

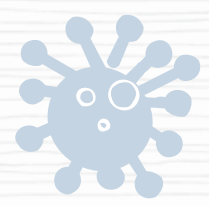
# Social determinants of health, equity and the COVID-19 pandemic in the Americas

**Sebastian Garcia Saiso**  
**Director EIH**

May 18, 2021.

# Content

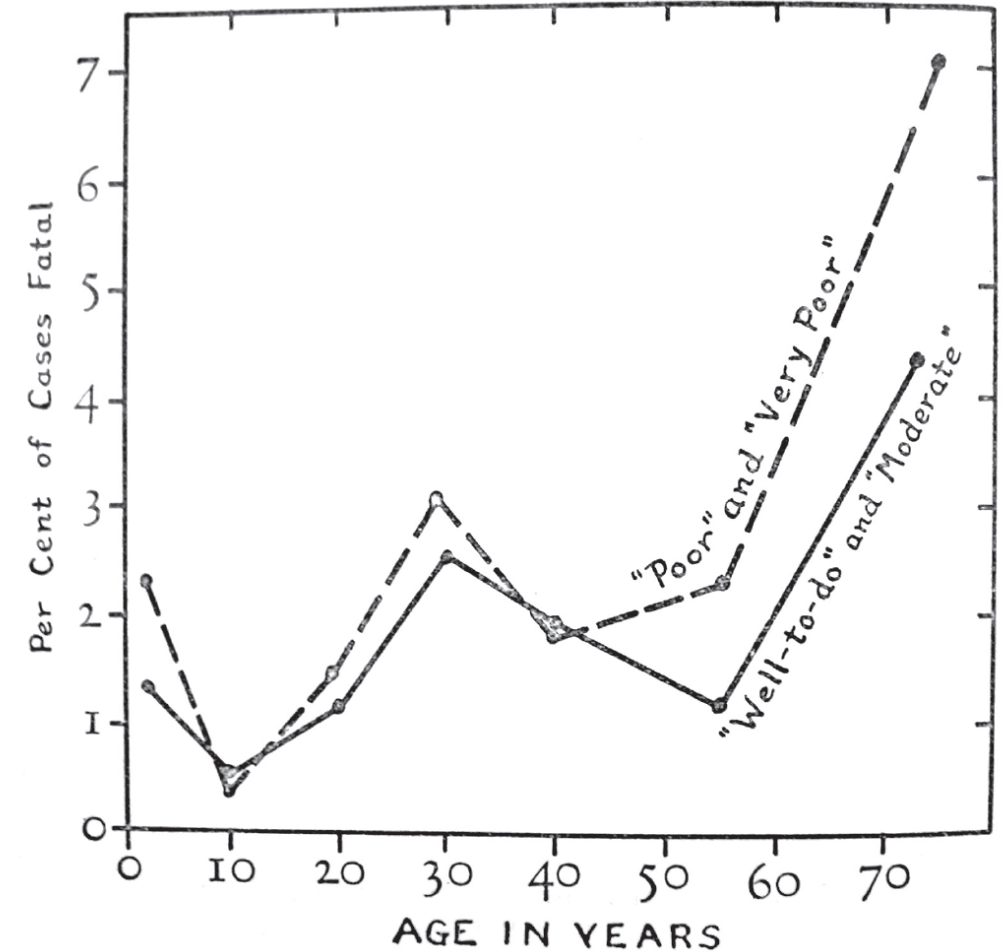
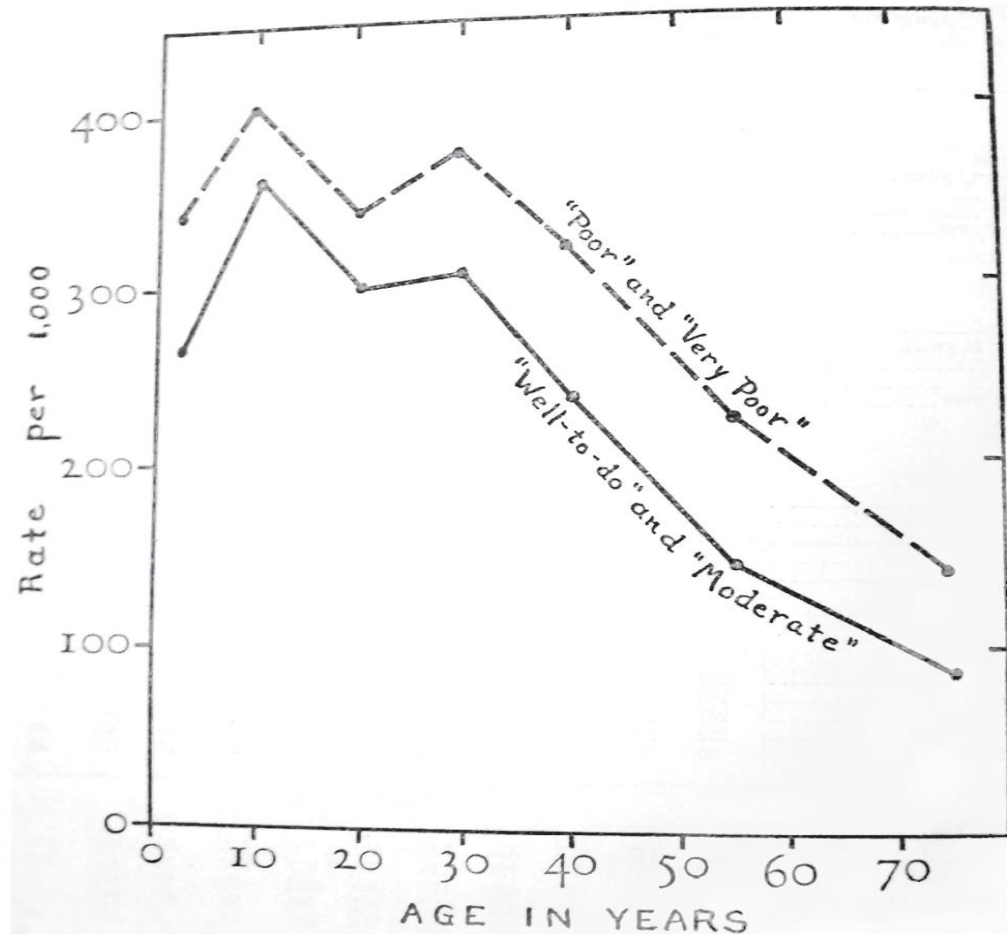
1. Pandemics are not socially neutral
2. The Social Determinants of Health
3. Persistent Inequality
4. Health inequalities and Covid19
5. Covid 19 economic impact
6. The road to 2030 is now a postpandemic road



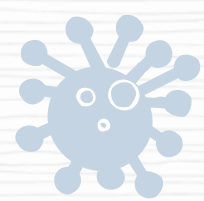
# Pandemics are not socially neutral events

