

Effects of Early Life Exposure to Famine on Adulthood Metabolic and Cognitive Outcomes: A Historical Cohort Study From 1983 - 1985 Ethiopian Great Famine

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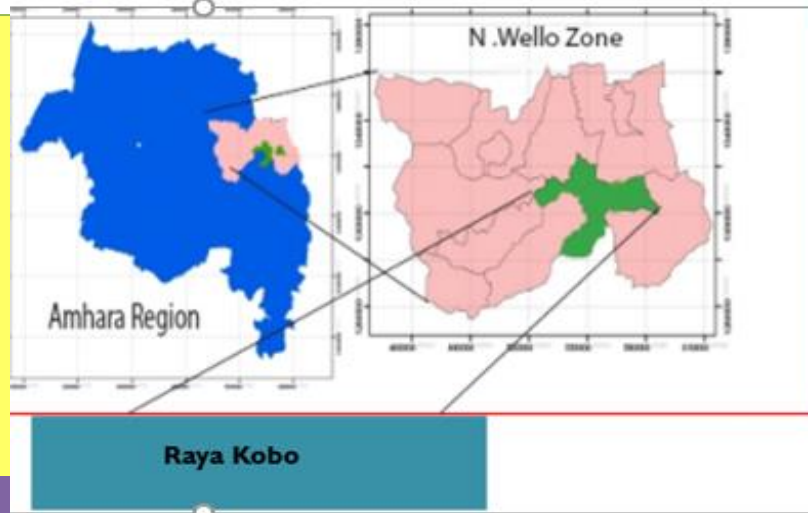
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INTRODUCTION

- Famine during early life can serve as a natural laboratory model to test the DOHaD hypothesis, where undernutrition is considered as natural exposure

STUDY PARTICIPANTS

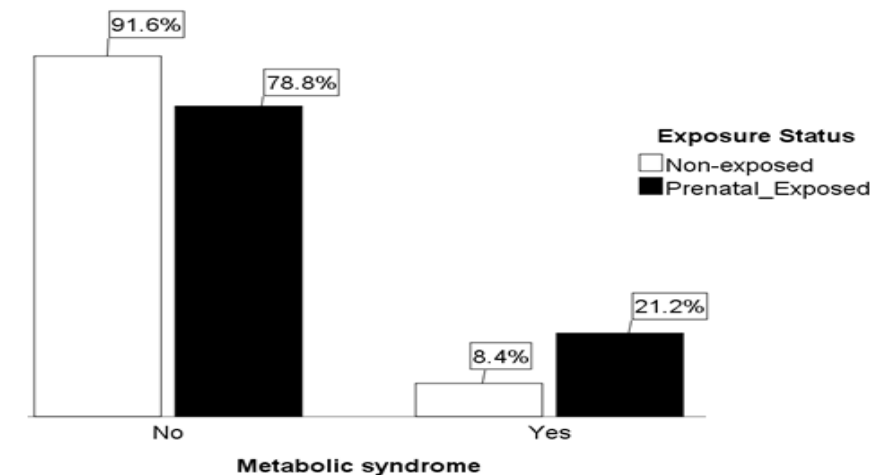
- Participants were divided into four: based on self-reported age and birthdate
- Prenatal-exposed (birth year = 8 August 1983 to 30 August 1985)
 1. Postnatal-exposed (birth year = 8 September 1981 to 8 August 1983)
 2. Non-exposed (birth year = 8 September 1987 to 8 October 1988)



Results

- Prenatal exposure to famine increases the risk of metabolic syndrome (MetS) (AOR = 2.94; 95% CI:1.66, 5.27)
- Postnatal (birth to 2 years) exposure to famine lowers cognitive function score ($\beta = -2.26$; 95% CI -3.12, -1.36)

Magnitude of MetS



Conclusion

- ❖ Early life exposure to famine was associated metabolic syndrome and Cognitive decline in adults