The effects of conditional cash transfer programs on AIDS, Tuberculosis, and Child mortality according to socioeconomic conditions: a cohort study of 57 million individuals in Brazil

Presenter: Prof. Davide Rasella

Institute of Collective Health (ISC/UFBA), Salvador, Brazil

Authors: Andréa F Silva; Priscila FPS Pinto; Daniella M Cavalcanti; Elisa L Basterra; Gabriela S Jesus; Iracema Lua; Carlos AST Santos; Maria Y Ichihara; Mauricio L Barreto; Luis E Souza; James Macinko; Inês Dourado; Davide Rasella

WCE
WORLD CONGRESS OF EPIDEMIOLOGY 2024

Background

- Social vulnerabilities and socioeconomic inequalities are important risk factors for poverty-related diseases and conditions, including HIV/AIDS, Tuberculosis (TB), and child mortality.
- Social Protection policies such as Conditional Cash Transfers (CCT) could mitigate their burden, reducing household poverty levels and improving access to education and healthcare.
- We evaluated the extent to which the world's largest CCT, the Bolsa Família Program (BFP), has effects on AIDS and TB incidence, and on child mortality, among different socioeconomic strata within the poorest 50% of the Brazilian population.

Methods

- We developed a quasi-experimental impact evaluation of the effects of BFP on AIDS using 22.7 million individuals (2007-2015), and on TB and child mortality using 56.7 million individuals (2004-2013), from the 100 million Brazilians cohort of low-income individuals.
- We compared BFP beneficiaries to non-beneficiaries, using inverse probability of treatment weighting (IPTW) to adjust for selection into receipt of BFP benefits.
- We fitted IPTW multivariable Poisson regressions adjusted for socioeconomic, demographic, and healthcare confounding variables at the individual and municipal level, estimating the effect of BFP for different subgroups of the populat to per capita wealth levels (stratified by deciles).

WCE
WORLD CONGRESS OF EPIDEMIOLOGY 2024

Results

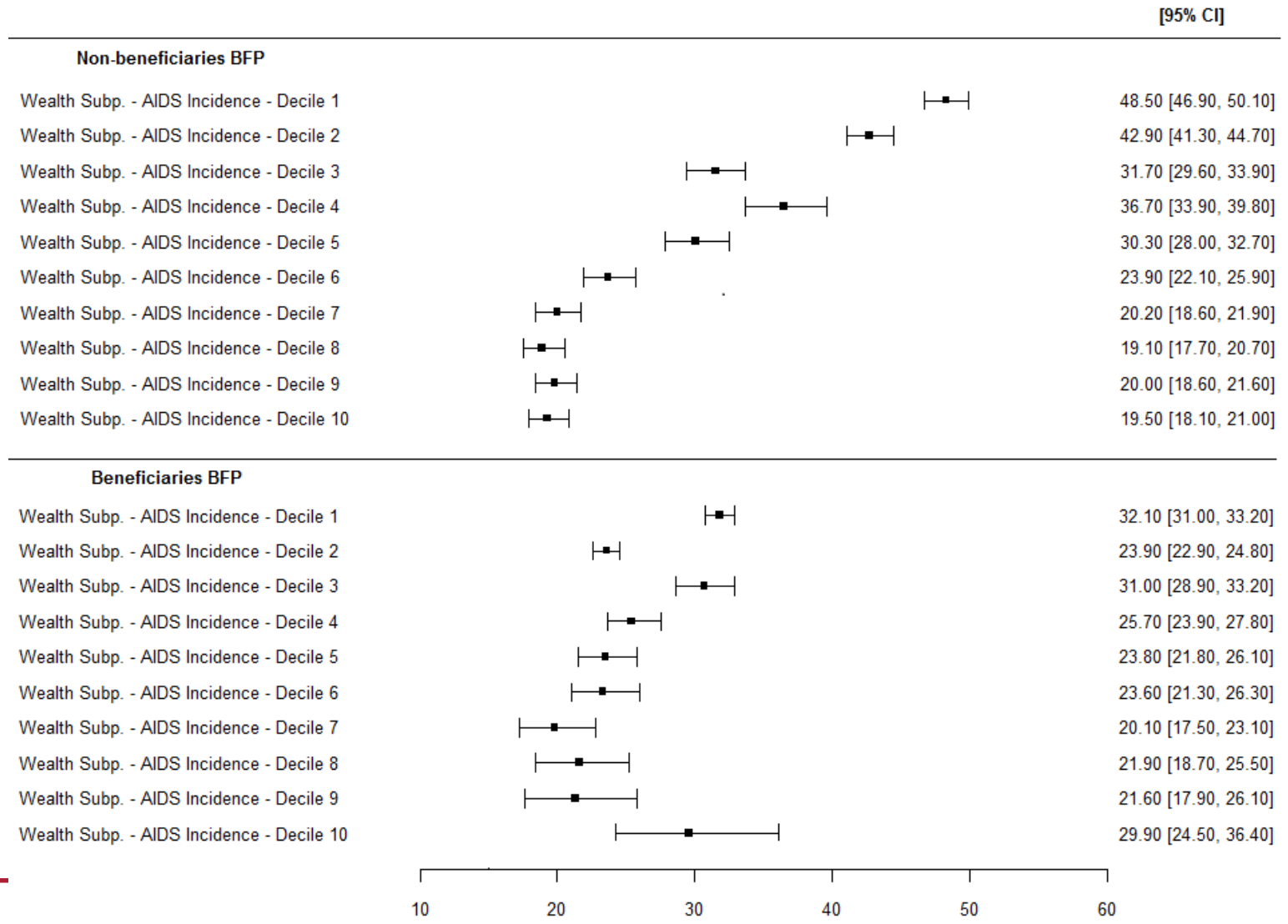
Descriptive analyses *of Bolsa Familia Program (BFP) non-beneficiaries (N-BF) and beneficiaries (BF) on* ***AIDS incidence rate***

