

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

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Modelling COVID Roundtable,22 June 2020

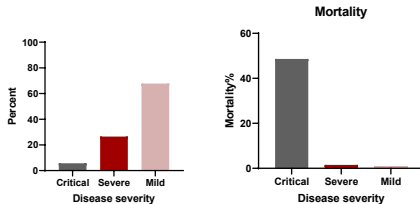
- How Can We Conceptualize Achievement in this Plethora of Data?
- How Can We Differentiate Between Luck and Ability?
- Where Are the Success Stories?
- Where Are the Vulnerabilities?
- What Can We Learn About the Next Stage? What Can We Do Better?

- 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.

- HayatEveSigar Module Together With Official Numbers as Confirmation.
- Center for Geographic Analysis-Harvard University
- HU-SESPAM Office of Health Policy Analysis.
- Conversion of Map Choropleths to Regional Values.
- Controlled by Non-Continous Regional Data and Continous National Data.
- What Does the Degree of Regional Heterogeneity Tell Us? Why Could It Be Advantegous and Disadvantegous? . .

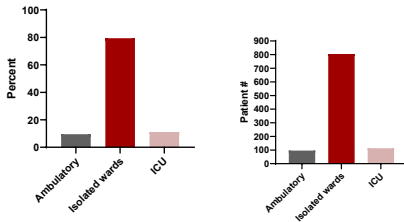
- The Vast Percentage of Treatment Has Occurred in Public Hospitals.
- Dataset⇒1019 Patients Identified as COVID-19 and Treated As Such.
- What Information Do We Need:
- How Were They Treated? How Long Did It Take to Treat Them?
- How Serious Were the Cases That Arrived? What Other Disease Distributions 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?



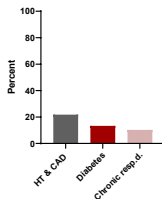
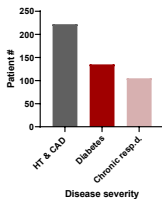
Data Source: HU SESPAM Hospitalization Statistics,2020

# How Were the Disease Cases Treated?



Data Source: HU SESPAM Hospitalization Statistics,2020

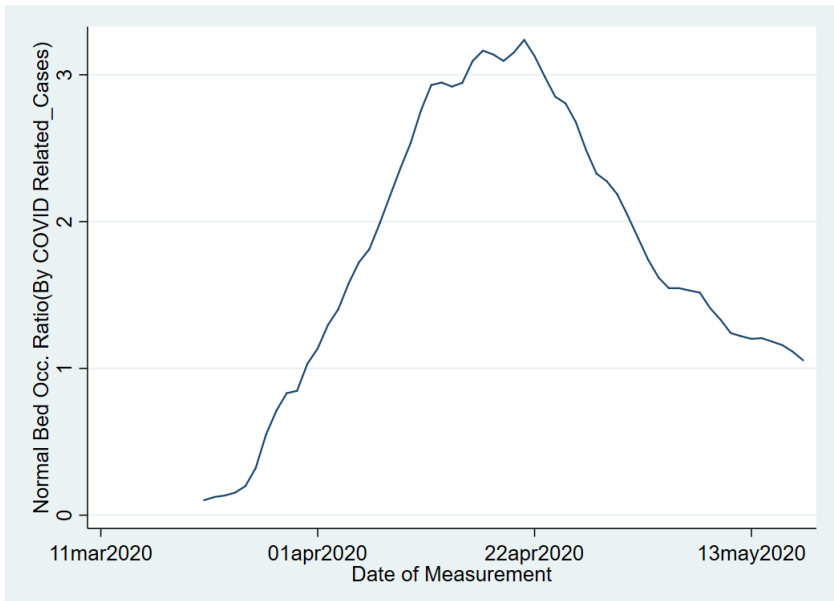
# What About the Other Diseases?



Data Source: HU SESPAM Hospitalization Statistics,2020



# Has the First Period Ended?-Graph 1



# Has the First Period Ended?-Graph 2

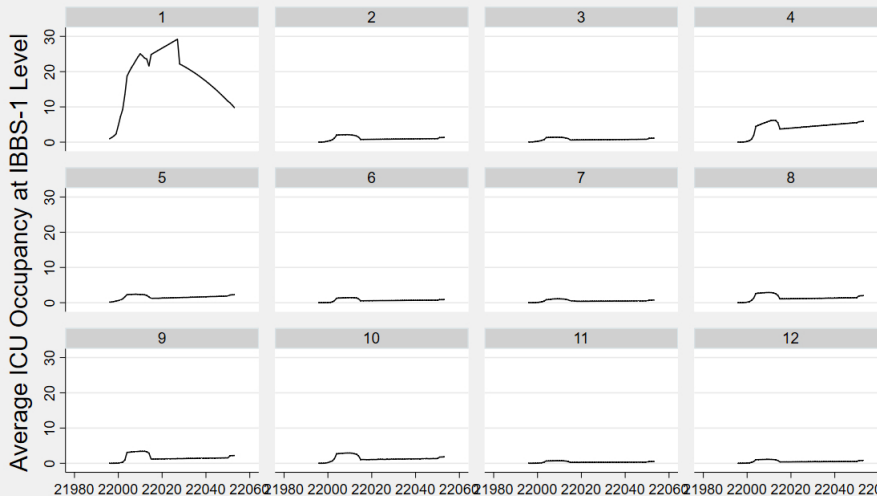


Data Source: Saglik Bakanligi COVID Statistics,2020

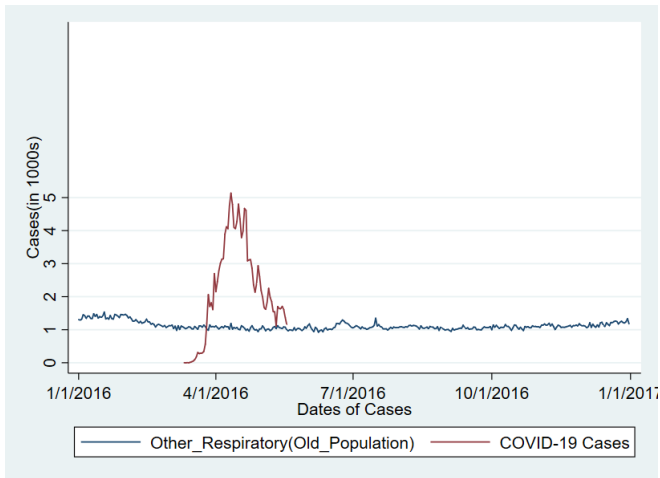
# Have We Had a National Wave?



## ICU Occupancy Increase Related to COVID-19 IBBS-1 Level(%)



# Have We Been Lucky?



Data Source: Saglik Bakanligi COVID Statistics-TUIK Saglik Bilesenleri,2020.

# 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.

- 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  $\Rightarrow$  How Much Did We Learn.
- Geography Dimension  $\Rightarrow$  How Have Different Hospitals Treated the Critical Category?
- Crucial Question  $\Rightarrow$  How Have We Limited the Severe Category & Can We Keep on Limiting People in the Severe Category?

**Thank you for listening**