



## **International: Crisis and Response in the COVID-19 Pandemic**

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- The Impact of COVID-19 on the US Medical System Including Trauma
- Medical response to the pandemic of COVID-19 in Osaka including trauma care
- The impact of COVID-19 on the Italy's medical system including trauma

# The Impact of COVID-19 on the US Medical System Including Trauma

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The impact of the COVID-19 pandemic on the US medical system and the provision of trauma care continues to be felt, despite the drastic decrease in both active cases and deaths over the last several months. In California, the statewide lockdown or stay at home orders combined with the most recent winter surge resulted in a number of unprecedented repercussions and effects from an increase in interpersonal violence to financial hardship, economic uncertainty, and cancellation of elective and non-emergency surgeries. In this presentation, we will review the effect of COVID-19 on healthcare workers, patients, and society at-large.

# Medical response to the pandemic of COVID-19 in Osaka including trauma care

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In Japan, the first laboratory-confirmed case of coronavirus disease 2019 (COVID-19) was detected on January 16, 2020, and the first case in Osaka was reported on January 29. In response to the rapid spread of COVID-19, the Japanese government declared a state of emergency on April 7. The first wave of the pandemic occurred from March to May in the Osaka prefecture. The Osaka prefecture government established the center to coordinate administration of the moderate and severe patients under the headquarter for the Corona Virus management office. More than 500 beds for the moderate COVID-19 patients and more than 200 ICU beds for the severe patients were requested to the 37 hospitals and the 16 hospitals, respectively from the government. Twelve critical care medical emergency centers (CCMEC) are included in the requested 16 hospitals for the severe patients. Since most of these ICU beds were prepared using the ICU beds of the emergency department, there were some influences in the emergency medical system in Osaka.

The Osaka City University Hospital was one of the CCMEC and was requested to prepare ten beds for severe COVID-19 patient. The all beds of ICU and HCU of the CCMEC were changed to the ICU beds for the COVID-19. The function as the tertiary emergency hospital was highly limited especially in the first wave of the pandemic.

The number of the ambulance transportation to our hospital decreased about 20%. The Osaka prefecture government analyzed the influence of the emergency transportation in Osaka city. Although there was no difference in the proportion of the acceptance difficulty in the patients of traffic accidents between 2019 and 2020, but an increase was observed in the patients of acute disease. To avoid the limitation of the function as the CCMEC and improve the acceptance and care of the emergency patients, our hospital re-designed the ICU and human-resource preparedness plan after May 2021.

In this presentation, the influences of the COVID-19 pandemic on the emergency system of Osaka and our challenge to prepare for the COVID-19 pandemic and maintain the function of CCMEC in our hospital.

# The impact of COVID-19 on the Italy's medical system including trauma

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On January 30<sup>th</sup>, 2020 following the recommendations of the Emergency Committee, the WHO Director General declared that the outbreak constitutes a **Public Health Emergency of International Concern (PHEIC)**.



The term Public Health Emergency of International Concern is defined in the IHR (2005) as "an extraordinary event which is determined, as provided in these Regulations:

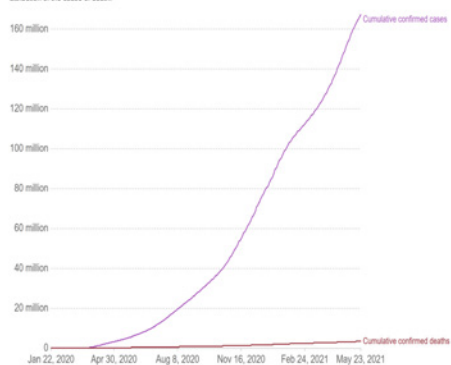
to constitute a public health risk to other States through the international spread of disease; and  
to potentially require a coordinated international response".

This definition implies a situation that: is serious, unusual or unexpected; carries implications for public health beyond the affected State's national border; and may require immediate international action.



Cumulative confirmed COVID-19 deaths and cases, World

The confirmed counts shown here are lower than the total counts. The main reason for this is limited testing and challenges in the attribution of the cause of death.

