

EXPOSURES TO ENVIRONMENTAL CHEMICALS AMONG U.S. REPRODUCTIVE AGE WOMEN

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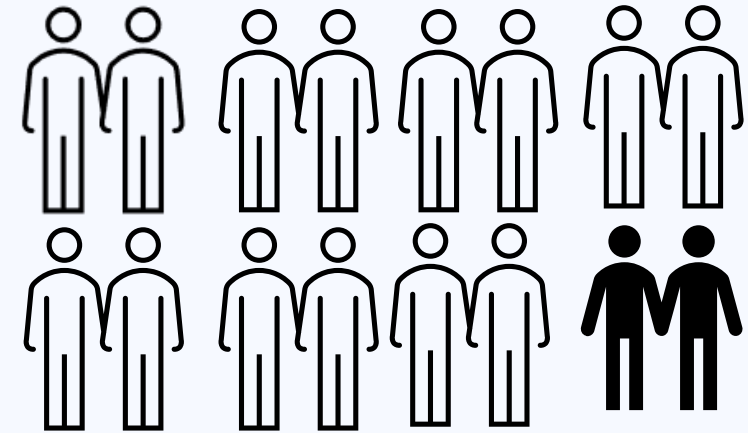
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INFERTILITY AND ENVIRONMENTAL CHEMICALS

- **Infertility** is defined as not being able to get pregnant after one year of unprotected sex – CDC
- Infertility is associated with psychological-emotional disorders, financial stress, and stigmatization
- Infertility affects 1 in 8 couples and 7.4 million women in the U.S. alone
- Moreover, the causes are still largely unclear
- However, many studies have linked environmental chemicals to infertility



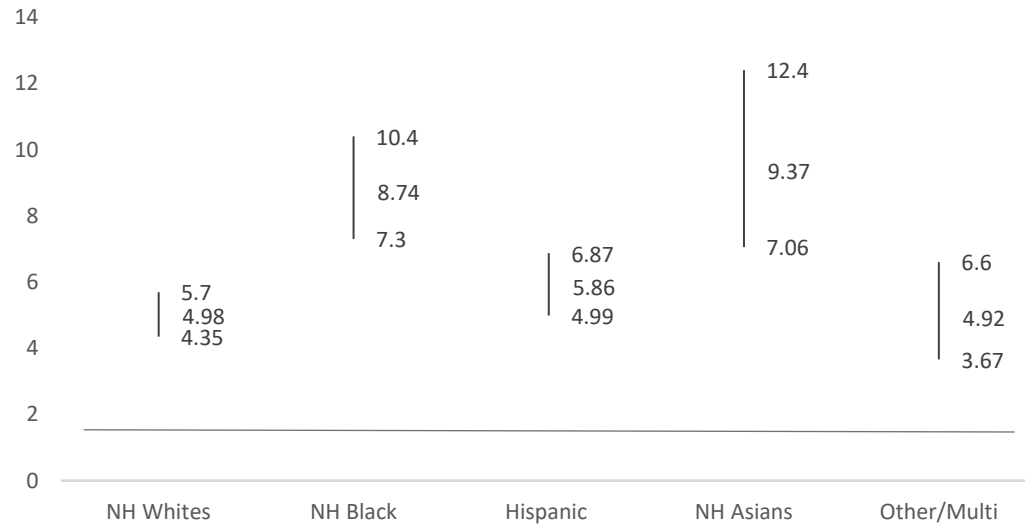


OBJECTIVES AND METHODS

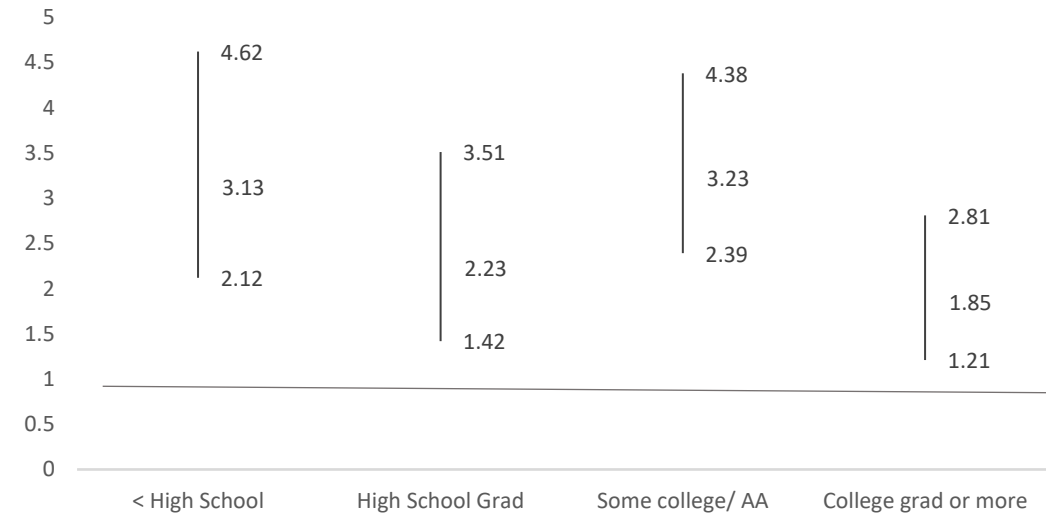
- Characterize the environmental portfolio of exposure to environmental chemical in U.S. reproductive age women & explore whether exposures vary by sociodemographic characteristics
 - Calculated geometric means
 - Conducted Kruskal-Wallis test
- Assess the relationship between exposure to environmental chemicals and infertility
 - Conducted logistic regression
- Study Design & Participants
 - cross-sectional design
 - 2,579 non-pregnant women aged 18–49 years without history of hysterectomy, oophorectomy, currently pregnant, and without fertility response (NHANES, 2013–2016)

