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August 7, 2020

Nora D. Volkow, MD
Director, National Institute on Drug Abuse
6001 Executive Boulevard
Rockville, Maryland 20852

Submitted electronically to: NIDAstrategicPlan@nida.nih.gov

Re: NIDA Notice Number: NOT-DA-20-059 2021-2025 Strategic Plan: Request for Information

Dear Dr. Volkow:

The Society for Women's Health Research (SWHR) appreciates the opportunity to provide comment on the National Institute on Drug Abuse (NIDA)'s Request for Information (RFI) Notice (NOT-DA-20-059) on its 2021-2025 strategic plan.

SWHR is 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. Because of SWHR's advocacy efforts, women are now routinely included in most major medical research studies, and scientists funded by the National Institutes of Health (NIH) are required to consider sex as a biological variable (SABV) in their research.¹

Overall, the cross-cutting research topics outlined are relevant and appropriate, and SWHR supports three in particular: Identify and Develop Approaches to Reduce Stigma, Identify and Develop Approaches to Reduce Health Disparities, and Understand Sex/Gender Differences. We also support the outlined priority research goals and actions.

We offer the following comments on the cross-cutting research topics:

Identify and Develop Approaches to Reduce Stigma

Stigma is a significant issue for an array of health conditions, and while modest gains have been made in reducing stigma around certain conditions, little progress has been made in removing stigma surrounding substance use disorders.²



A 2017 paper published in *Fusio* found that women as a gendered group face greater stigmatization than men for using illicit drugs since they go against the character traits of perceived female identity. The stigma of illicit drug use is also greater for mothers since they are expected to be the primary caregivers and more family-oriented than fathers. This stigma often creates barriers for women attempting to recover.³

SWHR Recommendations:

- NIDA should establish a research goal to understand the stigmatization of women with substance use disorders and how stigma impacts prevention, treatment and recovery.
- NIDA should conduct a systematic review of the literature on stigma, women, and substance use with public input to establish an evidentiary baseline to identify research and knowledge gaps and to inform the development of a research agenda and plan for addressing them.
- NIDA should develop a public awareness campaign specific to stigma related to women and substance use to communicate the unique challenges women face and to provide resources to support women in treatment and recovery.

Identify and Develop Approaches to Reduce Health Disparities

Despite advances toward greater inclusion of women in clinical research, female subjects continue to populate clinical trials in numbers disproportionate to the disease prevalence in the population. Specific groups of women — namely, women of color, women who are pregnant or breastfeeding, and women of low socioeconomic status⁴ — routinely are not included in clinical research, resulting in an incomplete picture of which therapies are most effective and safe for them. This underrepresentation has serious consequences for women and their health.

Women of color may face unique issues with regard to substance use and treatment needs. For example, Black and American Indian/Alaska Native women are more likely than women of other racial and ethnic groups to be victims of rape, physical violence, and stalking by an intimate partner in their lifetime, and these issues are risk factors for substance use and should be addressed in treatment and research.⁵

SWHR Recommendations:

- NIDA should promote research study designs that analyze whether the factors being examined vary for specific populations like women and/or people of color.
 - Researchers should disaggregate data by sex and gender, along with other relevant demographic factors (e.g., race, age, pregnancy) and social factors (e.g., housing, employment) that may affect people's risk and response to disease.⁶
- NIDA should foster career development in clinical research for women and other underrepresented populations.
 - Women and people of color should be included not only as participants but also champions in the research process by assuming roles as investigators, chief recruiters, and clinical trials staff.
 - Women with the same ethnic or racial background as the targeted population bring value to study design and by providing critical support/interaction with study participants in a culturally and linguistically sensitive manner.
- NIDA should leverage trans-NIH expertise, resources, and best practices to identify and develop approaches to reduce health disparities.



- The 2019-2023 Trans-NIH Strategic Plan for Women's Health Research: Advancing Science for the Health of Women has charted a multipronged pathway for advancing a vision in which sex and gender influences are integrated into the biomedical research enterprise; every woman receives evidence-based disease prevention and treatment tailored to her own needs, circumstances, and goals; and women in science careers reach their full potential.

Understand Sex/Gender Differences

Research has shown that women often use and respond to drugs differently than men, and they face unique obstacles to effective treatment that are influenced in part by sex and gender.⁷ A substance's impact can be influenced by hormones, menstrual cycle, fertility, pregnancy, breastfeeding, and menopause. Research also suggests that treatment for substance use disorders in women may progress differently than for men. For example, women experience lower pain reduction responses to opioids than men.⁸ Discovering and understanding these and other examples of sex and gender differences in substance use are critical to improving health outcomes for both women and men.