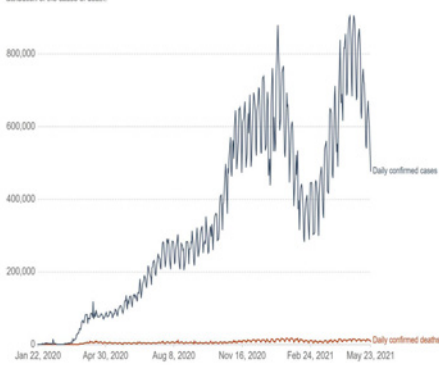


Source: Johns Hopkins University CSSE COVID-19 Data - Last updated 24 May, 06:03 (London time) OurWorldInData.org/coronavirus - CC BY



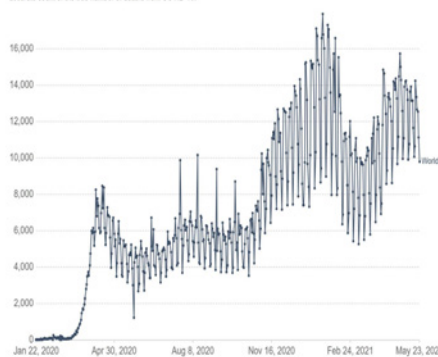
Daily confirmed COVID-19 cases and deaths, World