Results

Urinary, Arsenic (ug/L) across Race Groups



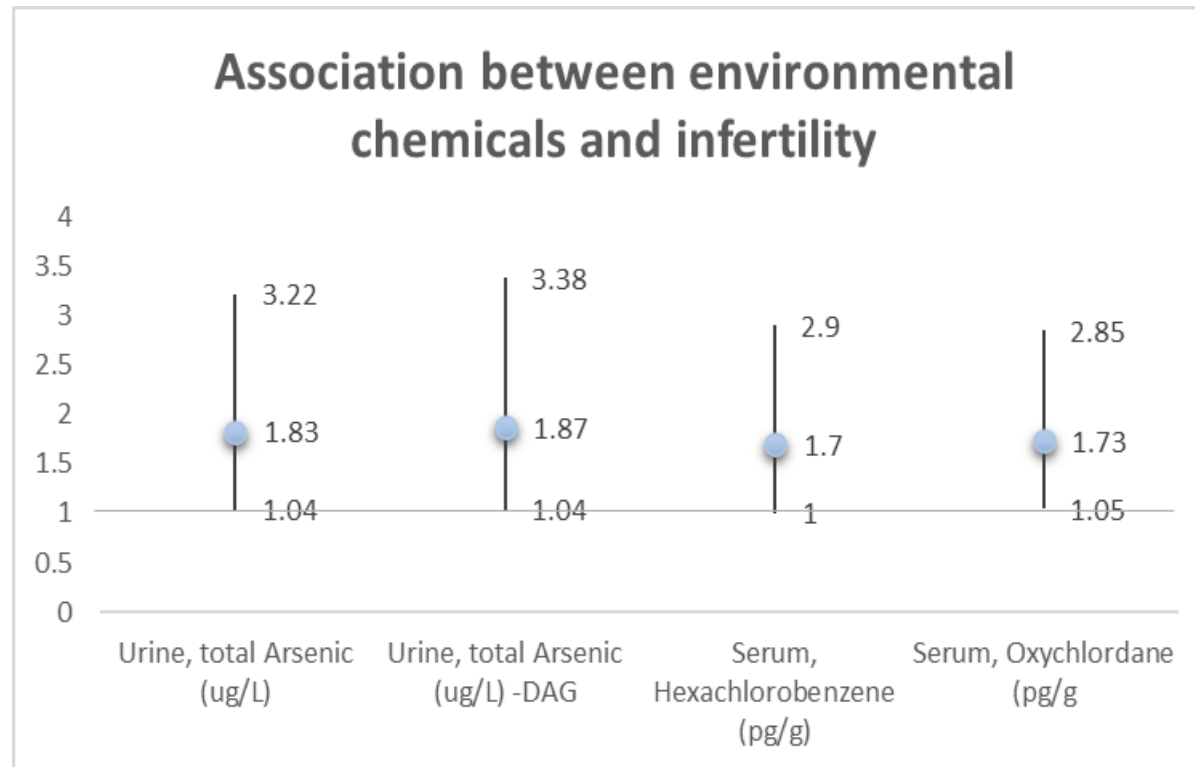
Urinary, DEET (ug/L) across Education Levels



Results Cont...

Objective 2

- DAG Model adjusted for Race, Age, Education and income





CONCLUSION

- Pesticides and metals associated with increased odds of infertility
- Exposures to Environmental Chemicals were reported more in reproductive age women that belonged to lower educational status and racialized minority groups
- Health Equity
 - This research highlights the disproportional exposures to environmental chemicals among racialized minority groups
 - These disproportional exposures to environmental chemicals shape reproductive health outcomes such as infertility

THANK YOU!

Any Questions?

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