3

## Influenza pandemic 1918

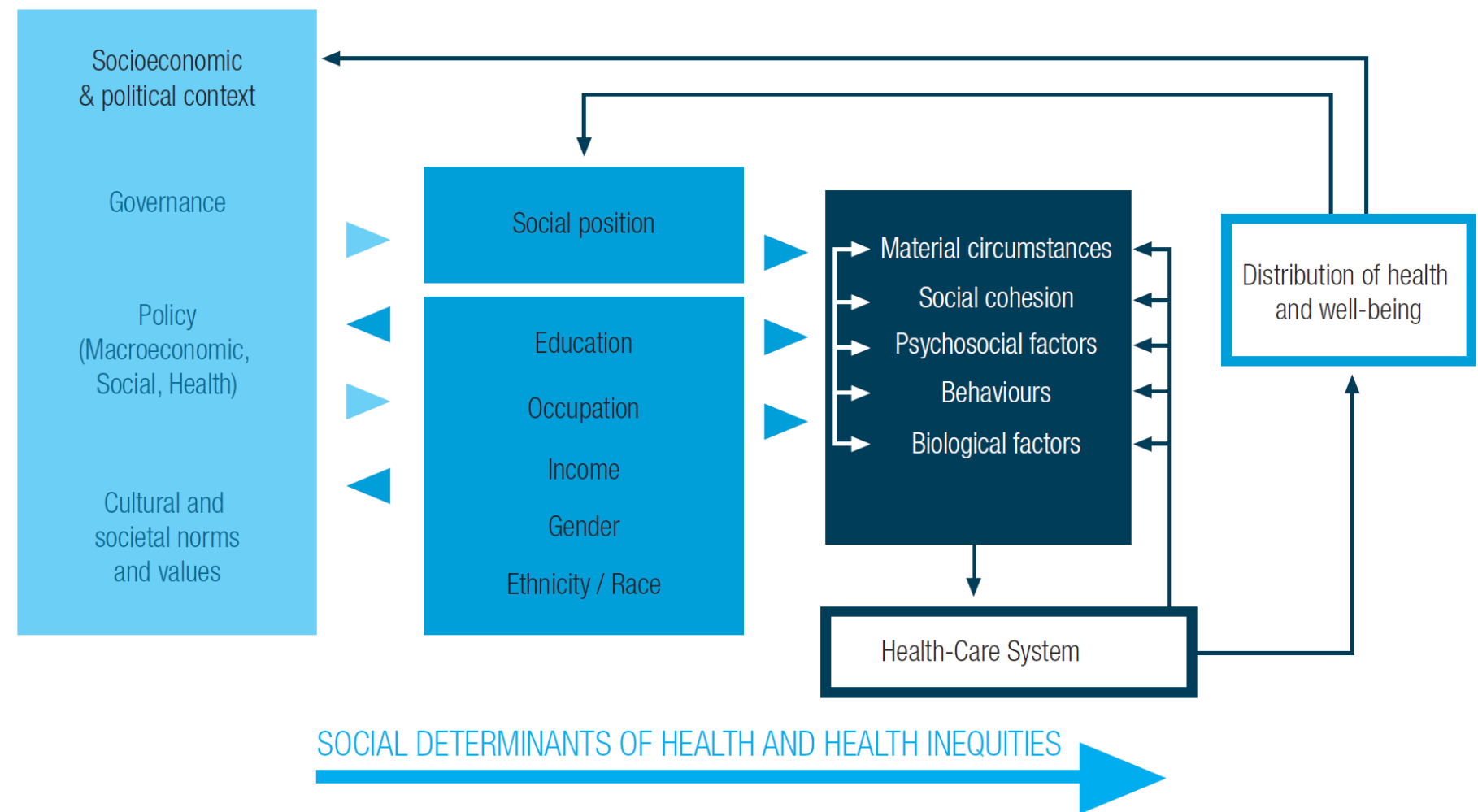
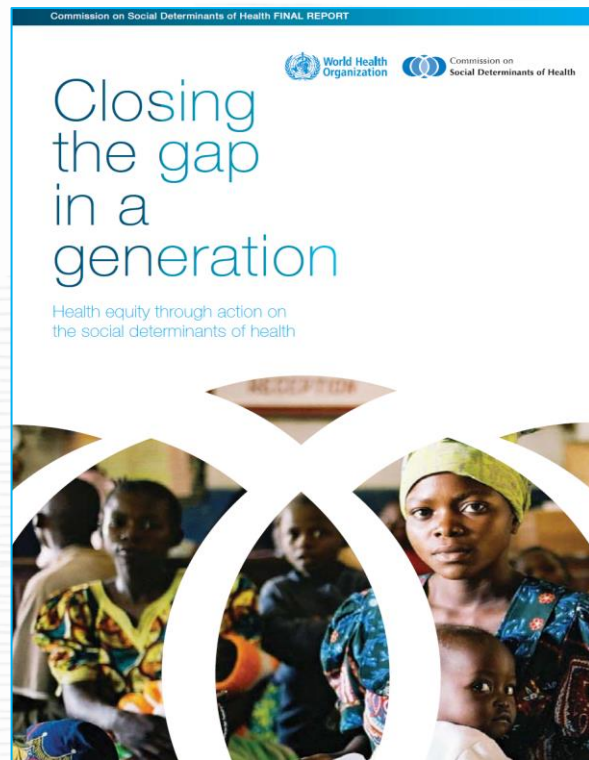


Sydenstricker E. The incidence of influenza among persons of different socioeconomic status during the epidemic of 1918. *Public Health Reports* 1931;46(4):154-170



# The social determinants of health conceptual framework

4



Source: Amended from Solar & Irwin, 2007

Final Report of the Commission of the World Health Organization on Social Determinants of Health; Geneva: 2008



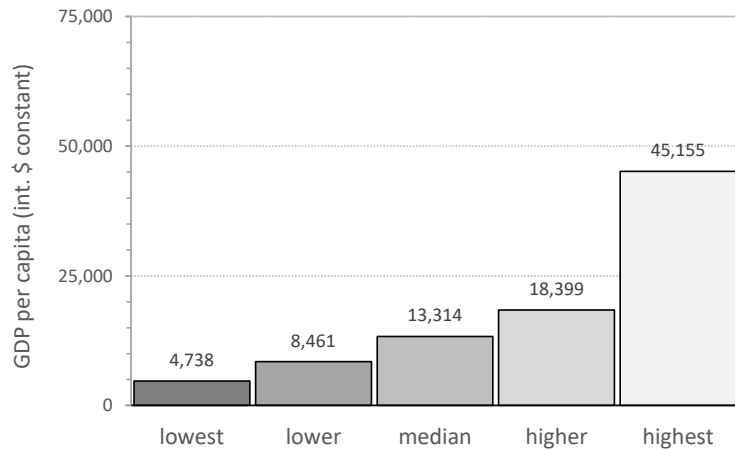


# Persistent inequality in the three dimensions of sustainable development

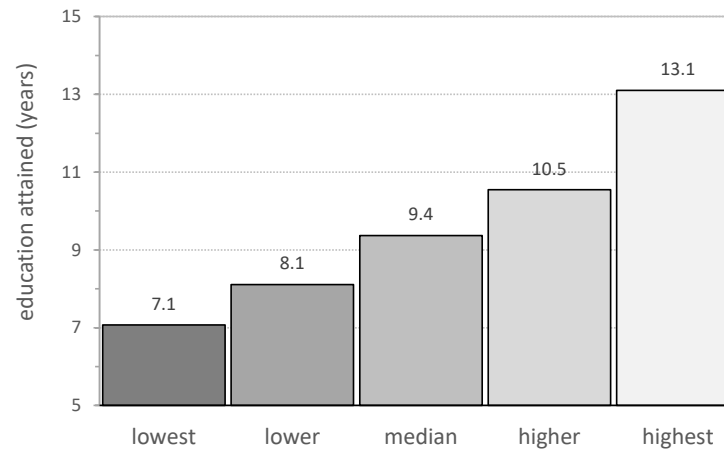
5

2000

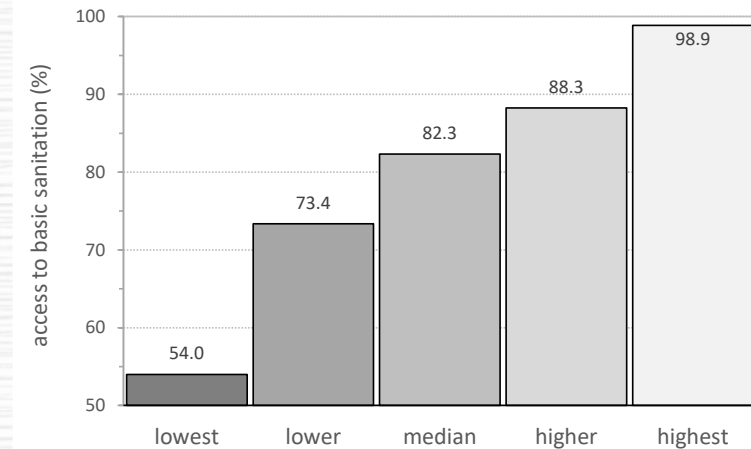
economic (wealth)