Poorest

Richest

Poorest

Richest



Results

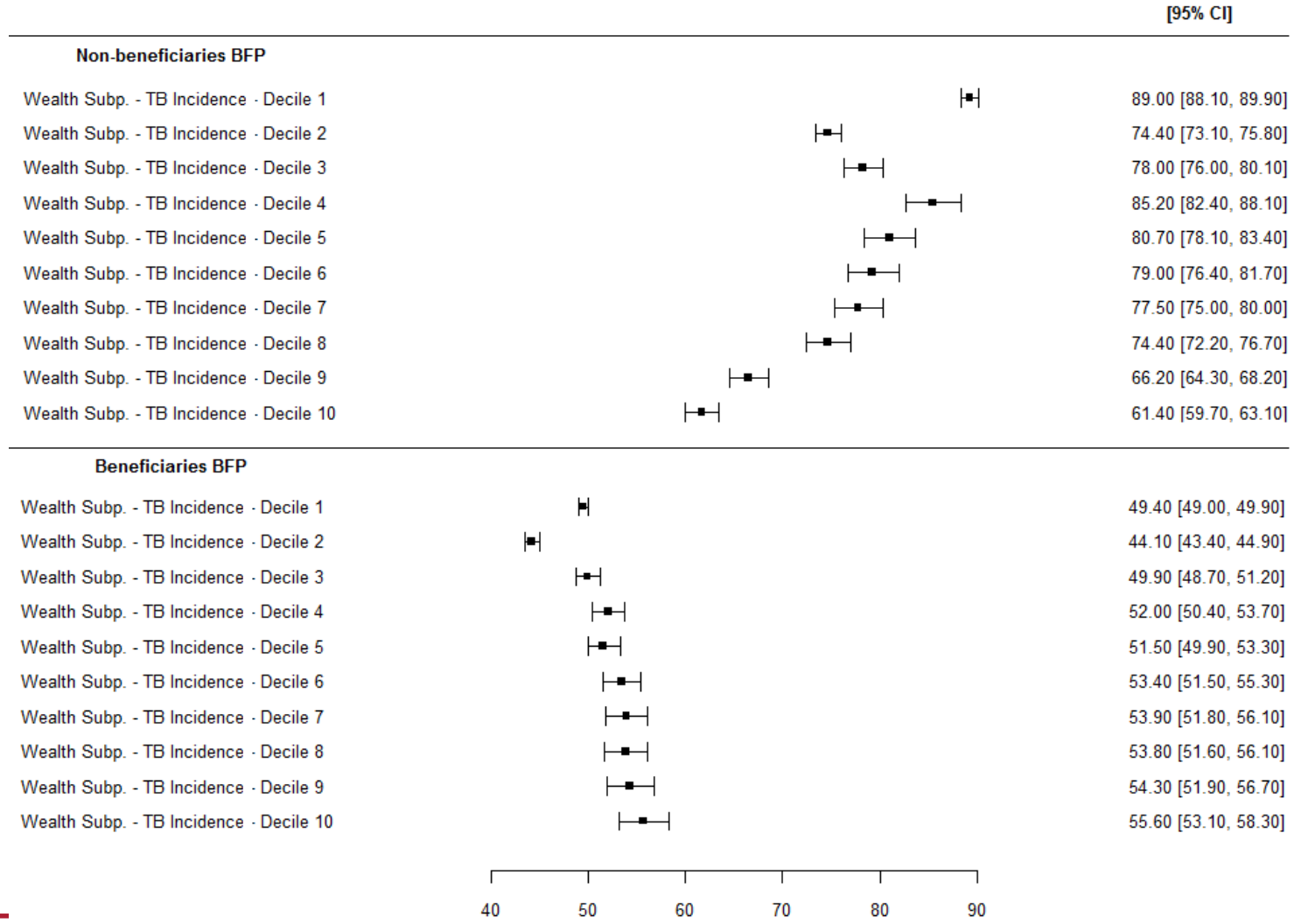
Descriptive analyses *of Bolsa Familia Program (BFP) non-beneficiaries (N-BF) and beneficiaries (BF) on* ***TB incidence rate***

