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POSTER ABSTRACTS

904. OUTCOMES RESEARCH-NON-MALIGNANT CONDITIONS

A 10 Year Analysis of Gender Distribution in National Institutes of Health Funding for Non-Malignant Hematology

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Introduction: Historically, there has been an underrepresentation of women in the field of hematology. Consequently, this makes them less likely to receive academic research grants. Here, we present a ten year retrospective analysis of the Research Project Grants (R01) awarded by the National Institutes of Health (NIH) through the fiscal years of 2012-2022. The grants were categorized by various NIH agencies. This temporal analysis examines gender disparities under the field of non-malignant hematology research.

Methods: Data was extracted for the fiscal years 2012-2022 focusing exclusively on R01 grants awarded and categorized by the various NIH agencies. Data was leveraged using the NIH RePORTER tool, Tidyverse, and janitor packages in R. The dataset incorporated key grant parameters such as grant ID, agency code, activity code, abstract text, project title, fiscal year, activity status, award amount, organization, and principal investigator's (PI) name. In order to distinguish a PI's gender, PI's first names were processed using the gender package in R, which provided a gender-wise distribution of recipients. For statistical analyses, proportions of females with accepted R01 grants were compared between 2012 to 2022; this proportion analysis was also done among each NIH agency. Further, linear regression and associated statistical tests were used to identify whether there was significant change in grants received by either gender over this time period.

Results: A total of 250,031 R01 grants were awarded by the NIH during the fiscal years of 2012 to 2022. Females (n=82,152: 32.9% (95% CI 0.41-0.43) received fewer grants than males (n=167,879: 67.1%, (95% CI 0.50-0.55). Across 2012 to 2022, there was no significant change in R01 grants awarded among men (16,221 to 15,601, p-value= 0.52). In contrast, there was a significant difference for females in the R01 grants awarded across 2012 to 2022 (6,865 to 9,339, p-value <0.001). In 2012, the National Institute of General Medical Sciences (NIGMS), National Institute of Neurological Disorders and Stroke (NINDS), and National Institute of Biomedical Imaging and Bioengineering (NIBIB) awarded less than 25% of the total grants to females. By 2022, of all the agencies, the NIBIB remained the agency with the most extensive gender gap with females being awarded only 23% of grants. In contrast, the National Institute of Minority Health and Disparities (NIMHD) and the National Institute of Nursing Research (NINR) were the only agencies in 2012 to award more grants to females with approximately 52% and 74% of grants respectively. In 2022, the NINR and NIMHD continued to show more grants awarded to females versus males. In addition to those agencies, by 2022, the National Institute of Child Health and Human Development (NICHD) and National Center for Complementary and Integrative Health (NCCIH) joined the NINR and NIMHD in awarding more than 50% of grants awarded to females that year.

Conclusion: This analysis highlights continued gender disparity as only 33% of total R01 NIH grants were awarded to females during the fiscal years 2012-2022 in non-malignant hematologic research. Although, it is noted that while some agencies have made strides towards gender parity, others continue to have a significant gap. While this remains a systemic and multifaceted issue, identifying these areas of gender disparity will enable targeted efforts to bridge this gap and advance gender equality.

Disclosures No relevant conflicts of interest to declare.

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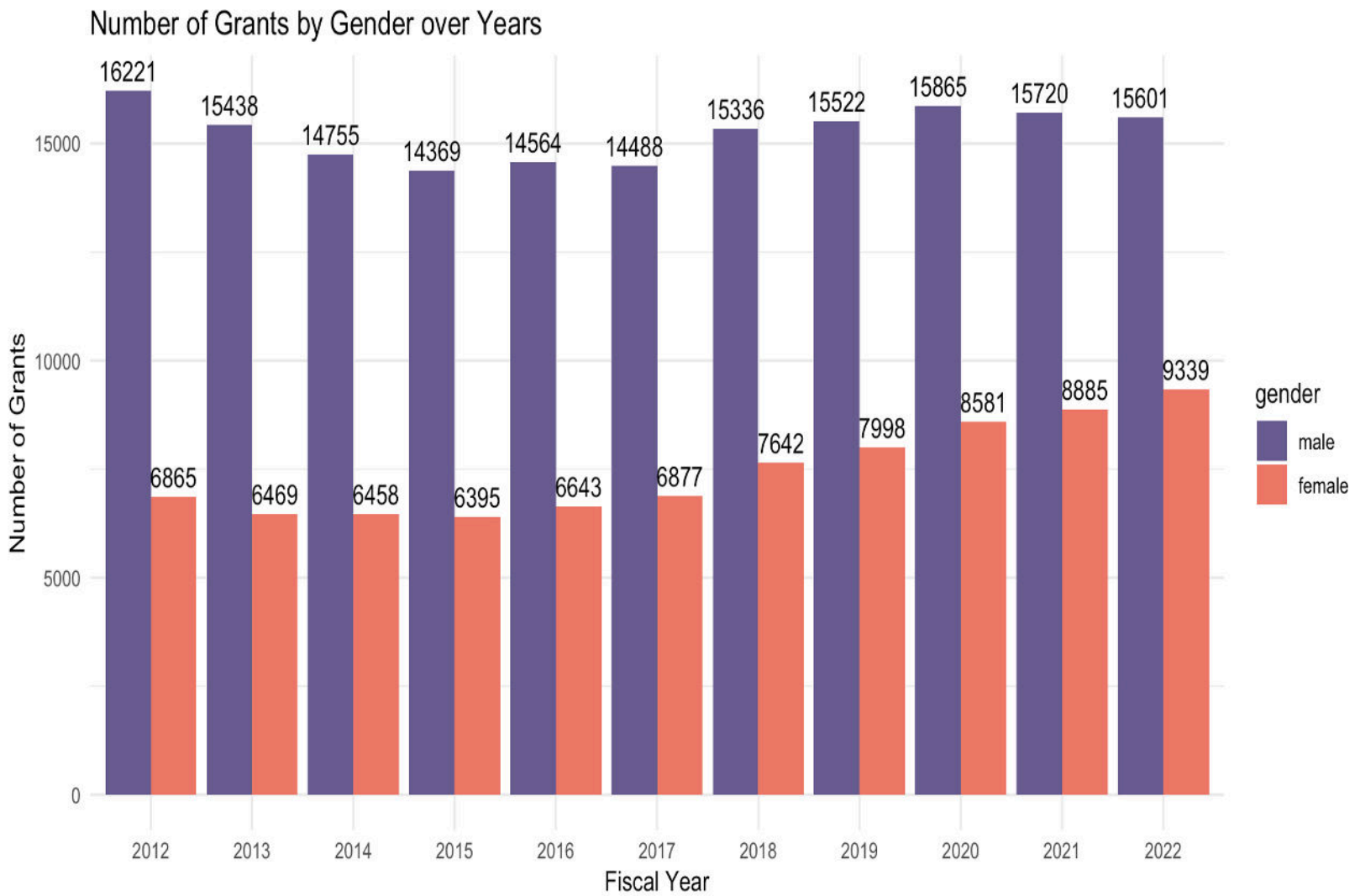


Figure 1