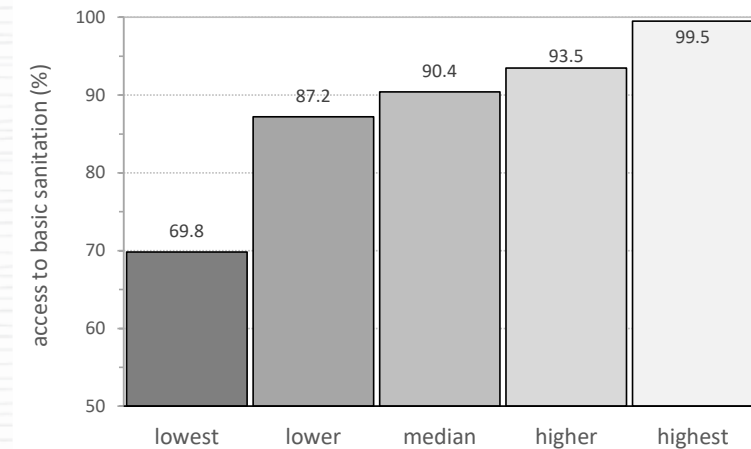
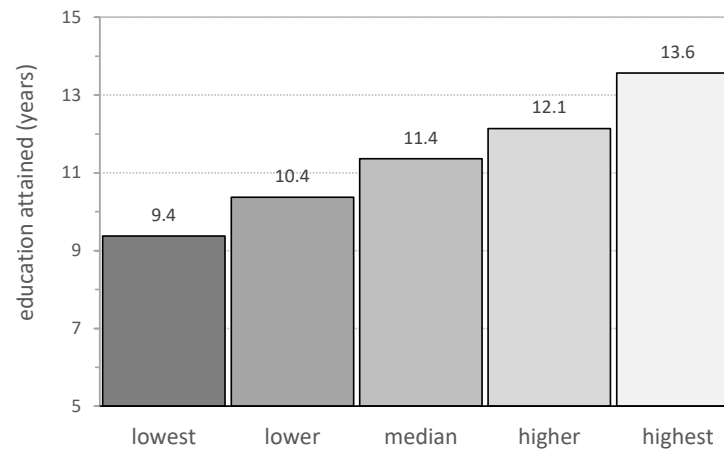
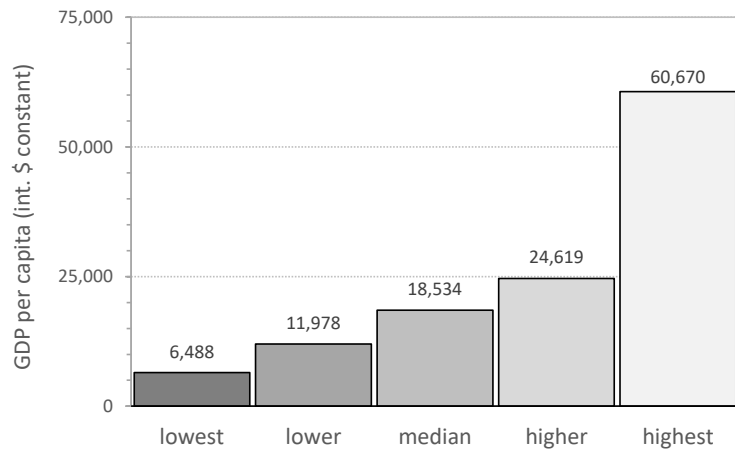
social (education)



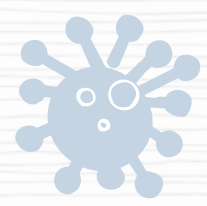
environmental (sanitation)



2019



PAHO Health in the Americas 2020; Washington DC: 2021 (upcoming)



# SDG-3 *protopandemic* precursors in the Americas

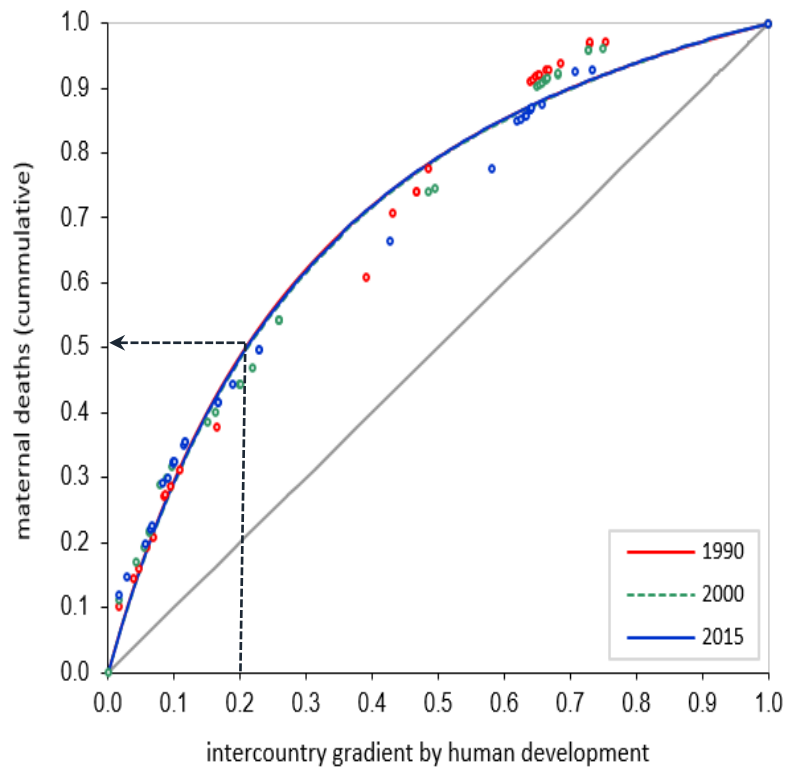
6

successful improvements in regional averages – no sizable changes in inequalities

## maternal mortality (MDG 5)

target: reduce 3/4 from 1990 to 2015

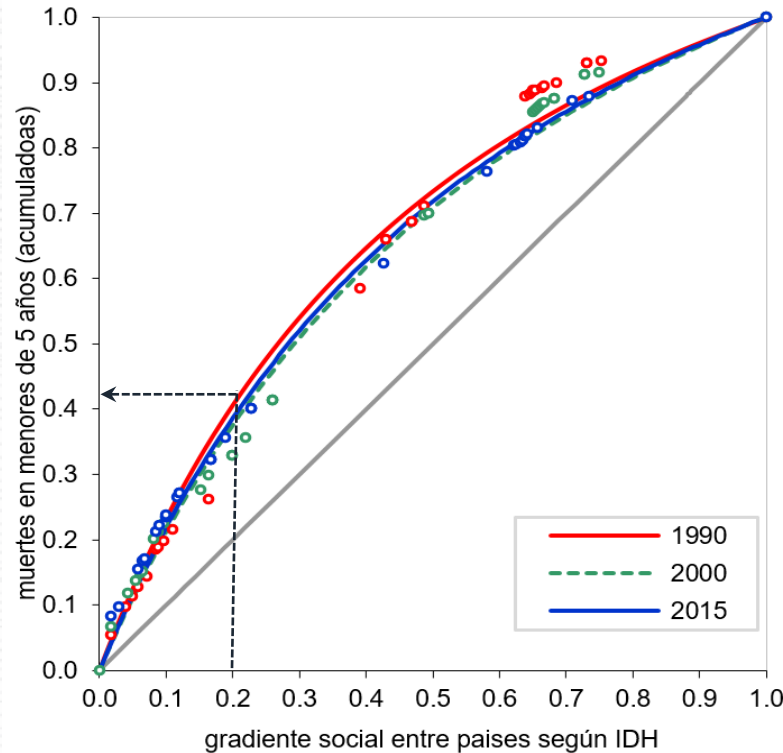
outcome: 101.8 (1990); 51.7 (2015)



## child mortality (MDG 4)

target: reduce 2/3 from 1990 to 2015

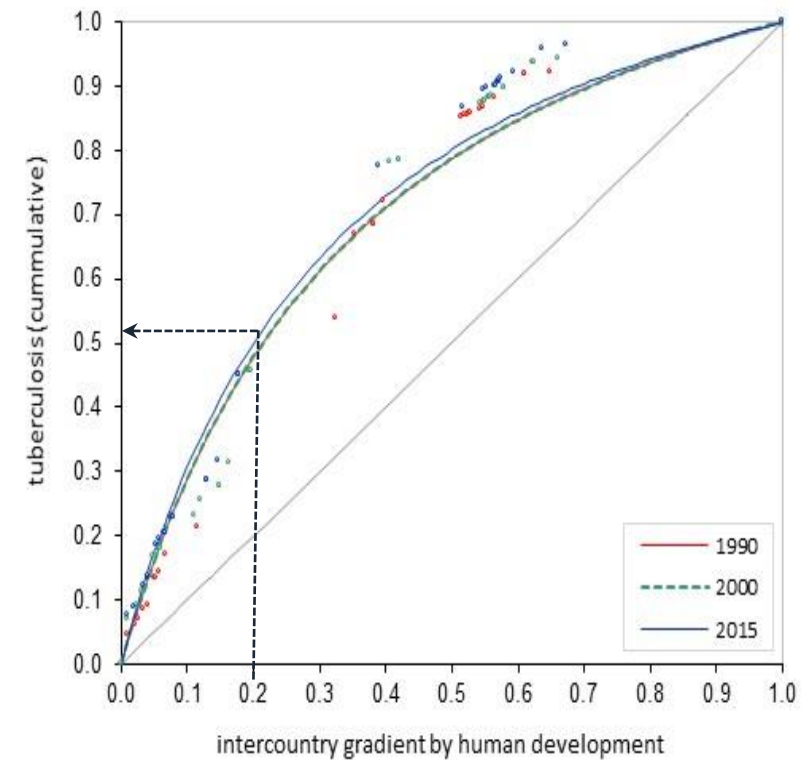
outcome: 42.6 (1990); 14.6 (2015)



