

Elizabeth Barr, Ph.D.  
Office of Research on Women's Health  
6707 Democracy Boulevard  
Suite 400  
Bethesda, MD 20817

## **Re: Request for Information: Inviting Comments to Inform the Women's Health Consensus Conference**

Dr. Barr:

The Society for Women's Health Research (SWHR) is pleased to offer comments in response to the Request for Information (RFI): Inviting Comments to Inform the Women's Health Consensus Conference.

SWHR—a 30-year-old national nonprofit dedicated to promoting research on biological sex differences in disease and improving women's health through science, policy, and education—is encouraged that Congress has directed the National Institutes of Health (NIH) to evaluate research related to women's health. We are also pleased that the Office of Research on Women's Health (ORWH), through this RFI, is soliciting input on the current state of women's health research, including gaps and opportunities. SWHR has long advocated for women's health to be a national priority, reflected through robust funding of women's health research at the federal level.

As part of its mission, SWHR works to ensure that the field of women's health research considers the unique needs of women throughout the lifespan and across all areas of health care. Therefore, while we recognize and appreciate the great research needs associated with the areas identified within the RFI (maternal morbidity and mortality, chronic conditions, and stagnant cervical cancer rates), we are concerned that the concentration on these areas may inadvertently shift the focus from other, equally important areas of research on conditions that are unique to or that may differently or disproportionately affect women. While we understand that Congress has identified these key topics for discussion, SWHR encourages ORWH to broaden its focus to incorporate this lifespan approach and to consider the full continuum of research—from basic to clinical to public and population health research.

Additionally, there are critical high-level structural considerations—such as defining women's health research and ensuring research is representative of the patient population—that would have tremendous bearing on the ability to assess and advance the current state of NIH-supported women's health research:

### **Better Defining Women's Health Research**

The NIH defines women's health research as the study of diseases unique to women, diseases with higher prevalence in women, or diseases that present differently in women than in men.<sup>1</sup>

---

<sup>1</sup> Schiebinger L. Women's health and clinical trials. *J Clin Invest.* 2003;112(7):973-977. doi:10.1172/JCI19993

Yet, as Marcia Inhorn notes in her article, “Defining Women’s Health: A Dozen Messages from More than 150 Ethnographies,” the NIH categorization of women’s health research priorities “almost entirely neglects the sociocultural matrix in which women’s ills develop, including in the context of poverty, patriarchy, and other life stresses...” and does not include many concessions to behavioral research.<sup>2</sup> Contrastingly, as the Women First Research Coalition (of which SWHR is a member) notes in its RFI comments, there is concern that NIH Research, Condition, and Disease Categorization (RCDC) system data may overrepresent the amount of research being conducted on women’s health.

There is clearly confusion about what women’s health research entails and therefore, how research across NIH Institutes and Centers is categorized. As ORWH looks to address gaps and opportunities to advance women’s health research, a key consideration should be how women’s health research is defined. A methodology for properly defining women’s health that removes variability in current definitions would provide greater insight and understanding into the true state of women’s health research across the federal government. This will better equip NIH and its stakeholders, including the intramural and extramural research community, to review current research and to identify and work to fill gaps.

### **Ensuring Research Reflects the Range of Issues Affecting Women**

Significant gaps remain in our understanding of health conditions both specific to or that disproportionately or differently affect women, but according to a July 2021 article in the *Journal of Women’s Health*, “There is little in the published literature when it comes to gender disparity in the allocation of research funds among diseases.”<sup>3</sup> Article author Dr. Mirin, by performing an analysis of funding by the NIH, found that a disproportionate share of NIH resources is applied to diseases that primarily affect men. As it considers which applications to award funding, NIH should consider placing additional emphasis on disease burden so that the agency can continue in its efforts to be responsive to the issues most afflicting the full population.

There is also, historically, underrepresentation of women in health studies and clinical trials. SWHR appreciates NIH’s work to address this through its Policy on the Inclusion of Women in Clinical Trials. However, there has been an over-reliance on male animals and cells in basic biomedical research that could affect our understanding of sex influences on health processes and outcomes.<sup>4</sup> While NIH has taken important steps to rectify this through its Policy on Sex as a Biological Variable (SABV), SWHR encourages taking steps to improve the integration of SABV into research. This includes developing incentives and requirements to motivate the scientific enterprise, offering additional trainings for researchers on incorporating and conducting data analysis on SABV in clinically-relevant research studies, and encouraging

---

<sup>2</sup> Inhorn, M.C. (2006), Defining Women's Health: A Dozen Messages from More than 150 Ethnographies. *Medical Anthropology Quarterly*, 20: 345-378. <https://doi.org/10.1525/maq.2006.20.3.345>

<sup>3</sup> Mirin AA. Gender Disparity in the Funding of Diseases by the U.S. National Institutes of Health. *J Womens Health (Larchmt)*. 2021 Jul;30(7):956-963. doi: 10.1089/jwh.2020.8682. Epub 2020 Nov 27. PMID: 33232627; PMCID: PMC8290307.

