ELSA-Brasil: 
The Covid19 Mental Health Cohort

Andre Russowsky Brunoni, MD, PhD
Associate Professor, University of São Paulo Medical School
ELSA-Brasil Senior Mental Health Researcher

- The impact of mental health was expected to be huge ("tsunami")
- Findings from cross-sectional studies
- The ELSA-Brasil Mental Health Cohort
- Ours and worldwide findings
- Tackling the heterogeneity of findings
- Deterioration, Status Quo, Recovery
IHCC Mental Health Working Group

ELSA-BRASIL São Paulo team
- Isabela Bensenor, PI
- Paulo Lotufo, PI
- Daniel Fatori, Post-Doc
- Paulo Suen, PhD
- Pedro Bacchi, PhD

IHCC Team Initiative
- Jordan Smoller (Harvard)
- Sarah Bauermeister (Oxford)
The COVID-19 pandemic and its restrictive measures
Impact of COVID-19 pandemic on mental health in the general population: A systematic review

Jiaqi Xiong, Orly Lipsitz, Flora Nasri, Leanna M.W. Lui, Hartej Gill, Lee Phan, David Chen-Li, Michelle Iacobucci, Roger Ho, Amna Majeed, Roger S. McIntyre

Methods: A systematic search was conducted on PubMed, Embase, Medline, Web of Science, and Scopus from inception to 17 May 2020 following the PRISMA guidelines. A manual search on Google Scholar was performed to identify additional relevant studies. Articles were selected based on the predetermined eligibility criteria.

Results: Relatively high rates of symptoms of anxiety (6.33% to 50.9%), depression (14.6% to 48.3%), post-traumatic stress disorder (7% to 53.8%), psychological distress (34.43% to 38%), and stress (8.1% to 81.9%) are reported in the general population during the COVID-19 pandemic in China, Spain, Italy, Iran, the US, Turkey, Nepal, and Denmark. Risk factors associated with distress measures include female gender, younger age group (≤40 years), presence of chronic/psychiatric illnesses, unemployment, student status, and frequent exposure to social media/news concerning COVID-19.

Limitations: A significant degree of heterogeneity was noted across studies.

Conclusions: The COVID-19 pandemic is associated with highly significant levels of psychological distress that, in many cases, would meet the threshold for clinical relevance. Mitigating the hazardous effects of COVID-19 on mental health is an international public health priority.
The ELSA-Brasil Study

The Longitudinal Study of Adult Health - ELSA - is a cohort study including 15,000 civil servants 35-74 years-old from 6 institutions:

- University of São Paulo (5,000)
- Federal University of Minas Gerais (3,000)
- Federal University of Bahia (2,000)
- Federal University of Espírito Santo (2,000)
- Fundação Oswaldo Cruz (2,000)
- Federal University of Rio Grande do Sul (2,000)

ELSA's main objective to study cardiovascular diseases and diabetes in Brazil and Latin America.

Brunoni et al., Psychol Med, 2021

Mental Health Cohort
March 15, 2020: Lockdown in São Paulo

March-April, 2020: Arrangements for virtual assessment of ELSA-Brasil São Paulo participants

April – May, 2020: Ethics Committee, FAPESP approval
Aims

1) to assess the rates of psychiatric disorders and symptoms before and during the pandemic.

2) to investigate whether several clinical and demographic variables, as well as leisure activities, and quarantine behaviors during the pandemic would be associated with clinical outcomes.
Pandemic impact on mental health: ELSA-Brasil - 2020

Brunoni et al., Psychol Med, 2021
Pandemic impact on mental health: ELSA-Brasil - 2020

Risk factors

- > 60 years-old
- Non-white ethnicity
- Absence of college degree
- Loneliness
- Concerns about income
- Increased distress
- Low quality of personal relationships

Brunoni et al., Psychol Med, 2021
Tackling the heterogeneity of pandemic impact on mental health: ELSA-Brasil - 2020
Strategies and Pathways

UN Research Roadmap for COVID-19 recovery
What will be the pandemic aftermath?

Before

Better than before (Recovery)

As before (Status quo)

Worse than before (Deterioration)

Post-Pandemic

Economic recovery
Collective Effervescence
Mental Illness - Pathogenesis
Post-traumatic growth and Resilience

Mass Vaccination

Pandemic

Chloroquine
Rumination and Vulnerability
Mental Health - Salutogenesis
Economic recession
Anomic societies
Thank you!
Andre R Brunoni
Brunoni@usp.br