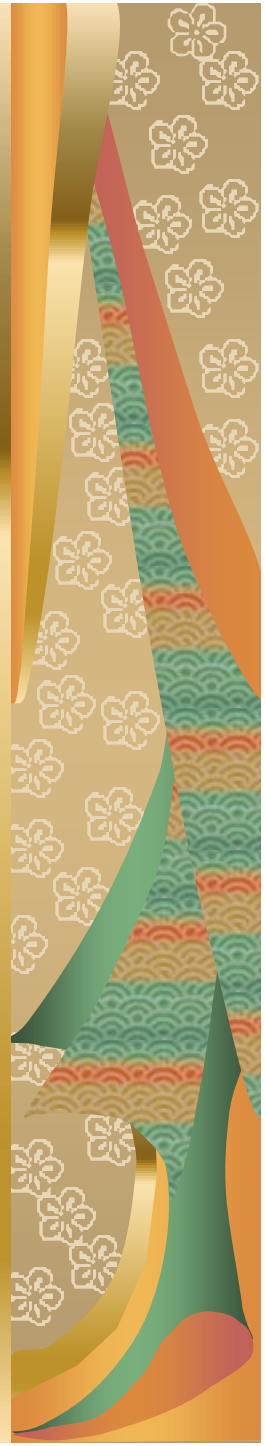
- NIH Revitalization Act 1993
  - Ensured the inclusion of women and minorities in all phases of clinical research projects
  - Established the Offices of Research on Women's Health and Research on Minority Health
  - Pertained to Phase III trials
  - Stipulated that the NIH will not approve any proposal for clinical research funding which did not provide information on how the investigator would comply with these requirements



NIH Revitalization Act 1993 (cont)

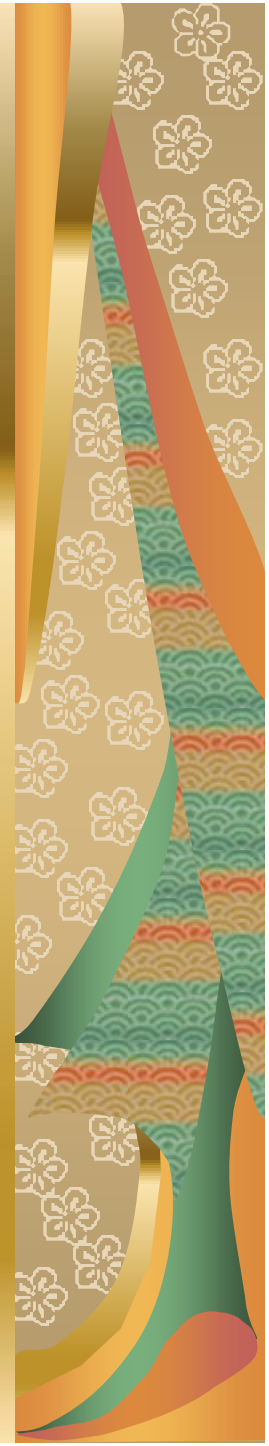
But…. the inclusion requirement of women and minorities did not apply if it was considered inappropriate

- With respect to the health of the subjects
- With respect to the purpose of the research (for example, women can be excluded from prostate cancer trials)
- If scientific data demonstrates no significant difference in effects on women or minorities with respect to the intervention being studied
- Other situations identified by the NIH Director



The Food and Drug Administration (FDA)

- FDA Modernization Act 1997
  - Fell short of mandating that racially diverse participants be included in clinical trials
- 1998 Regulation of Investigational New Drug Applications and New Drug Applications



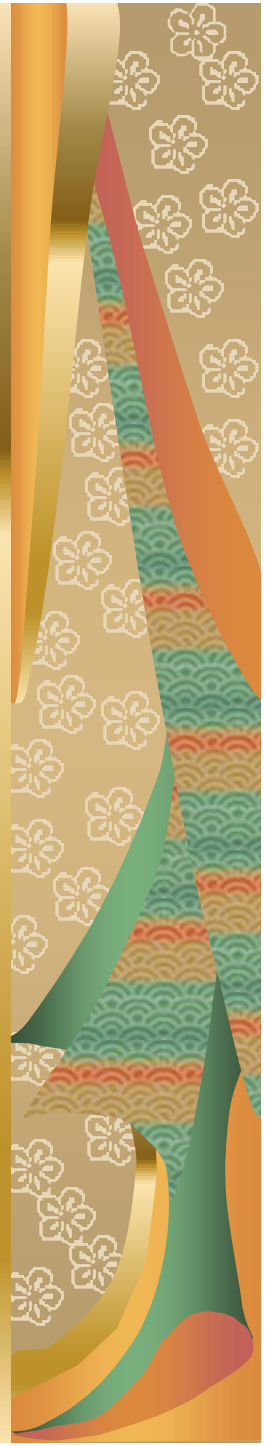
Centers for Disease Control and Prevention

- Include women and members of racial and ethnic groups in research
- Identify gaps in information on health disparities and encourage research to address these disparities
- Address English proficiency and cultural differences as targets for recruitment programs
- Stress that investigators form partnerships with communities which research subjects belong