<sup>4</sup> NIH Policy on Sex as a Biological Variable. National Institutes of Health. <https://orwh.od.nih.gov/sex-gender/nih-policy-sex-biological-variable>

medical journals to establish and honor review criteria for the inclusion of SABV in publication policies and guidelines. These policies and mechanisms are elucidated in a 2021 article in the [Journal of Clinical Endocrinology and Metabolism](#). Integrating these policies will improve outcomes by ensuring research is developed in an intentional, inclusive way as well as positively affecting the research's potential to be scaled up and impactful.

Beyond these broader, overarching considerations, SWHR appreciates the opportunity to weigh in on the three RFI-identified areas of maternal morbidity and mortality, the rising rates of chronic debilitating conditions in women, and stagnant cervical cancer survival rates. While SWHR encourages viewing women's health throughout the lifespan, we recognize the critical research needs within these three defined areas and their impact on women's health and outcomes overall.

### **Maternal Morbidity and Mortality**

Maternal mortality rates in the United States are higher than anywhere else in the industrialized world, with a maternal mortality ratio of 20.1 per 100,000 live births.<sup>5</sup> These deaths disproportionately occur among non-Hispanic Black women (40.8 deaths per 100,000 live births) and non-Hispanic American Indian/Alaska Native women (29.7 deaths per 100,000 live births), 3.2 and 2.3 times the rate for non-Hispanic white women (17.9).<sup>6</sup> These health disparities therefore represent a critical research need in the United States.

There is much to be understood about pregnancy and maternal health. Unfortunately, there is little incentive to conducting research during this time in a woman's life due to barriers that exist for including this population in clinical research. In fact, most of the research conducted during this time is funded by the federal government. We urge ORWH to examine how incorporating the [recommendations of the Task Force on Research Specific to Pregnant and Lactating Women \(PRGLAC\)](#) and supporting their implementation could further research in this area.

Two other areas that would be well-served by additional research include research into the year following birth as well as pregnancy's role as a catalyst for other health conditions to manifest.

The "fourth trimester" through the year following childbirth is a time of great physical and emotional change for mothers and represents a period when women can experience worse maternal complications. The rise in maternal morbidity and mortality is also accompanied by large and persistent disparities by race and ethnicity. Not only do most maternal deaths now occur postpartum,<sup>7</sup> but half of the more than 700 annual deaths related to pregnancy or pregnancy complications are considered preventable.<sup>8</sup> Additional research to understand and

---

<sup>5</sup> Hoyert D. Maternal Mortality Rates in the United States, 2019. Health E-Stats, National Center for Health Statistics. <https://www.cdc.gov/nchs/data/hestat/maternal-mortality-2021/maternal-mortality-2021.htm>

<sup>6</sup> Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths, Centers for Disease Control and Prevention. 2019. <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>

<sup>7</sup> Creanga AA, Syverson C, Seed K, Callaghan WM. Pregnancy-Related Mortality in the United States, 2011-2013. *Obstet Gynecol*. 2017;130(2):366-373. doi:10.1097/AOG.0000000000002114

<sup>8</sup> Howell EA. Reducing Disparities in Severe Maternal Morbidity and Mortality. *Clin Obstet Gynecol*. 2018;61(2):387-99. doi: 10.1097/grf.0000000000000349. PMID: 29346121.

reduce pregnancy-related mortality, including why the disparities in this space are so prevalent, is vital.

Additionally, SWHR would encourage further exploration into research on a mother's transition back to primary care, touching upon physical, social, and psychosocial well-being. While there have been discussions surrounding optimizing postpartum care and support, additional research into the transition period could provide valuable evidence as policies and guidelines on this topic are considered.

Tying together the issues of maternal morbidity and mortality and the rising rates of chronic debilitating conditions, touched upon in the section below, is a research opportunity surrounding pregnancy's association with other health conditions. Growing evidence shows that certain pregnancy complications can predict the future risk of chronic diseases in women, including cardiovascular disease, diabetes, and breast cancer.<sup>9</sup> To ensure the best possible long-term outcomes for women, additional research is needed to identify risk and to attempt to prevent future negative consequences and health care burden of these chronic conditions.

### **Rising Rates of Chronic Debilitating Conditions**

Chronic diseases are among the most prevalent and costly health conditions in the United States, and they account for more than two-thirds of U.S. deaths.<sup>10</sup> They also present a growing challenge to women's health.