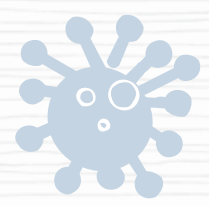
## tuberculosis incidence (MDG 6)

target: curb the incidence

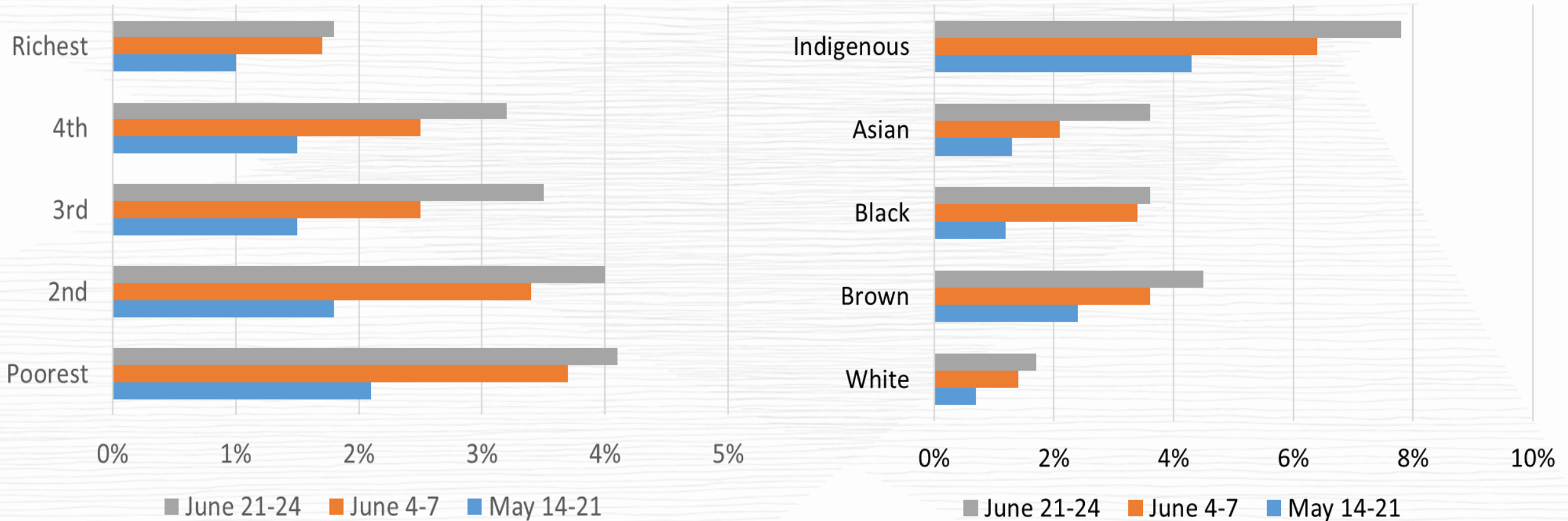
outcome: 55.7 (1990); 28.4 (2015)



Pan American Health Organization. Health in the Americas+, 2017 Edition. PAHO: Washington DC, 2017.

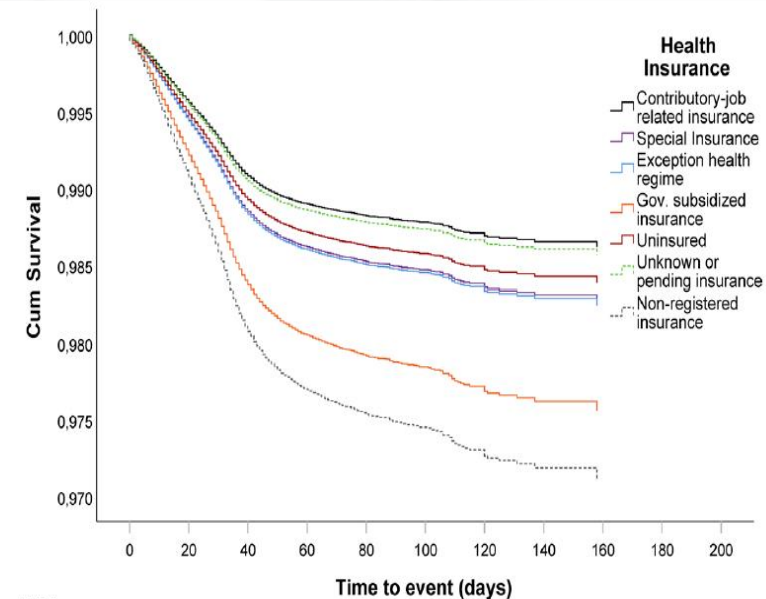
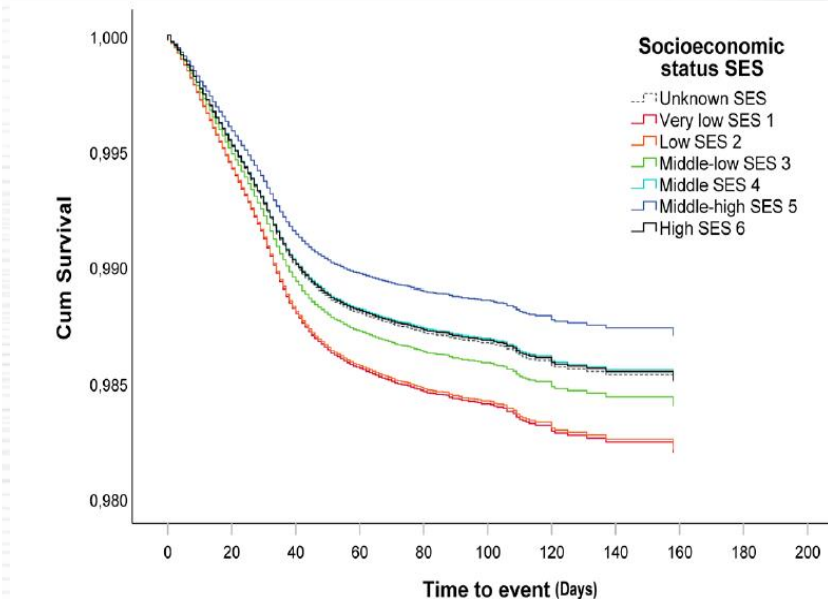
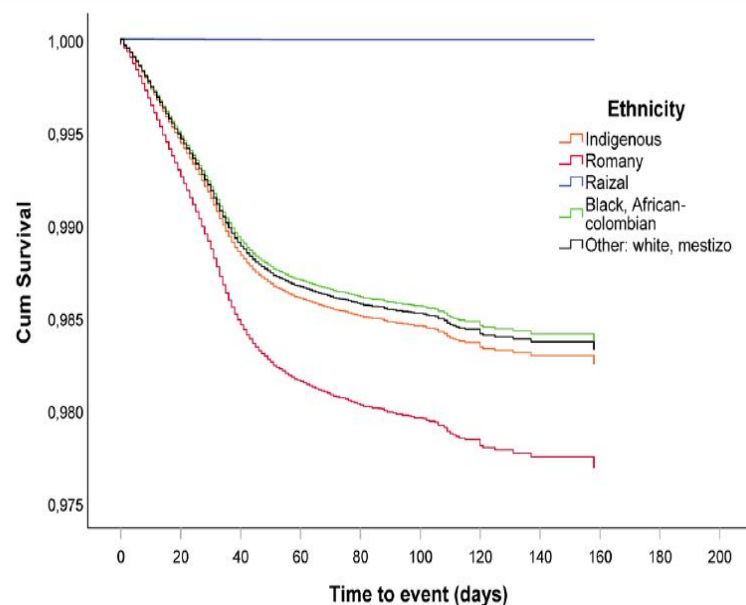


# Inequality gradients in SARS-CoV-2 prevalence, Brazil; May-June 2020



Victora C. Epidemiology and Inequalities in Brazil: the EpiCOVID19 Study. PAHO Webinar 1 on COVID-19, Health-related SDGs and Equity. July 20, 2020.