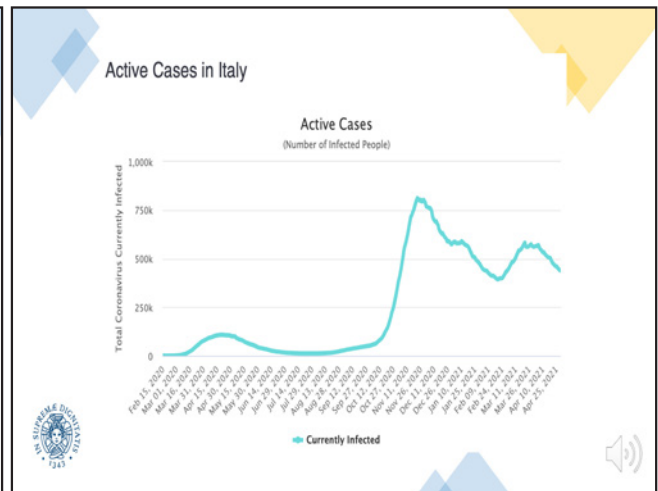
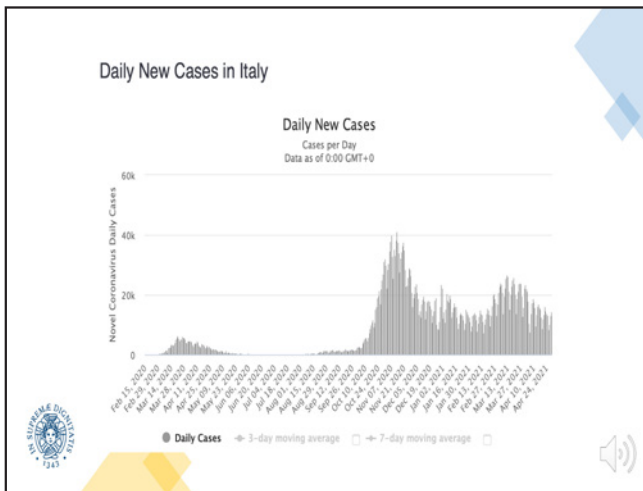
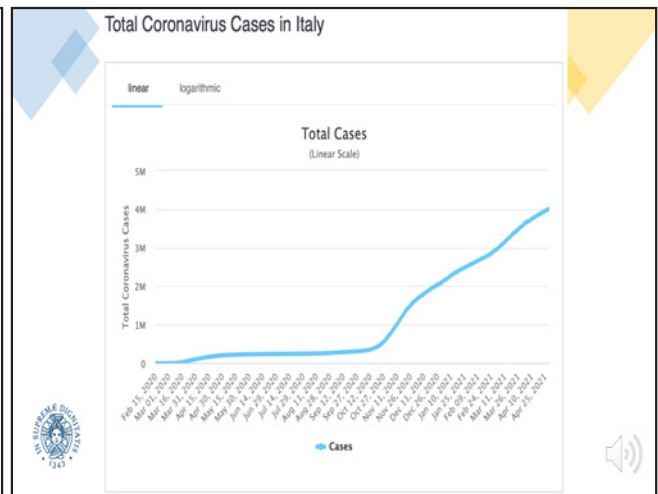
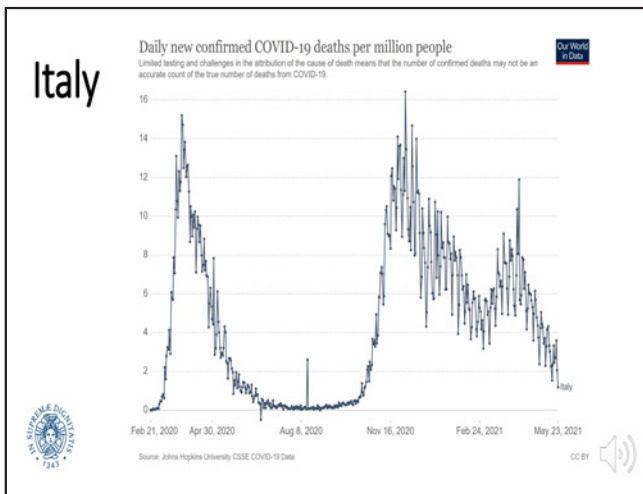
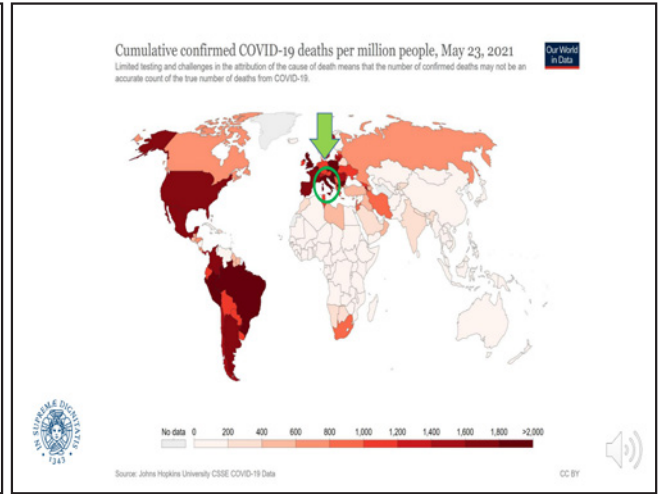
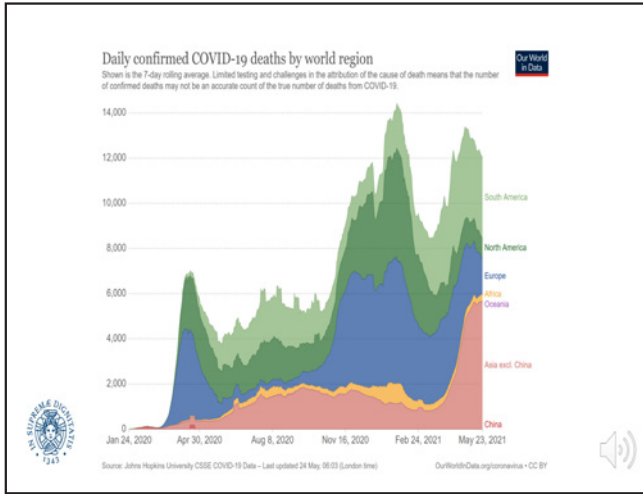