Poorest

Richest

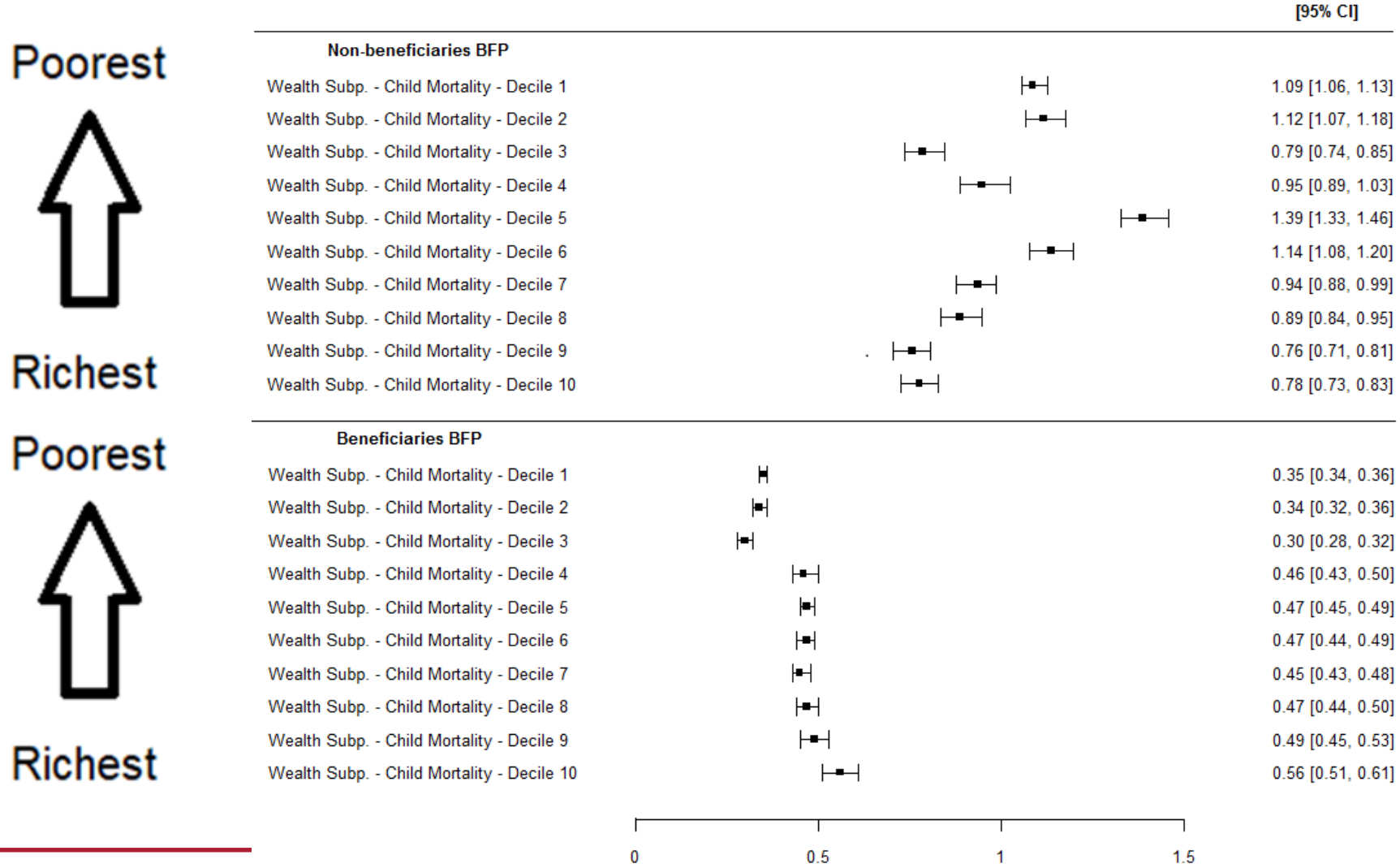
Poorest

Richest



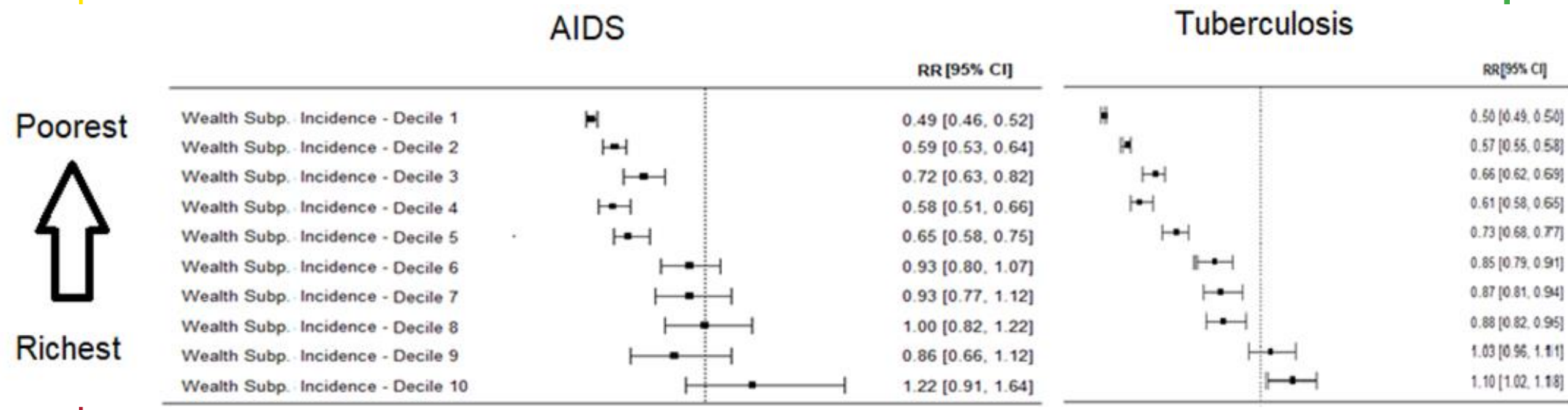
Results

Descriptive analyses *of Bolsa Familia Program (BFP) non-beneficiaries (N-BF) and beneficiaries (BF) on* ***Child mortality rates***