# Survival curves for covid-19 in Colombia by determinants



Number at Risk

	0	20	40	60	80	100	120	140	160	180	200
Indigenous	4 062	17 005	973	417	229	45	21	10	21	4	0
Romany	11	24	0	1	0	0	0	0	0	0	0
Raizal	5	7	1	0	0	0	0	0	0	0	0
Palenquero	0	0	0	0	0	0	0	0	0	0	0
Black, African-colombian	5 568	30 373	1 937	698	499	137	50	32	7	3	0
Other: white, mestizo	264 752	655 919	29 078	12 096	6 930	1 564	369	199	133	28	10

Number at Risk

	0	20	40	60	80	100	120	140	160	180	200
Unknown SES	57 355	136 735	4 871	1 591	1 010	252	56	40	13	6	3
Very low SES 1	46 039	132 849	7 355	3 477	2 045	459	141	71	50	14	1
Low SES 2	94 405	262 633	12 441	5 126	2 962	638	164	100	75	10	5
Middle-low SES 3	59 028	136 442	5 886	2 437	1 310	291	54	19	16	5	1
Middle SES 4	11 584	23 055	973	354	208	57	15	7	4	0	0
Middle-high SES 5	3 997	7 618	301	124	68	31	5	3	0	0	0
High SES 6	1 990	3 996	162	103	55	18	5	1	3	0	0

Number at Risk

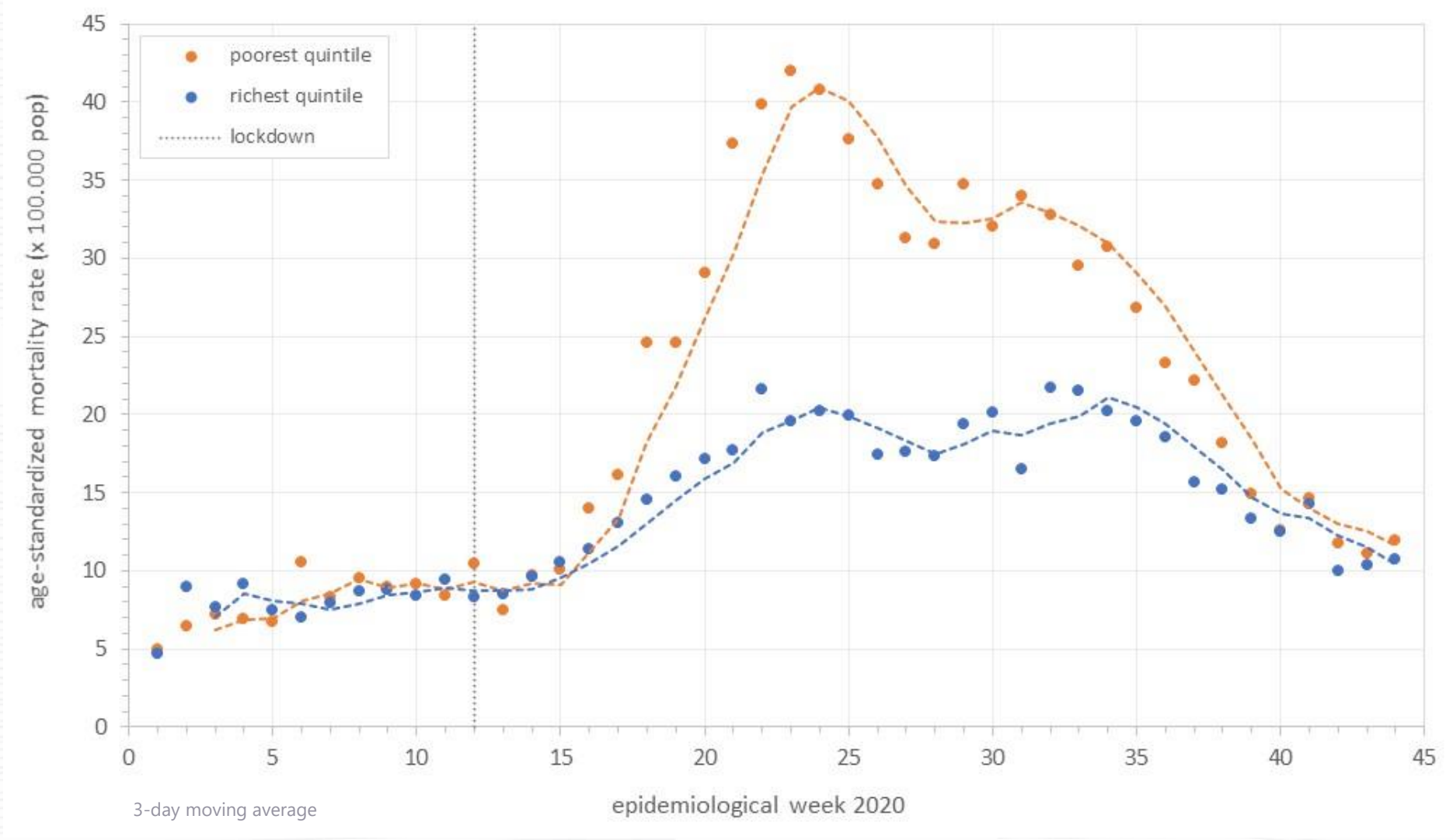
	0	20	40	60	80	100	120	140	160	180	200
Contributory-job related	173 624	455 597	18 907	6 989	3 727	930	200	79	34	13	5
Special Insurance	2 012	13 640	670	252	140	39	7	2	5	2	0
Exception regime	14 841	32 046	1 078	399	237	44	6	25	60	0	1
Gov. subsidized	41 384	102 285	6 973	3 731	2 281	523	189	97	56	17	4
Uninsured	4 416	12 869	1 013	331	210	54	11	14	2	1	0
Unknown or pending	1 942	7 848	386	107	74	17	6	3	1	0	0
Non-registered	36 179	79 043	2 962	1 423	989	139	21	21	3	2	0

Cifuentes MP et al. *J Epidemiol Community Health* 2021 ahead of print [doi:10.1136/jech-2020-216275]





# Excess mortality in Lima City by extreme wealth quintiles, 2020

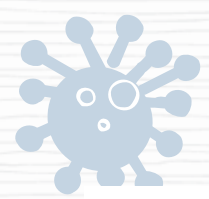


Mujica OJ, Pachas PE. Social inequalities in mortality during the COVID-19 pandemic in Lima, Peru [Spanish]. *Rev Peru Med Exp Salud Publica* 2021;38(1). doi: <https://doi.org/10.17843/rpmesp.2021.381.6740>



