

Is there an association between non-communicable disease mortality and corruption indexes? A global perspective

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Introduction

- Government characteristics and outcomes in health relationship has been described since the Hippocratic times.
- Political decisions have an impact on health indicators through public policies regulations.
- Corruption has been linked to:
 - Lesser economic growth
 - Poor public infrastructure
 - Increase in public spending
 - Higher inequality
 - Growth of poverty
 - Risks to national security
- Corruption affect the healthcare system by:
 - Reducing the investment that government make in the health system and in promotion of public health
 - Corrupting the system itself
- Non-communicable diseases (NCD)) are responsible of two out of three deaths globally.
- NCDs are linked to modifiable causes such as tobacco use, harmful use of alcohol, obesity, excessive salt or sugar and sedentarism

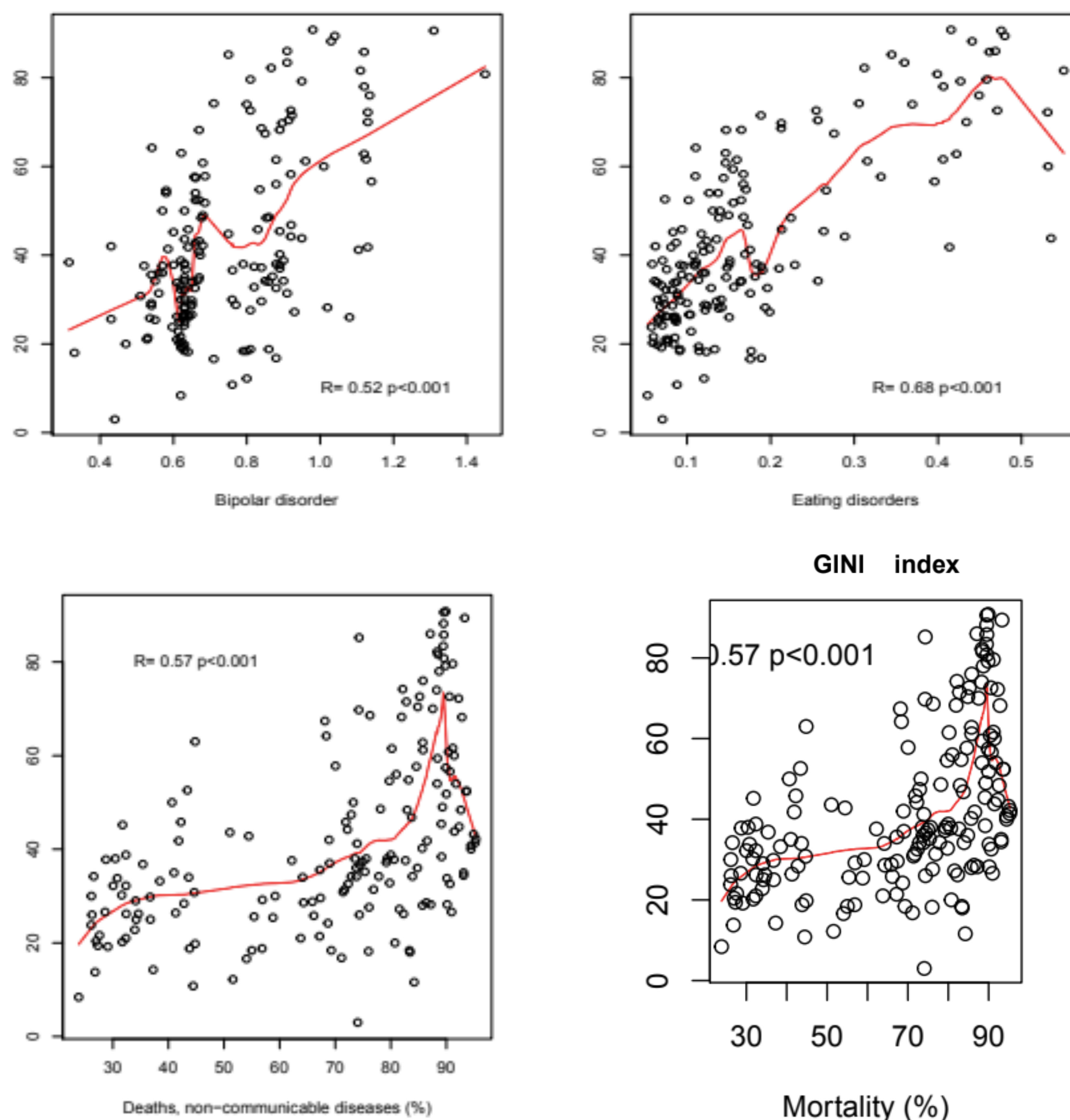
Methodology

- **Corruption:** Corruption Perception Index (CPI) - published by Transparency International. It ranks countries by their perceived levels of public sector corruption determined by expert assessments and opinion surveys.
 - A CPI of 100 indicates the country is perceived as very clean and 0 indicates is perceived as totally corrupted
- **Inequality:** GINI index - measure of statistical dispersion that represents the wealth distribution among the residents of a nation
 - A GINI coefficient of zero expresses no inequality whereas a GINI coefficient of 100 expresses maximal inequality
- **Ability of countries to make effective use of aid:** the Country Policy and Institutional Assessment
- Data related to noncommunicable diseases was extracted from the World Bank, Our World in Data and the Human Development Indicators databases
- Statistical analysis
 - ANOVA between continents
 - Bivariate analysis
 - R® software

Objective

- To explore a relation between corruption indicators and NCDs statistics globally.

Results



Conclusion

- There is an association between a high perception of corruption and Cause of death due to non-communicable diseases, prevalence of Schizophrenia, bipolar disorder and eating behavior
- There is a moderate and negative association between the GINI index and Cause of death due to non-communicable diseases. Also between CPI and mortality caused by cardiovascular diseases, cancer, diabetes or chronic respiratory diseases and malnutrition prevalence.
- Further research should study the weight of these associations in order to take actions on the way corruption is impacting on societies health.