

RE: Open Letter to the Food and Drug Administration Regarding Women's Health, Psychedelic Clinical Research and the Psychedelic Drug Approval Process

## DRAFT STAKEHOLDER REPORT

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### Introduction

#### About the Open Letter

The Open Letter to the Food and Drug Administration is a harm reduction and research advocacy initiative in partnership with <u>Hystelica</u>, a research organization dedicated to understanding safe and effective psychedelic use for women. The letter intends to address the urgent need for psychedelic research on female biology, including the effect of stages of the menstrual cycle as mentioned in the <u>FDA's Evaluation of Gender Differences in Clinical Investigations</u>.

#### About the Dysphoric Project

The Dysphoric Project is a non-profit research organization founded in 2023 that:

- Advocates for menstrual cycle awareness in psychedelic medicine
- Advocates for psychedelic research on premenstrual conditions
- Publishes and promotes harm reduction information on female biology
- Publishes case studies from women with premenstrual conditions

Our work is grassroots, not currently sponsored, and is volunteer-based. More information can be found on our website: <a href="https://dysphoricproject.org/">https://dysphoricproject.org/</a>

#### **Advocacy Projects**

Open Letter to the FDA Regarding Women's Health, Psychedelic Clinical Trials and the Psychedelic Drug Approval Process:

https://dysphoricproject.org/open-letter-to-the-fda

ICER Report Public Comments - MDMA Clinical Trials RE: Draft Evidence Report on Treatment for Post-Traumatic Stress Disorder:

https://dvsphoricproject.org/policy/icer

Colorado Natural Medicine Advisory Board - Stakeholder Feedback:

https://dysphoricproject.org/policy/colorado

## Historical Timeline

#### Historical Timeline

1977

The FDA issues a guideline banning most women of childbearing potential from participating in clinical research:

https://www.womenshealth.gov/30-achievements/04

1990

The NIH Office of Women's Health is established:

<u> https://orwh.od.nih.gov/about/mission-history</u>

1993

The NIH Revitalization Act is passed requiring the inclusion of minorities and women in research and accounting for sex-specific variables:

https://www.ncbi.nlm.nih.gov/books/NBK236531/

1994

The FDA's Office for Women's Health is established:

https://www.ncbi.nlm.nih.gov/books/NBK236531/

Dr. Rick Strassman publishes *Human Psychopharmacology of N,N-dimehtyltrptamine (DMT)*, the first study of it's kind in this era:

1995

https://pubmed.ncbi.nlm.nih.gov/8788488/

\*Dr. Strassman's request for additional funding from the National Institute on Drug Abuse (NIDA) to study DMT and the menstrual cycle was denied

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Liechti et al. publishes *Gender Differences in the Subjective Effects of MDMA* noting that equal doses of MDMA per kilogram body weight produces stronger responses in women than in men:

https://www.ncbi.nlm.nih.gov/books/NBK236531/

<sup>\*</sup>For more on this topic: ICER Report Public Comments - MDMA Clinical Trials

#### Historical Timeline

2013

The FDA issues the first ever sex-based dosage adjustment for women taking Ambien due to concerns about the drug's effects in women vs. men:

https://www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-fda-approves-new-label-changes-and-dosing-zolpidem-products-and

2016

U.S National Institute of Health mandates that preclinical, biomedical research include female cells:

https://www.womenshealth.gov/30-achievements/04

2019

Galea et al. publishes *The Promise and Pitfalls of Sex Difference Research* which discusses the lack of funding being allocated to implement mandates on sex-based research:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7050281/

2020

Irving Zucker and Brian Prendergast publish Sex differences in Pharmacokinetics Predict Adverse Drug Reactions in Women discussing elevated blood concentrations and longer elimination times in women for dozens of FDA-approved drugs:

https://pubmed.ncbi.nlm.nih.gov/32503637/

2023

Kerri Smith publishes Nature article and interactive chart titled Women's Health Research Lacks Funding visually demonstrating that research funding for conditions that impact women more than men is not aligned with the burden of disease:

https://www.nature.com/immersive/d41586-023-01475-2/index.html

2024

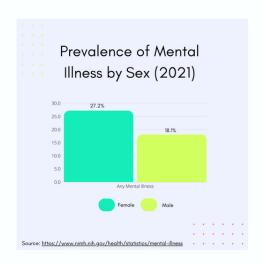
The Biden Administration Proposes \$12 Billion in New Research Funding for Women's Health:

https://www.whitehouse.gov/briefing-room/statements-releases/2024/03/18/fact-sheet-president-biden-issues-executive-order-and-announces-new-actions-to-advance-womens-baseleb research and innovation/

U.S Populations

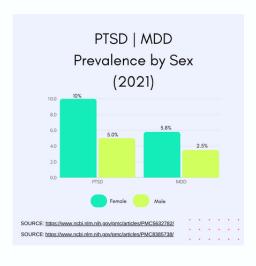
## **U.S Populations**

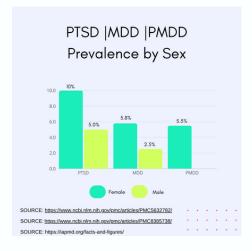
## Mental Health Conditions Disproportionally Impact Women in the United States



Psychedelics are being investigated for a wide range of mental health conditions - many of which impact women disproportionately.

Women are almost twice as likely to develop PTSD compared to men, and women have an increased prevalence rate in depressive disorders such as major depression.





Premenstrual dysphoric disorder (PMDD) which only impacts women, receives <u>little attention</u> in the U.S healthcare system and in psychedelic medicine, despite the overlap in symptoms with major depression and PTSD, the severity of the condition, and the increased risk of <u>suicide</u>.