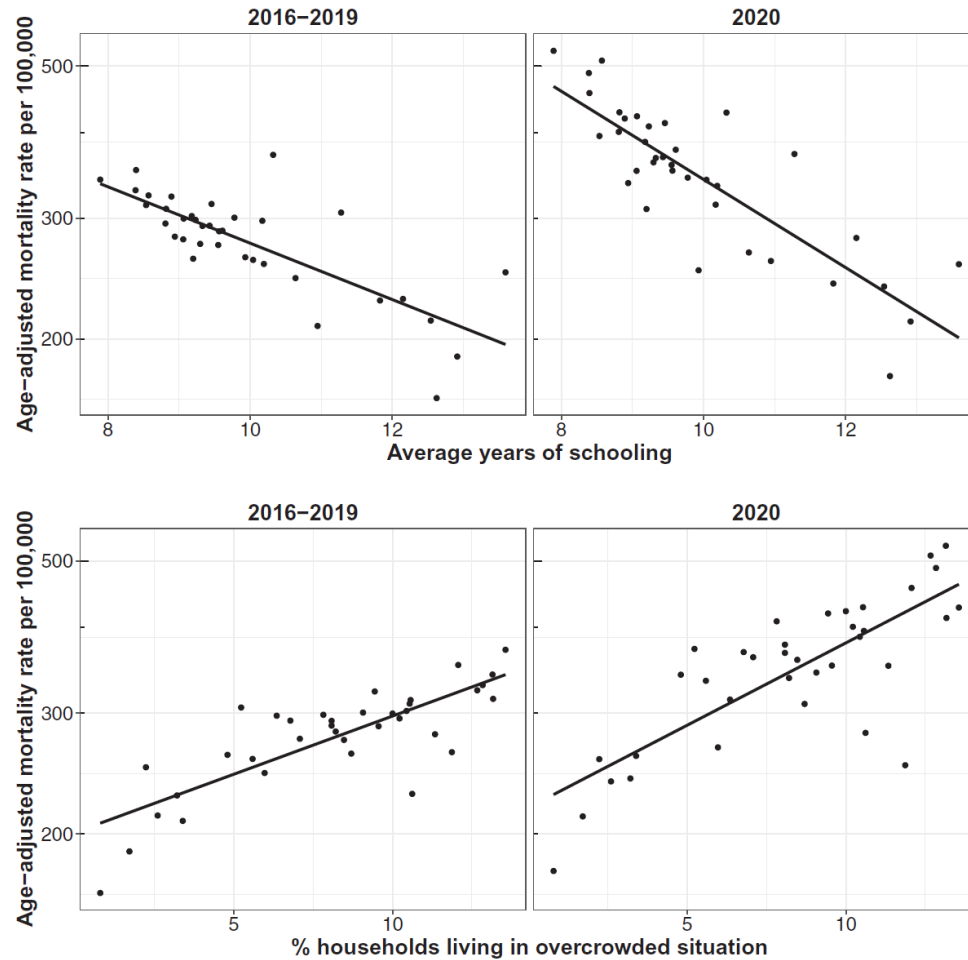
# PAHO

**BE AWARE. PREPARE. ACT**  
[www.paho.org/coronavirus](http://www.paho.org/coronavirus)

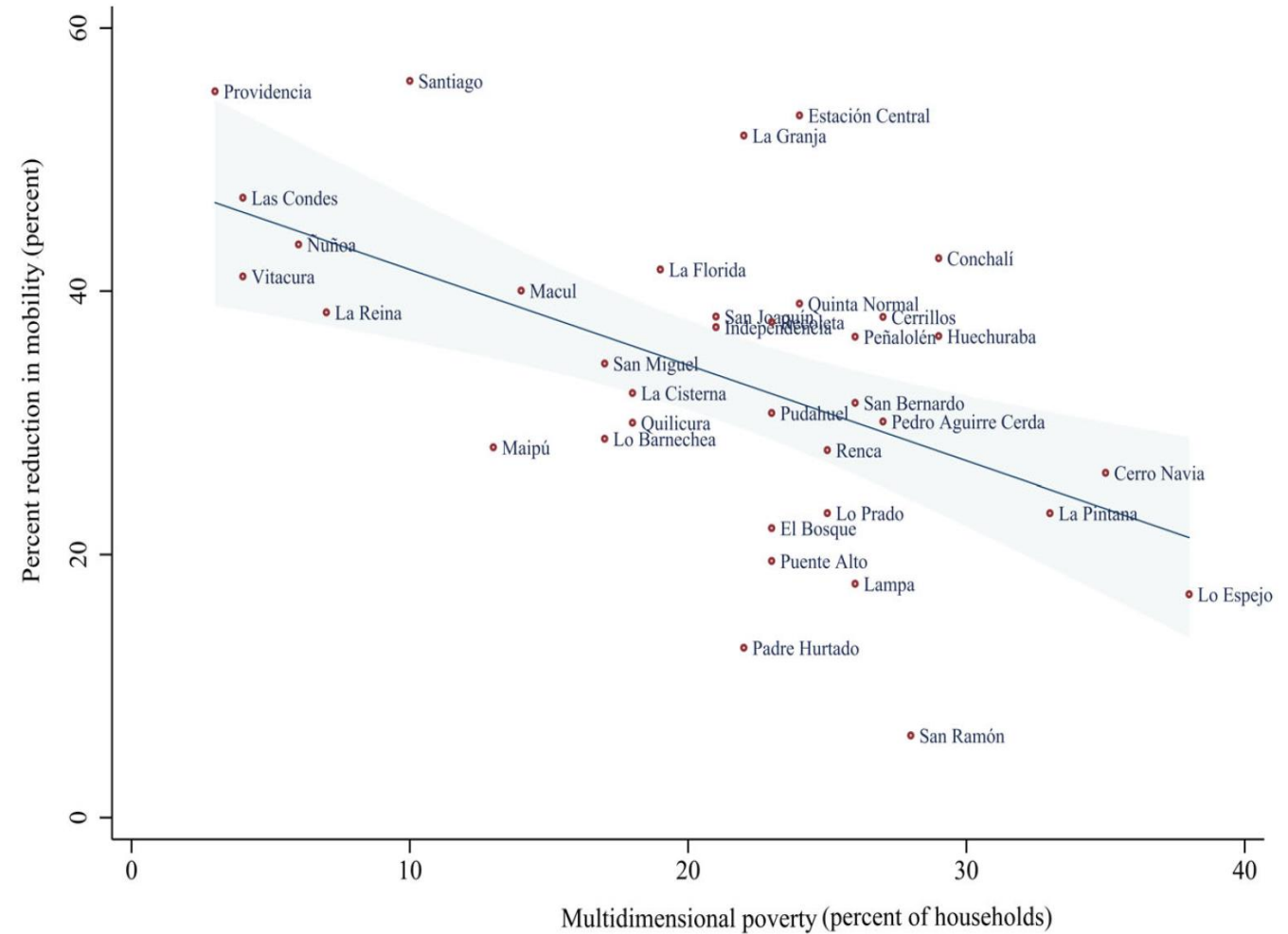


# Social inequalities and covid-19 in Santiago de Chile City

10

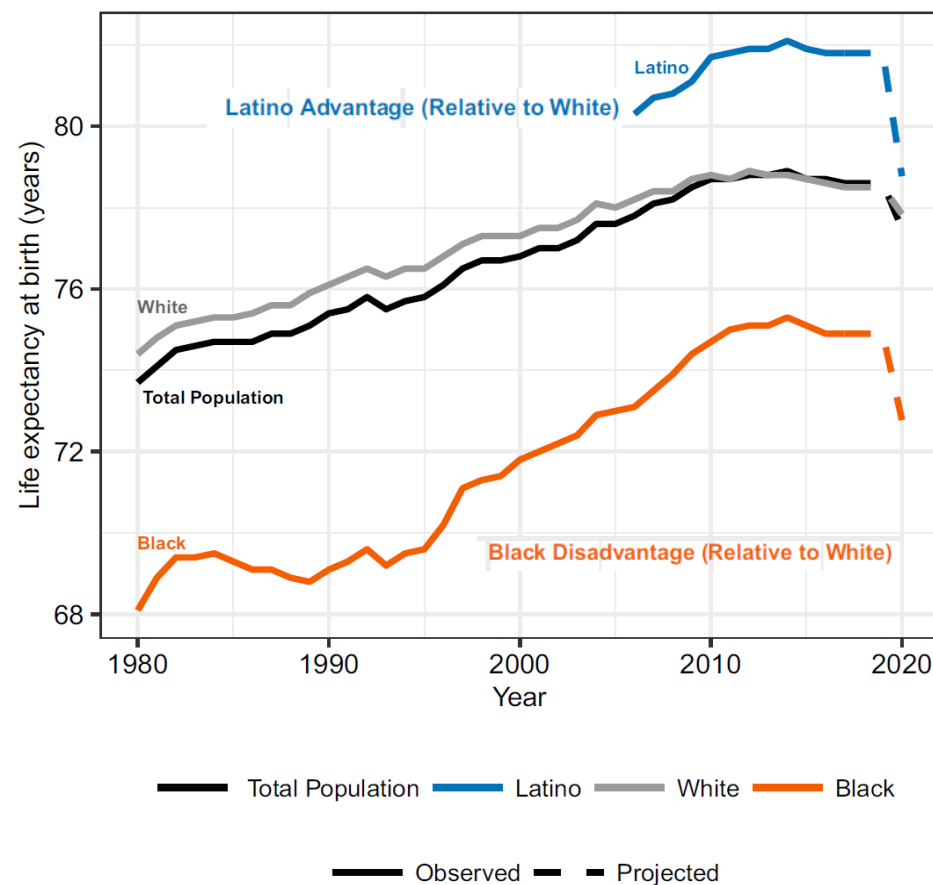


Bilal U et al. *Int J Epidemiol* 2021;1-3 [doi: 10.1093/ije/dyab007]



Gil M et al. *Bull Latin American Research* 2020;39(S1):28-34.