SWHR Recommendations:

- NIDA's FY2021-2025 strategic plan should include an assessment of the current state of the science on sex and gender differences in substance use.
 - NIDA's Substance Use in Women Research Report states that current evidence is limited.⁹ A gap analysis of the evidence for sex and gender differences would identify research areas of need that could inform and prioritize a research agenda on sex and gender differences in substance use.
 - For example, hormones have been found to play a role in addiction and higher relapse rates, yet addiction studies in women that account for hormonal cycles are lacking.¹⁰
- NIDA's Women & Sex/Gender Differences Research Group should integrate its strategic goals and actions into NIDA's overarching strategic plan.
 - NIDA's strategic plan should include a roadmap of how the Research Group will promote the conduct, translation, and dissemination of substance use research on sex and gender differences and topics specific to women.
 - In formulating its goals and actions, the Research Group should leverage trans-NIH initiatives such as the Specialized Centers of Research Excellence (SCORE) on Sex Differences program, which supports established scientists conducting research at centers across the country to incorporate a sex and gender focus.

Regarding NIDA's Strategic Plan Priority Research Goals and Actions, SWHR supports all three overarching research goals, each of which have importance for women's health:

Understand Drug Use, Behavior, and the Brain

SWHR supports advancing neuroscience to understand how and why brain changes in women who use substances are different from those in men. A 2017 paper in *Neuroscience Research* discusses how contextual and social factors (e.g., stigma, ongoing interpersonal violence, treatment-seeking barriers, and lack of social support for recovery among girls and women) may influence the processes of addiction and relapse differently in women and men. The paper found that women escalate drug use more rapidly than men and relapse is more likely to be triggered by stressful events or drug-related cues.¹¹



Develop and Test Novel Prevention, Treatment, and Recovery Support Strategies

SWHR supports targeting interventions to the needs of the patient and their families. For example, treatment programs that provide gender-specific and gender-responsive care are more likely to enhance women's treatment outcomes. Tailoring treatment to include family and community is particularly effective for certain groups. Language and literacy (including health literacy) may also affect how a person responds to the treatment environment.¹²

Implement Evidence-Based Strategies in Real-World Settings

SWHR supports using real-world settings to understand the impact of racial inequity, cultural differences, and social structures in accessing and utilizing quality care for substance use disorders. Factors such as race and ethnicity, sexual orientation, gender identity, and economic status can play significant roles in treatment initiation, engagement, and completion.¹³

Suggested areas for further investigation include: (1) why some racial and ethnic groups experience disparities in entering and receiving treatment services for substance use disorders and (2) whether making accommodations that respond to unique cultural experiences impact treatment access and care.

Thank you for the opportunity to provide a response to NIDA's request for information and to serve as a resource on women's health topics. If you have any questions, please feel free to contact Sarah Wells Kocsis, SWHR's Vice President of Public Policy at swellskocsis@swhr.org or 202-496-5003.

Sincerely,

Kathryn G. Schubert, MPP
President and Chief Executive Officer
Society for Women's Health Research



- ¹ Society for Women's Health Research. Retrieved from: <https://swhr.org/about/womens-health-research/>
- ² National Institute on Drug Abuse. Director's Blog: Addressing the Stigma that Surrounds Addiction. Retrieved from: <https://www.drugabuse.gov/about-nida/noras-blog/2020/04/addressing-stigma-surrounds-addiction>
- ³ Lee, N and Boeri, M. Managing Stigma: Women Drug Users and Recovery Services. 2017. *Fusio* 1(2): 65–94. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6103317/pdf/nihms931455.pdf>
- ⁴ Liu, KA and Dipietro Mager, NA. Women's involvement in clinical trials: historical perspective and future implications. *Pharm Pract (Granada)*. 2016;14(1):708. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4800017/>
- ⁵ National Institute for Drug Abuse. Substance Use in Women Research Report: Sex and Gender Differences in Substance Use. Retrieved from: <https://www.drugabuse.gov/publications/research-reports/substance-use-in-women/sex-gender-differences-in-substance-use>
- ⁶ Center for American Progress. Toward Equitable Treatments for Women's Health During Coronavirus and Beyond. Retrieved from: <https://www.americanprogress.org/issues/women/reports/2020/07/15/487429/toward-equitable-treatments-womens-health-coronavirus-beyond/>
- ⁷ National Institute for Drug Abuse. Substance Use in Women Research Report: Sex and Gender Differences in Substance Use. Retrieved from: <https://www.drugabuse.gov/publications/research-reports/substance-use-in-women/sex-gender-differences-in-substance-use>
- ⁸ Averitt DL, Eidson LN, Doyle HH, Murphy AZ. Neuronal and glial factors contributing to sex differences in opioid modulation of pain. *Neuropsychopharmacology*. 2019; 44:155-165.
- ⁹ National Institute for Drug Abuse. Substance Use in Women Research Report: Sex and Gender Differences in Substance Use. Retrieved from: <https://www.drugabuse.gov/publications/research-reports/substance-use-in-women/sex-gender-differences-in-substance-use>
- ¹⁰ Amy R., Johnson et al. Cues play a critical role in estrous cycle-dependent enhancement of cocaine reinforcement. *Neuropsychopharmacology* 2019. DOI: 10.1038/s41386-019-0320-0
- ¹¹ Becker JB, McClellan ML, Reed BG. Sex differences, gender and addiction. *J Neurosci Res*. 2017;95(1-2):136-147. doi:10.1002/jnr.23963. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5120656/>
- ¹² Office of the Surgeon General. Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. 2016 Retrieved here: <https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf>
- ¹³ Ibid.