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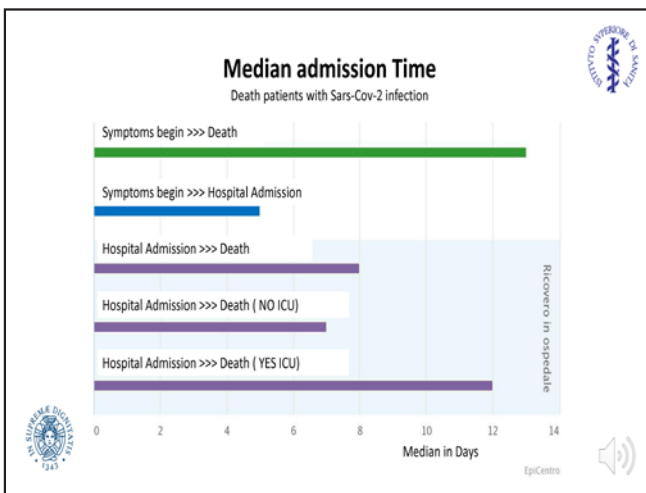
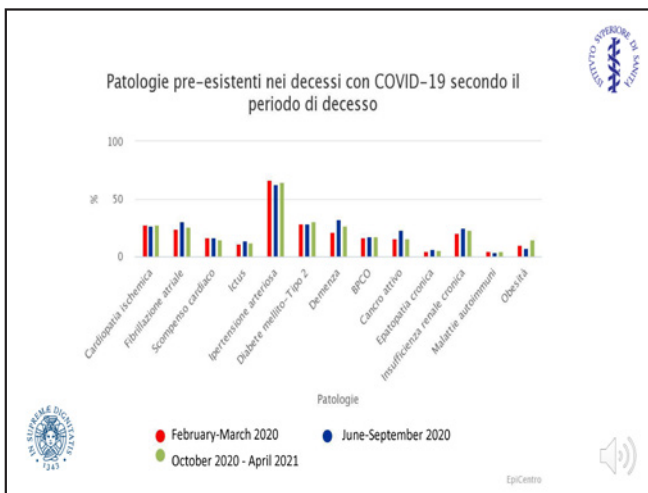
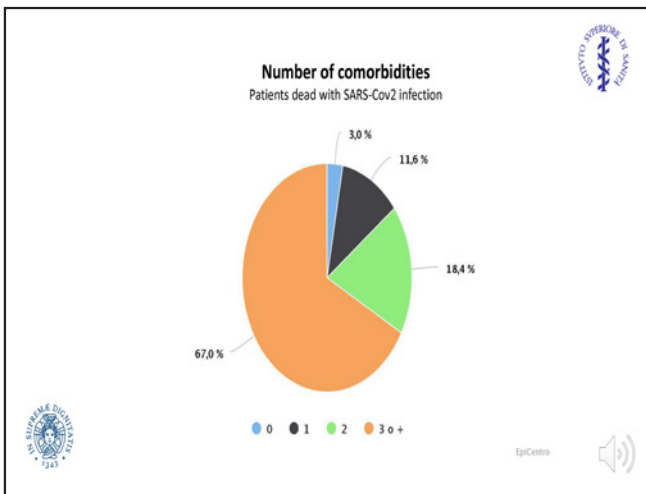
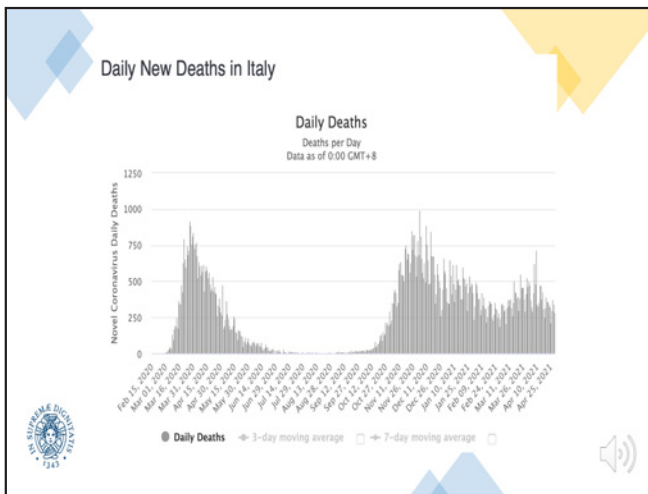
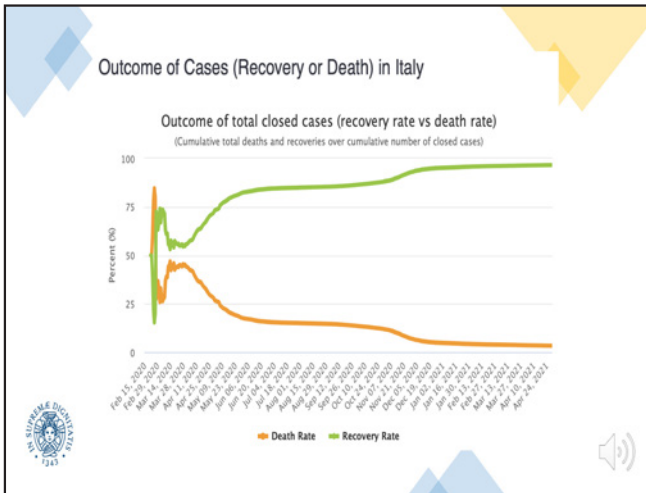
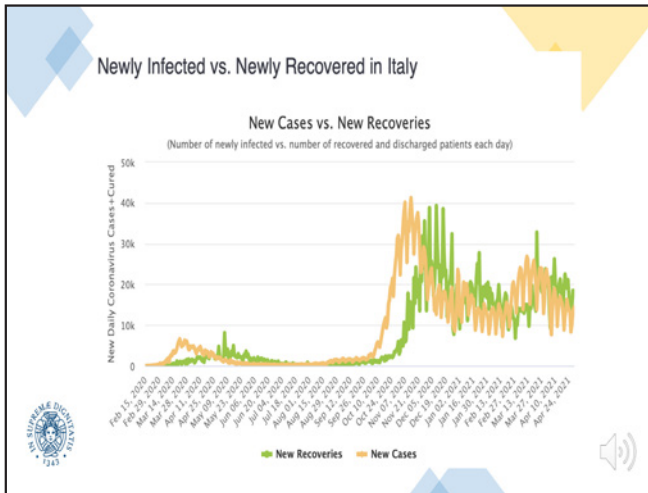