# Reductions in Life Expectancy due to COVID-19, USA 2020

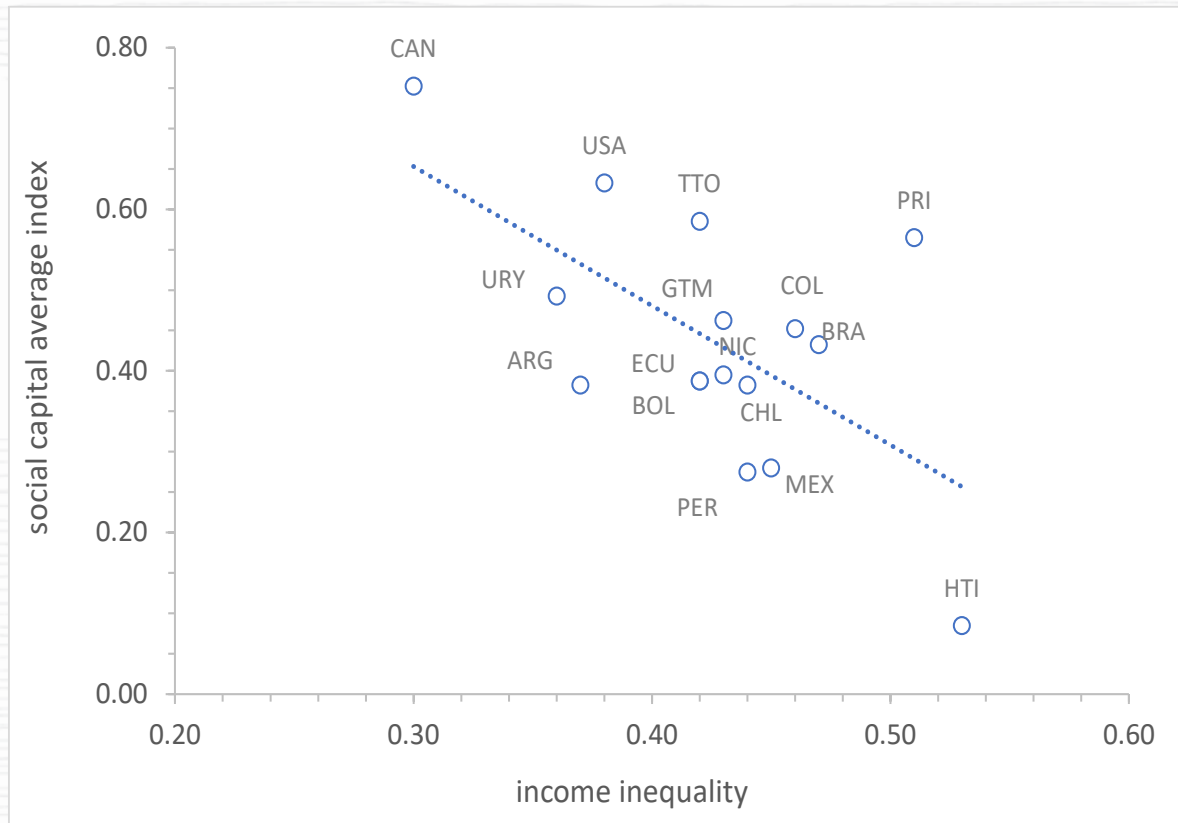


Source: Andrasfay T, Goldman N. Proc US Nat Acad Sciences 2021 [https://doi.org/10.1073/pnas.2014746118]



# Social capital, the determinants of health, and covid-19

social capital = social trust + group affiliation + civic engagement + confidence in state institutions



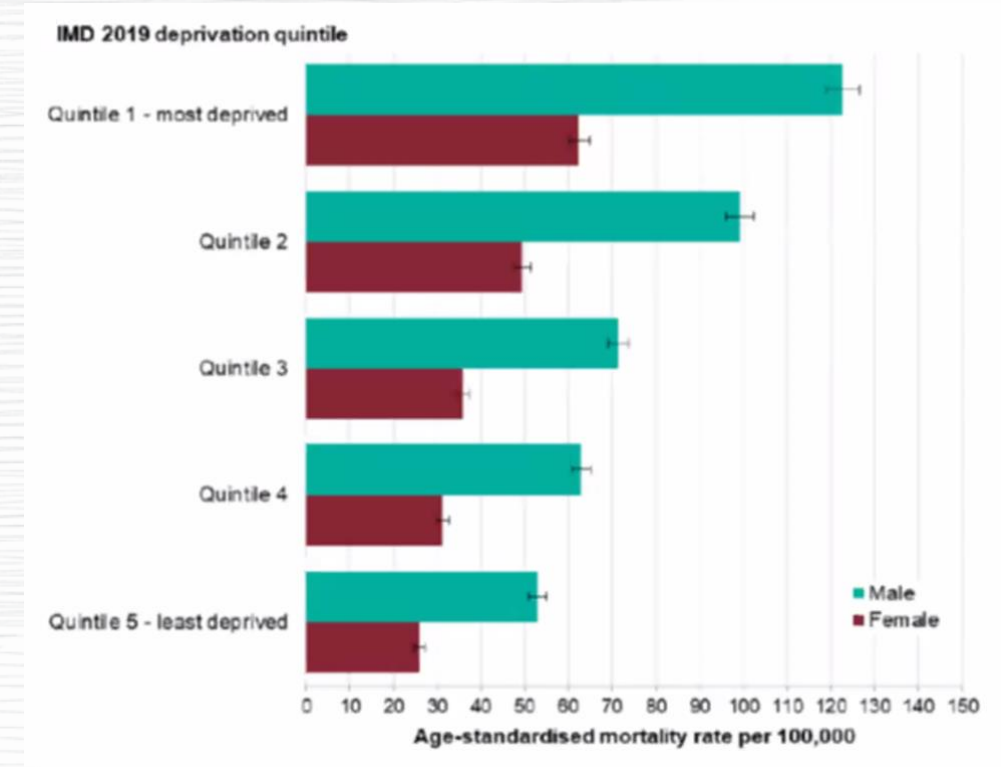
PAHO/EIH, based on data from: Elgar FJ, Stefaniak A, Wohl MJA. The trouble with trust. *Soc Sci Med* 2020 <https://doi.org/10.1016/j.socscimed.2020.113365>



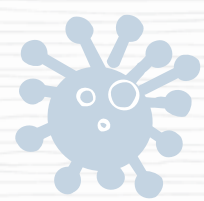


# COVID-19, inequalities, and SDH: WHO systematic review (preliminary)<sup>13</sup>

- 46 studies (mostly ecological, mostly from North America and Western Europe)
- 44 studies show that **disadvantaged groups are more negatively impacted** through:
  - higher COVID-19 infection rates
  - worse COVID-19 severity
  - lack of access to treatment
  - higher COVID-19 mortality rates
- Health gradients by employment category (higher infection rates for employees than for managers)
- Health gradients by race/ethnicity identity (higher infection rates in minorities)



Valentine N. Overview: COVID-19 Impacts. WHO Webinar on Inequities in COVID-19 infection and mortality. November 4, 2020 <https://bit.ly/3nkRXwX>



# COVID-19, inequalities, and SDH: WHO systematic review (preliminary)

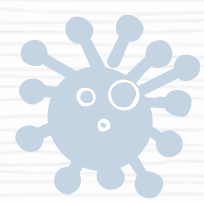
14

## Negative impacts associated to:

- Poverty and reliance on daily wages, or the informal economy
- Weak social assistance programs
- Deprived housing, deprived public areas and poor services
  - Housing and public area crowding
  - Poor sanitation and lack of hygiene facilities
- Poor health coverage and poor access to health care
- Poorly paid and poorly supported working conditions
- Poor/inappropriate information
- Living and working conditions requiring public transport / higher mobility

- **153/200 countries had offered cash transfers**
- **94/200 offered financial obligations support**
- **70% of Q1 in LMIC one member lost job**

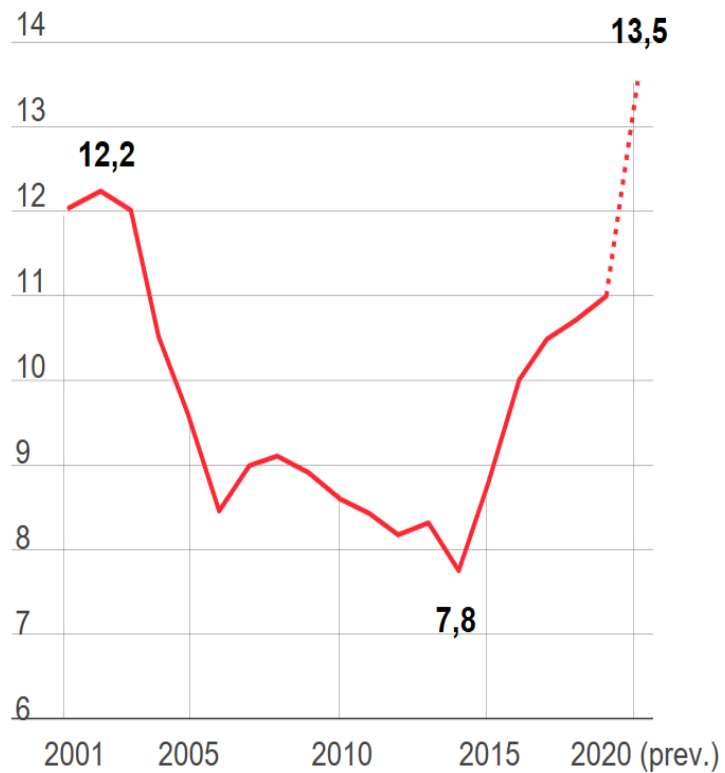
Valentine N. Overview: COVID-19 Impacts. WHO Webinar on Inequities in COVID-19 infection and mortality. November 4, 2020 <https://bit.ly/3nkRXwX>