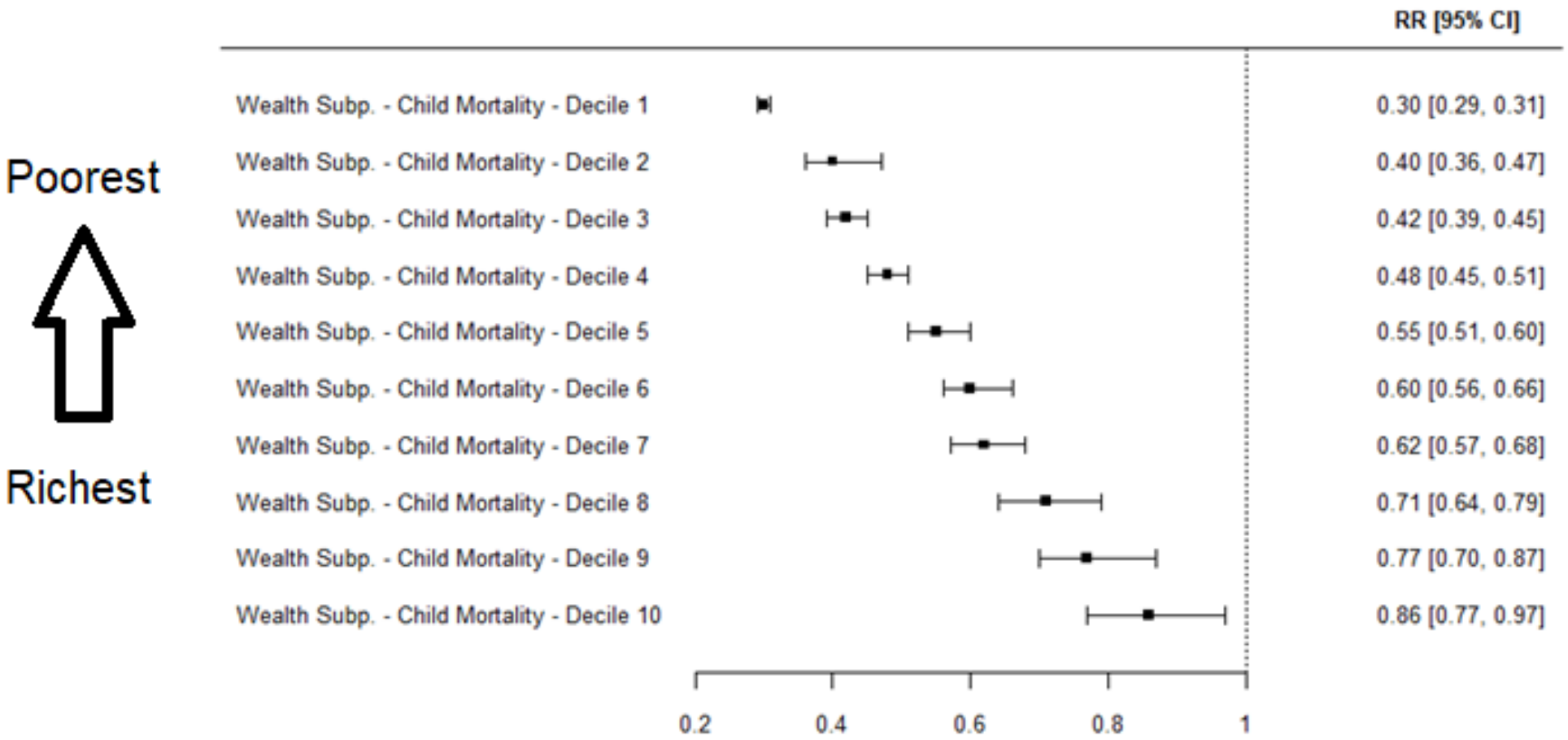


Results

Effects *of the Brazilian CCT, expressed in adjusted Rate Ratios from IPTW multivariable Poisson Regression,* ***on AIDS and Tuberculosis incidence***



Effects *of the Brazilian CCT on* ***Child Mortality****, expressed in adjusted Rate Ratios from IPTW multivariable Poisson Regression.*



WCE
WORLD CONGRESS OF EPIDEMIOLOGY 2024

Discussion and Conclusions

- BFP was able to significantly decrease the AIDS and TB incidence, and child mortality rates, among very low-income populations, with a marked dose-response effect based on the level of socioeconomic vulnerability of the beneficiaries, playing an important role in reducing health inequities in the Brazilian society.

- Given the growing poverty and inequality in the current polycrisis era, the expansion and strengthening of CCT in Low- and Middle-income countries has the potential to contribute to the achievement of the Sustainable Development Goals linked to AIDS, TB, and child mortality by 2030, and to contribute to the reduction of health inequalities worl

WCE
WORLD CONGRESS OF EPIDEMIOLOGY 2024

DSAIDS
Determinantes Sociais do HIV/AIDS

Coorte de 100 milhões de Brasileiros

Plataforma Brasileira de Projeções em Saúde

Thank you

davide.rasella@gmail.com

NIH National Institute of Allergy and Infectious Diseases
R01AI152938
wellcome trust

UFBA | Instituto de Saúde Coletiva | Fiocruz | cidacs | UCLA | SUS | Ministério da Saúde | Pátria Amada Brasil Governo Federal

WCE WORLD CONGRESS OF EPIDEMIOLOGY 2024