



Assessment of NIH Research on Women's Health

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History: Women's Health Under-researched

Examples highlighting harm from lack of inclusion:

- Cardiovascular disease in women (generalization)
- HIV medications in early trials
- Thalidomide
- Bendectin
- Zika
- COVID vaccination
- Many/most medications (off-label use)

Progress has been made....

- NIH Revitalization Act
- Reclassifying pregnant people from “vulnerable” to “scientifically complex”
- FDA PLLR
- PRGLAC: recommendations and implementation plan

Additional Considerations

Pregnant women often excluded from trials investigating complex conditions

- Pregnancy occurring in older ages; higher prevalence of complex conditions and comorbidities
- Short-sighted: excluding women from trials that may identify interventions that could lead to better outcomes.....

Contraception

- Often out of proportion to actual risk; should be tailored to actual risk
- Mandating a specific type: inappropriate based on ethical principles (autonomy, justice, beneficence)
 - And not necessary clinically....

Additional Considerations

Parental/partner consent

- Rarely appropriate
- Not ethically justified; requirement creates an unethical barrier
- Federal laws exist: specific requirements listed for non-gestational parent

Fetal risk

- Clearly an important consideration (but so is maternal risk/benefit...)
- Trying to reduce fetal risk could paradoxically increase risk by not considering interventions that would improve fetal/maternal outcomes
- “0” fetal risk is not attainable, but if universally exclude any potential fetal risk, then maternal risk increases
- Ethical obligation to confront the challenges related to inclusion of pregnant patients to address maternal health and fetal safety

Additional Considerations

- Pregnancy involves anatomic and physiologic differences
- **REQUIRES** involvement in research, not exclusion
 - Required to determine if assessment/intervention being studied is applicable in pregnancy
- Considerations:
 - Expansion of blood volume; physiologic anemia
 - Hormonal impacts
 - Variations according to trimester
 - Immunologic changes
 - Impact of the fetus and placenta (including transplacental transfer)
- **NOT** a reason to exclude, but figure into study design

Additional Considerations – Military and Veterans

Additional Risks

Higher rates of PTSD, intimate partner violence, trauma (including sexual)

Higher rates of physical and psychological morbidities

Higher rates of adverse maternal mental health conditions

Higher rates of substance use disorders

Less social support

Limited screening and contraceptive access particularly when deployed or in remote settings

Ethical Considerations

- Justice: requires sufficient number of women be included to determine if results are applicable
 - Need for representative sample of women, including women of color and different SES
- Autonomy: patients (including pregnancy and lactating people) are capable of making their own decisions
- Informed consent: important
 - Apply the same principles as for others
 - Relevant risks and benefits; in pregnancy – not just fetal risk
 - Obligated to address “more than minimal risk” but to consider the patient and fetus

Gaps/Additional Research Needed – Medications!



Medication use in pregnancy/lactation is common

Medications for chronic conditions increasing

Most medications not adequately studied in pregnancy

- Animal studies provided basis for many medications' pregnancy risk

Considerations:

- Drug safety and efficacy
- Physiologic variations: impact absorption, distribution, metabolism, elimination
- Pharmacokinetics and pharmacodynamics
 - Impact on dosing, frequency

PLLR: requires updated labeling

- Step in the right direction

Gaps/Additional Research Needed

- Maternal morbidity and mortality
 - Multifactorial; no single etiology or “fix”
 - Visit data lacking due to bundled billing codes
 - Continued investigation needed to identify multifactorial approach to reduce adverse outcomes
 - Continued investigation to reduce disparities
 - Lack of uniform definition of severe maternal morbidity: barrier to data collection/research
- Immunizations: to increase uptake and address hesitancy

Gaps/Additional Research Needed



Cardiovascular disease

Risk profiles, unique clinical presentation, response to interventions



Prevention of chronic disease following pregnancy-related conditions

CV disease (hypertension); diabetes (gestational diabetes)
Optimal screening and prevention strategies



Prenatal genetic screening and diagnosis

Rapidly expanding technology
Clinically-relevant information needed to interpret test results and provide counseling

Gaps/Additional Research Needed

Mental health, including maternal mental health

- Significant progress made.....
- Research needed to further identify most efficacious interventions, including the role of telehealth

Environmental impacts on pregnancy and lactation

- Chemicals, toxins, climate change

Dense breasts

- New reporting requirements, but clinical challenges remain
- Risk stratification, adjunctive screening

Gaps/Additional Research Needed

- Addressing misinformation
 - Example: COVID vaccination, abortion care
- Reproductive health in the LGBTQ+ community
 - Appropriate preventive strategies, evaluation, and treatments
 - Address disparities in care, outcomes
- Contraceptive access, including OTC options
- Obesity prevention
- Endometriosis
- Preventive care visits: efficient delivery of multiple, separate preventive services
 - Extend beyond a single visit

Gaps/Additional Research Needed – Cancer Care

- Risk assessment tools and optimal screening for early-onset breast cancer
- Address disparities in cancer outcomes, particularly uterine cancer
- Risk stratification and screening/diagnostic strategies for ovarian cancer
 - Particularly early-onset and patients with genetic risk
 - Further investigation of opportunistic salpingectomy and risk reduction
- Optimize fertility preservation for early-onset breast and GYN cancers

Gaps/Additional Research Needed

Health Equity !!!!!!!!!!!!!!!

Medical Society Considerations

- Advocate for research!!!
- Advocate for appropriate definitions of “minimal risk”
 - Educate regarding what constitutes “more than minimal risk”
- Advocate for adaptation of minimal risk techniques in study design
 - Including collaborative networks
 - Include consideration of pharmacokinetics and pharmacodynamics
- Identify research priorities

Medical Society Considerations

- Educate clinicians and patients about benefits to recruitment and participation
 - Address myths and misinformation about trials
 - Promote registries
- Advocate for implementation of PRGLAC recommendations
- Advocate for payment reform
 - Current CPT global maternity code – bundles entire episode of care
 - Provision of care, including full breadth of evaluation and treatment for patients with comorbidities and health-related social needs unknown

ACOG's Efforts

- Advocacy for inclusion of women, including pregnancy and lactating women, in clinical research
- ACOG Policy Priority
- Standing Member: Executive Committee of the Friends of the NICHD
- Founding Member: Coalition to Advance Maternal Therapeutics
- Member: PRGLAC Implementation Working Group

ACOG's Efforts – Advocacy Priorities

- Increased federal funding for women's health research
- Increased representation of women in research
- Reduction in barriers to participate in trials
- DoD Congressionally Directed Medical Research Programs
 - Including advanced ovarian cancer research
- Increased research inclusion of, and focus on, underserved populations
- Addressing disparities in outcomes and investigating systemic racism in clinical outcomes
- Maternal morbidity and mortality

ACOG Resources

- Clinical guidance
 - Ethics related to inclusion of women in research
 - Care for women in the military and veterans
- 2024 Policy Priority: Commitment to Policy Action
- Numerous advocacy efforts:
 - Engagement with governmental agencies
 - Policy statements
 - News statements, media releases
- Patient education resources
- Clinician education resources