# COVID-19 immediate economic impact

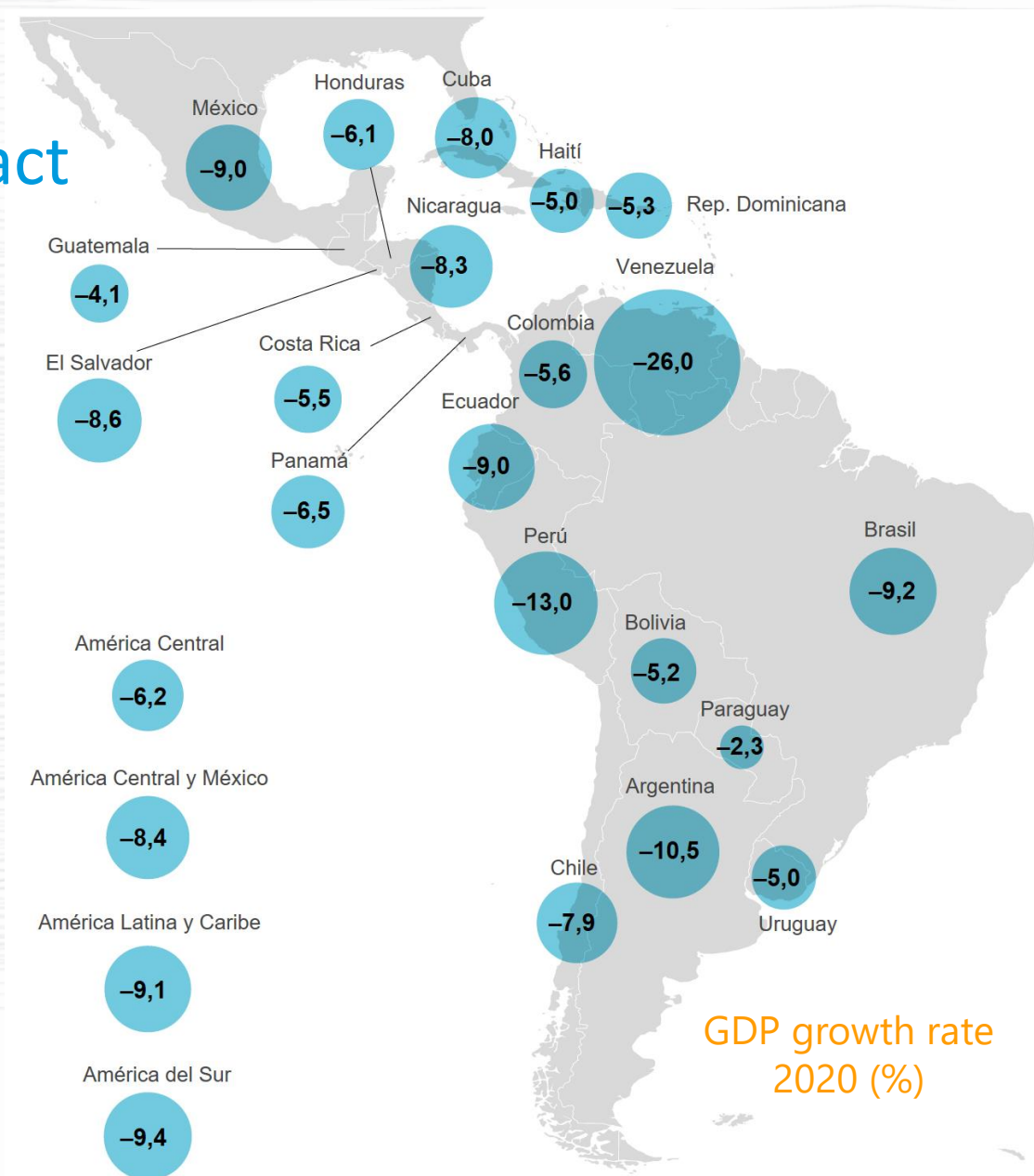
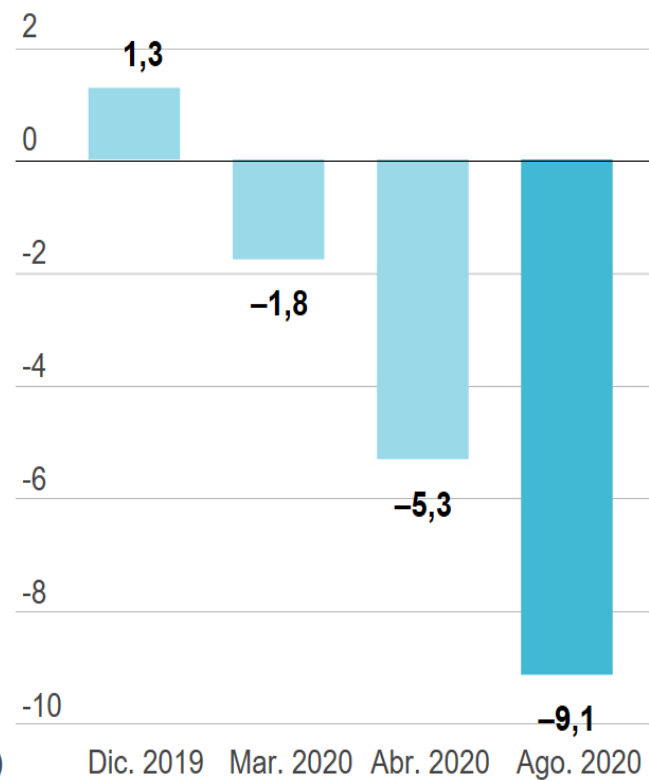
Extreme poverty prevalence  
% total population

**Regress into poverty 14 years**

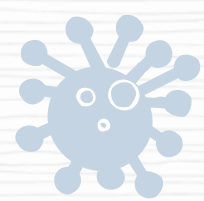


ECLAC/PAHO, July 2020

GDP growth rate  
%



GDP growth rate  
2020 (%)



# COVID-19 immediate economic impact on income inequality

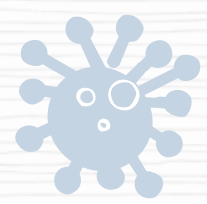
16

variation	country
Between 1.0% and 1.9%	Guatemala
	Paraguay
Between 2.0% and 2.9%	Honduras
	Nicaragua
Between 3.0% and 3.9%	Bolivia
	Costa Rica
	Panama
	Dominican Republic
Between 4.0% and 4.9%	Colombia
	Uruguay
Between 5.0% and 5.9%	Brazil
	Chile
	El Salvador
	Mexico
6.0% and more	Argentina
	Ecuador
	Peru

- **The Gini index for the region would increase by 4.9 percentage points from 2019 to 2020.**
- The increase would vary by country between 1% and 8%.
- Eight out of 10 people in the region (491 million people) will live with incomes below 3 poverty lines: \$ 500 per month.

ECLAC, July 2020: projected variation in the Gini Index in 2020; Latin America (17 countries)





# COVID-19 and inequalities in the social determinants of health: reciprocal impacts

17

## **SARS-CoV-2 transmission dynamics unveils and exacerbates social inequalities:**

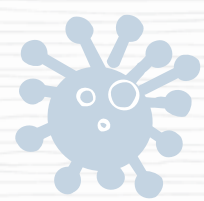
Neither the exposure nor the susceptibility to the infectious agent is homogeneously distributed in the population; they disproportionately concentrate in socially disadvantaged, vulnerable, and excluded groups

## **Underlying social inequalities fuel SARS-CoV-2 transmission dynamics:**

Lack of access to health care and to quality information in the socially disadvantaged leave them more exposed and more susceptible to the infectious agent

**The short-, medium- and long-term consequences of the COVID-19 inequality syndemic are structural, multidimensional, and intersectional:** immunization, infant mortality, maternal mortality, nutrition, fertility, domestic violence, mental health, chronic conditions, discrimination, alienation, and other numerous and unfairly distributed health and social spill over effects....

PAHO Seminar on Covid-19, SDG-health related Targets, and Equity; Washington DC: August 19, 2020.



## postscript: *the road to 2030 is now a post pandemic road...*

18

- ✓ The sense of urgency to address and eliminate unfair inequalities in the opportunities for health and well-being on the road to universal health and sustainable development has been suddenly fuelled by **the emergence of the new coronavirus pandemic, which has dramatically exposed and amplified social inequalities and, therefore, health inequalities.**
- ✓ The road to 2030 is now a post-pandemic road and, consequently, **society as a whole should review and rethink its priorities toward building resilient systems to combat future pandemics.**
- ✓ **Health policy makers must recognize the primacy of the principle of equity:** equity is a societal value with a central role in social decision-making, the conduct of civilized life, the identity of peoples and institutions, and the promotion of population health.
- ✓ **In this post-pandemic future, health policy accountability on pro-equity decisions and actions will be better informed if guided by explicit measurable goals for health inequality reduction/elimination.**

Sanhueza A, Espinosa I, Mujica OJ, Barbosa J. Leaving no one behind: a methodology for SDG-related health inequality reduction target setting. *Pan Am J Public Health* 2020;44:e155