SWHR has hosted a number of roundtable discussions and published papers on chronic conditions, including [autoimmune skin conditions](#), [uterine fibroids](#), [osteoarthritis](#), and [endometriosis](#). In each of these roundtables, interdisciplinary working groups identified gaps and unmet needs in research. Select research gaps identified across each of these areas include:

- **Autoimmune Skin Conditions:** The impact of conditions like alopecia areata, atopic dermatitis, and psoriatic arthritis on mental health plays a large role in patient quality of life. For a better understanding of the overall burden of disease, research is needed on how these conditions affect the psychosocial well-being of both patients and caregivers. Additionally, research on the biology of autoimmune skin conditions is needed to determine why women have different treatment outcomes and remission rates than men.
- **Uterine Fibroids:** A woman's decision about which fibroid treatment to pursue—whether medical, non-surgical, or surgical—can be complicated, especially when considering options that may affect fertility. Patients would benefit from research into biomarkers, imaging assessments, and risk-based algorithms, as well as research into less invasive treatment options, without fertility-related drawbacks. There is also a need for research into the basic biology of the disease and the genetic mutations that eventually cause fibroids, in addition to research to determine why women of color are

---

<sup>9</sup> Rich-Edwards JW. Reproductive health as a sentinel of chronic disease in women. *Women's Health (Lond)*. 2009 Mar;5(2):101-5. doi: 10.2217/17455057.5.2.101. PMID: 19245346.

<sup>10</sup> Chronic Disease Prevention and Management, National Conference of State Legislatures. <https://www.ncsl.org/documents/health/chronicdtk13.pdf>.

disproportionately affected by uterine fibroids, including why they have more severe symptoms despite relative incidence.

- **Osteoarthritis:** There are several gaps in osteoarthritis (OA) research, including the need to better understand normal joint aging and OA progression and how it may differ for men and women; the inclusion of female animals and disease models in basic research that would improve the consideration of SABV; more accurate assessment tools for OA pain and function; the identification of which pain mechanisms are contributing to an individual's pain experience in OA and treatments tailored to those specific pain mechanisms; and opportunity in multimodal and nonpharmacological treatment approaches.
- **Endometriosis:** Research into the basic biology of endometriosis and its causes is greatly needed to speed diagnosis, as is a better understanding of the relationship between endometrial lesions and pain and/or infertility. Additionally, there is a need for new, noninvasive diagnostic tools. With endometriosis, there are several quality-of-life considerations, including pain management and fertility considerations. Future treatments that are patient-centric and multidisciplinary—focusing on the patient as a whole, rather than on the individual's symptoms—would be beneficial.

### Stagnant Cervical Cancer Survival Rates

While there have been tremendous advances in cervical cancer research, including the human papillomavirus (HPV) vaccine and screening guidance, the survival rates of cervical cancer have been stagnant for years.<sup>11</sup> Although cervical cancer has well-developed guidelines for prevention, diagnosis, and treatment, it is still the fourth most commonly occurring cancer in women globally.<sup>12</sup> With cervical cancer being a highly preventable and treatable disease, it is critical that the United States increase HPV vaccine uptake, increase cervical cancer screening and follow up, and address stigma around HPV and related diseases.

Despite advancements in knowledge to date, funding on cervical cancer remains limited. At the National Cancer Institute, of 18 cancers investigated in a recent study, cervical cancer ranked 12/18 in funding allocation.<sup>13</sup> Additional research funding is needed in areas, such as the efficacy of targeted therapies and translational research on the treatment of advanced cervical cancer. The implementation of diagnostics to detect HPV-related diseases could also be improved.

Additionally, during a [2020 SWHR roundtable discussion](#), panelists noted that health care providers have been slow to incorporate women's preferences into management of their HPV-related disease and that a lack of understanding about how to discuss, diagnose, and treat these diseases has prevented many individuals from receiving efficient and effective care. Experts also stressed that for HPV-related precancers, the majority of treatment options are surgical, and the effects of these surgical treatments on women's longer-term sexual health are not well-

---

<sup>11</sup> Siegel, R., Miller, K., Jemal, A. Cancer statistics, 2020. CA: A Cancer Journal for Clinicians, 08 January 2020. <https://doi.org/10.3322/caac.21590>

<sup>12</sup> Arbyn M, Weiderpass E, Bruni L, et al. Estimates of incidence and mortality of cervical cancer in 2018: a worldwide analysis. *The Lancet Global Health*. 2020;8(2):e191-e203.

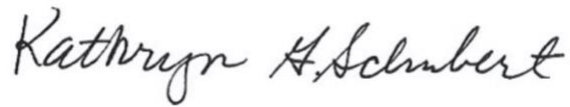
<sup>13</sup> Spencer RJ, Rice LW, Ye C, Woo K, Uppal S. Disparities in the allocation of research funding to gynecologic cancers by Funding to Lethality scores. *Gynecologic oncology*. 2019 Jan 1;152(1):106-11.

understood. Panelists agreed that there is an urgent need for research innovation in this space, specifically to address the dearth of screening options and non-surgical treatments.

Thank you again for the opportunity to respond to this important discussion and for your consideration of our comments. SWHR looks forward to the Women's Health Consensus Conference and stands ready assist NIH with implementing the ideas and policies coming out the conference to propel women's health research forward.

Should you have any questions about these comments or require additional information, please contact SWHR Chief Advocacy Officer Lindsey Horan at [lindsey@swhr.org](mailto:lindsey@swhr.org).

Sincerely,

A handwritten signature in cursive script that reads "Kathryn A. Schubert". The signature is written in black ink on a light-colored background.

Kathryn Schubert, MPP, CAE  
President and CEO  
Society for Women's Health Research