COVID 19 In Turkey: Modelling the Success and Failure of Public Health, and the Health Systems Response

İlhan Can Ozen

METU Economics Department

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Crucial Questions of the Day

- How Can We Conceptualize Achievement in this Plethora of Data?
- How Can We Differentiate Between Luck and Ability?
- Where Are the Success Stories?
- Where Are the Vulnerabilities?
- What Can We Learn About the Next Stage? What Can We Do Better?
Critical Data

- Target Data: 13 March—19 May 2020.
- What We Conceptualize as the **First Period of COVID**.
- Do We Have the Right To Call It This?
- National Distribution.
- Geographically Disaggregated Distribution.
- Hospitalization Data for A Large Subset of Population.
- TUIK Health System Capacity Indicators + Health Vulnerability Indicators.
Regional Heterogeneity in Disease Distribution


- Center for Geographic Analysis-Harvard University

- HU-SESPAM Office of Health Policy Analysis.

- Conversion of Map Choropleths to Regional Values.

- Controlled by Non-Continuous Regional Data and Continuous National Data.

- What Does the Degree of Regional Heterogeneity Tell Us? Why Could It Be Advantageous and Disadvantageous?..
Hospitalization and Hospital Treatments

- The Vast Percentage of Treatment Has Occurred in Public Hospitals.
- Dataset ⇒ 1019 Patients Identified as COVID-19 and Treated As Such.
- What Information Do We Need:
  - How Were They Treated? How Long Did It Take to Treat Them?
  - How Serious Were the Cases That Arrived? What Other Disease Distributions Did they Arrive With?
  - How Effective Was Their Treatment? What Are the Underlying Mortality Rates for Those Who Received Hospital Care?
How Were the Disease Cases Distributed?

Data Source: HU SESPAM Hospitalization Statistics, 2020
How Were the Disease Cases Treated?

Data Source: HU SESPAM Hospitalization Statistics, 2020
What About the Other Diseases?

Data Source: HU SESPAM Hospitalization Statistics, 2020
Has the First Period Ended?-Graph 1

Data Source: Saglik Bakanligi COVID Statistics, 2020

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COVID 19 In Turkey: Modelling the Success and Failure of Public Health, and
Has the First Period Ended?-Graph 2

Data Source: Saglik Bakanligi COVID Statistics, 2020
Have We Had a National Wave?

ICU Occupancy Increase Related to COVID-19

IBBS-1 Level(%)
Turkey’s Story (Up to Now): Lucky and Able

- The Public Choices Have Stopped In the First Period
- Region-to-Region Contagion (At the Level of the Health System)
- Managed to Contain the Epidemic Within the Borders of the
  Highest Public Health + Health System Characteristics.
- Public Awareness and Filiation Ability Limited the Severe Cases.
- Limited the Spatial Spread of Superspreader Events.
- Health System Is Able to Create Specialized Treatment Units.
  Homogenous, pharmaceutical intense treatment.
- Health System Is Successful in 2 of the 3 Categories. Role of
  Learning is Unclear.
- Excess Bed Capacity Was Kept, Complemented By Faster Turnover.
What Have We Learned? What Should We Have Learned?

- Coordination Is Critical.

- Actions Were Costly, But They Were Worth It.

- It Is Not Clear If We Know How Individually Valuable the Interventions Are.

- Time Dimension ⇒ How Much Did We Learn.

- Geography Dimension ⇒ How Have Different Hospitals Treated the Critical Category?

- Crucial Question ⇒ How Have We Limited the Severe Category & Can We Keep on Limiting People in the Severe Category?
Thank you for listening