



Female Infertility and Neurodevelopmental Disorders in Children: A Danish Nationwide Birth Cohort Study

By Khaoula Ben Messaoud, Vahe Khachadourian, Elias Arildskov, Stefan N. Hansen, Renee Gardner, Cecilia Ramlau-Hansen, Linda Kahn, Magdalena Janecka

Khaoula Ben Messaoud, PhD

Postdoctoral researcher

Department of Child and Adolescent Psychiatry, NYU Grossman School of Medicine, New York, USA.

Conflict of Interest Disclosures

VK is currently employed by Takeda Pharmaceuticals, outside of submitted work. This work was supported by grant from the National Institute of Mental Health





Introduction

Infertility





Introduction

Objective

1) Investigate the association between female infertility and risk of autism in offspring





Methods



Methods

Analysis #5



Shared familial confounders on the association



F



Exposure #2

Model adjusted for child's sex, maternal age, and maternal educational level; model stratified on child's year of birth, with cluster effect accounting for the presence of siblings in the dataset.



Stepwise#3

The associations between specified female infertility and offspring autism were robust to adjustment for potential confounders





Familial effects in the association #4

Maternal aunt's diagnosis of specified female infertility was significantly associated with autism in the child

HRadj=1.10, 95% CI: 1.00-1.20



Discussion

Main findings #1



Discussion

Comparison with other studies #2



Similar in terms of association estimation to Velez et al. 2024

Study focused on couple infertility, using proxy of seeking medical help for infertility problem



Vs female infertility in our study



Discussion

Strengths and limitations #3





Conclusion



Dr. Khaoula Ben Messaoud

Department of Child and Adolescent Psychiatry, NYU Grossman School of Medicine, New York, USA



Khaoula.Ben.Messaoud@nyulangone.org



@MessaoudKhaoula



Collaborators

Dr. Vahe Khachadourian

Ms. Elias Arildskov

Dr. Stefan N. Hansen

Dr. Renee Gardner

Dr. Cecilia Ramlau-Hansen

Dr. Linda Kahn



Dr. Magdalena Janecka