Reasons Given For Not Participating In Clinical Research

…by the Potential Subject

- A lack of trust in the health care system and researchers
- Research is more for the "sake of advancing the researcher's career"
- Not referred to participate in clinical trials by physician
- Unable to access enrollment information for active clinical research trials
- Informed consent is a way to provide legal protection to physicians- not a guarantee of the research subject's rights



…by the Potential Investigator

- Poor people are “unlikely to keep clinic appointments”
- Illegal drugs used by research subjects may interfere with the effects of the experimental AIDS treatments
- Need greater number of women or minority subjects for a reliable study
- Not safe to use women at childbearing age

Reasons Women of Color are Needed In Clinical Trials

- Avoid selection bias and strengthen reliability of the clinical study
- Increase the ability to generalize research results
- Decrease, and eventually eliminate, health disparities
- Identify positive and negative effects of treatment that are particular in communities of color
- Ethical abuses in human research are less common today

Recommendations To Increase Participation

- Require the FDA to include diversity in clinical trials and in sufficient numbers
- The subject and family members should be reminded that all stages of the study are voluntary and that they can withdraw at any time
- Honest and respectful communication between research personnel and subject
- Assurance that the subject has full knowledge of the procedures and outcomes of the study

Recommendations To Increase Participation (cont)

- Training research staff in the cultural nuances of communities of color
- Over-recruiting of women of color to meet study goals
- Have minorities on the research team and in leadership positions
- Encourage physicians to refer their patients for inclusion in clinical research trials
- Involve lay leaders from communities of color in local IRB activities

Thank You!!

References

Byrd WM, Clayton L. An American Health Dilemma. Vol 1. Routledge:New York. 2000.

British Medical Journal. http://www.cirp.org/library/ethics/nuremberg/.

National Institutes of Health. *Regulations and Ethical Guidelines.* http://www.nihtraining.com/ohsrsite/guidelines/belmont.html

Bustillos D. Surveying the Policy Landscape for Eliminating Disparities in Clinical Trials. http://www.bcm.edu.edict/PDF/Policy_Landscape.pdf.

http://orwh.od.nih.gov/inclusion/revitalization.pdf.

Wechsler J. Sex and Race in Clinical Trials. *Applied Clinical Trials.* August 2004.

Baird KL. The New NIH and FDA Medical Research Policies: Targeting Gender, Promoting Justice. *Journal of Health Politics, Policy and Law.* 1999 24(3)540.

Food and Drug Administration Modernization Act of 1997. http://www.fda.gov/CDER/guidance/105115.htm#SEC.%20115.

CDC.Inclusion of Women and Racial and Ethnic Minorities in Research. http://www.cdc.gov/od/foia/policies/inclusio.pdf.

Branson RD et al. African American's participation in clinical research: importance, barriers, and solutions. *The American Journal of Surgery.* 2007. 193:32-39.

Kolata G. In Medical Research Equal Opportunity Doesn't Always Apply. *The New York Times*. March 10, 1991.

Smith YR et al. Perceptions of Clinical Research Participation among African American Women. *Journal of Women's Health.* 2007. 16(3): 423-427.

Sullivan PS et al. Enrollment of Racial/Ethnic Minorities and Women with HIV in Clinical Research Studies of HIV Medicines. *Journal of the National Medical Association.* 2007.

References

Burroughs VJ et al. Racial and Ethnic Differences in Response to Medicines: Towards Individualized Pharmaceutical Treatment. *Journal of the National Medical Association*. 2002. 94: (Supp)10:1-26.

Durand JB. Heart Failure Management in African Americans: Meeting the *Challenge.The Journal of Clinical Hypertension* 6 (s4), 42–47.

Lin KM. Biological differences in depression and anxiety acrossraces and ethnic groups. *Journal of Clinical Psychiatry* .2001.62: (Suppl) 13 :13-19

Byrd WM, Clayton L. An American Health Dilemma. Vol 1. Routledge:New York. 2000.

http://www.nihtraining.com/ohsrsite/guidelines/belmont.html

Bustillos D. Surveying the Policy Landscape for Eliminating Disparities in Clinical Trials. http://www.bcm.edu.edict/PDF/Policy_Landscape.pdf.

http://orwh.od.nih.gov/inclusion/revitalization.pdf.

Wechsler J. Sex and Race in Clinical Trials. *Applied Clinical Trials.* August 2004.

Baird KL. The New NIH and FDA Medical Research Policies: Targeting Gender, Promoting Justice. *Journal of Health Politics, Policy and Law.* 1999 24(3)540.

Food and Drug Administration Modernization Act of 1997. http://www.fda.gov/CDER/guidance/105115.htm#SEC.%20115.

CDC.Inclusion of Women and Racial and Ethnic Minorities in Research. http://www.cdc.gov/od/foia/policies/inclusio.pdf.

Branson RD et al. African American's participation in clinical research: importance, barriers, and solutions. *The American Journal of Surgery.* 2007. 193:32-39.

Kolata G. In Medical Research Equal Opportunity Doesn't Always Apply. *The New York Times*. March 10, 1991.

Smith YR et al. Perceptions of Clinical Research Participation among African American Women. *Journal of Women's Health.* 2007. 16(3): 423-427.

Sullivan PS et al. Enrollment of Racial/Ethnic Minorities and Women with HIV in Clinical Research Studies of HIV Medicines. *Journal of the National Medical Association.* 2007.