\*To learn more about PMDD and Psychedelics: https://blossomanalysis.com/topic/premenstrual-dysphoric-disorder/ Research Funding for Women's Health

## Research Funding for Women's Health

#### Equality in Research Starts with Funding

The lack of funding for psychedelic research from research funding agencies such as the NIH, disproportionately affects women, who are at a greater risk for developing mental health conditions.

Funding for Dr. Rick Strassman's proposed research on the menstrual cycle and psychedelics in the 90s is still needed today. The decision to deny funding for this sex-based research was in direct opposition to the NIH Revitalization Act of 1993, which was passed prior to Dr. Strassman's request for the funds. When funding is denied to study women, it exacerbates the problem further, as other researchers are less likely to pursue projects that have historically been denied funding.

#### A Call to Action for U.S Funding and Regulatory Agencies

The NIH Revitalization Act, which promotes equality in research for minorities and women, including sex-based research, is enforceable through NIH funding. The overreliance of private investment in psychedelic research negatively impacts the implementation of this Act, as privately funded research efforts are not subject to these standards.

Given the history of women in research, and the fact that women - in general - are at a higher risk for adverse drug reactions, the fact that any drug trial can get to Phase 3 without basic data on female biology is egregious. This example calls into question the drug approval process in general as it relates to women.

If regulatory agencies are promoting and mandating sex-specific research, they should also be held accountable to enforce their own guidelines and policies, and promote and fund the research that they themselves are requiring. To correct for this in psychedelic medicine, U.S funding and regulatory agencies should make clear statements regarding the expectations of sex-specific psychedelic research and the funding opportunities available to conduct that research.

#### Project Backlog

Currently, there is a growing backlog of psychedelic research projects related to women's health that are in need of funding. Basic data on psychedelics and the female reproductive system, in addition to pharmacokinetic data is required to better understand safety and efficacy for women. In addition to the basics, female-specific conditions such as premenstrual dysphoric disorder, premenstrual exacerbation of underlying conditions, premenstrual syndrome, and peri-menopausal depression have largely been underfunded and under-researched in western medicine generally speaking, and in psychedelic medicine, despite the overwhelming need for advancements in new treatment options.

The Role of Psychedelic Medicine

## The Role of Psychedelic Medicine

#### Psychedelic Trial Re- Design

There is a tremendous opportunity for psychedelic trial design that incorporates the needs of women. Psychedelics are new to the western medical system, and there is much conversation about how these trials should be conducted. From blinding, to spiritual components, to indigenous use and reciprocity, there are many important problems to be solved - including how to incorporate the needs of women in research.

Because of the history of women in research, trials have historically been male-biased, and there is a severe lack of research advancement and innovation in accounting for female-specific variables such as menstrual cycle phase. Advancement and innovation in these key areas can inform statistics and methods that can be shared and applied to scientific domains outside of psychedelic medicine. This approach can enhance the knowledge and understanding of cyclical female biology, and has the potential to increase the quality of life for millions of women, their families, and their communities.

#### Funding for Women's Health in Psychedelic Research

Psychedelic researchers should not be discouraged to apply for public funding based on the history of research funding for psychedelic medicine. NIH funding, in particular, is required to implement and enforce the guidelines set forth in the NIH Revitalization ACT of 1993. Data that results from this NIH compliant research can greatly improve the current state of psychedelic research and female biology.

\*Community Resource: In partnership with the <u>Coheal Community</u>, we are hosting a dedicated online channel for collaborating and discussing research funding for women's health in psychedelic medicine: <a href="https://www.coheal.community/c/invest-in-women-s-health/">https://www.coheal.community/c/invest-in-women-s-health/</a>

#### Women's Health is More than the Menstrual Cycle

Due to the nature of our mission, and the community in which we serve, the menstrual cycle is our core focus, and the main topic of our open letter. That said, the broader conversation about women's health should not be overshadowed. There are many needs, some yet to be identified, that are equally worthy of discussion. Our intent is to create further dialogue and collaboration around these pressing issues.

## Actionable Next Steps

## Actionable Next Steps

#### Including Women in Psychedelic Research

Including women in research starts with study design. Accounting for variables such as menstrual cycle phase should be planned for in the design phase of research. For trials that are ongoing now, a reasonable attempt can be made to track the cycle phase at time of dose, and report outcomes - including adverse events - by sex.

#### Updated Stakeholder Report - Dysphoric Project

An updated stakeholder report will be published on September 9th, 2024. Updates will include U.S demographic data for other conditions being studied in psychedelic medicine such as auto-immune, chronic pain and anxiety conditions, in addition to material updates on the state of research funding. A follow up webinar with a focused Q&A session will be held on this date as well.

The updated report will be sent to stakeholders via the same communication channel used to notify them of the open letter. If there are additional points of contact for stakeholders, please email info@dysphoricproject.org with the appropriate contact information.

#### Scoping Review - Hystelica

Hystelica's Scoping Review is key literature for the psychedelic research community. This research helps us better understand what can be known about psychedelics and female biology. To stay up to date on this effort, and future research from Hystelica, you can signup for their newsletter at <a href="https://example.com">hystelica.com</a>.

#### RESOURCES

#### WWW.DYSPHORICPROJECT.ORG

Harm Reduction:

https://dysphoricproject.org/projects Projects:

Education:



#### WWW.HYSTELICA.COM

Research: https://www.hystelica.com/research

Articles:

Support Hystelica:

**HYSTELICA** 

#### WWW.COHEAL.COMMUNITY

https://www.coheal.community/c/women-s-health-Women's Health Think -Tank:

Funding Women's Health:

s-health/