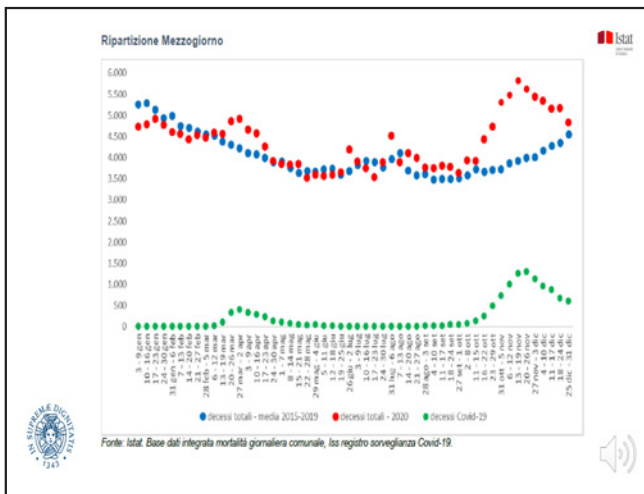
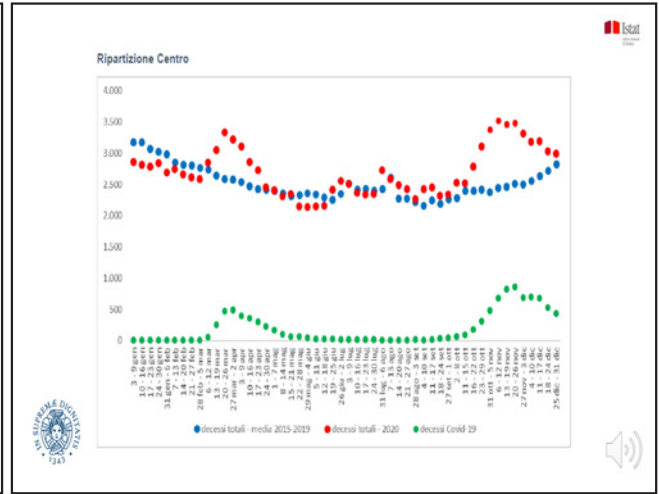
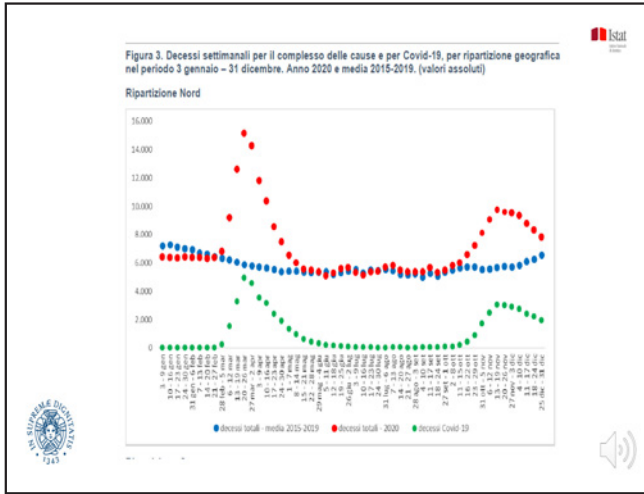
Daily new confirmed COVID-19 deaths

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.







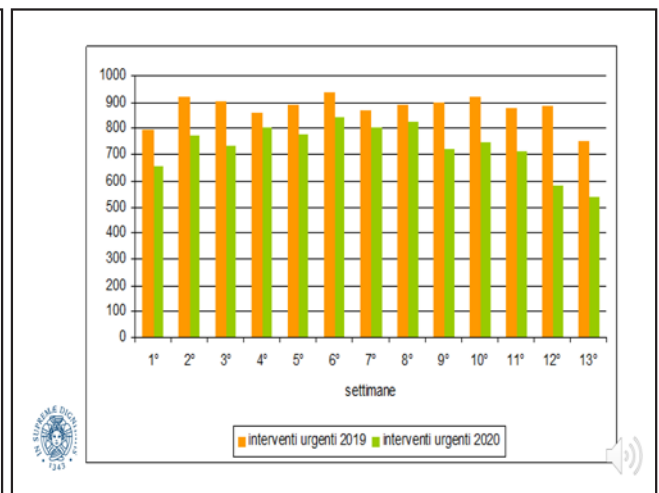
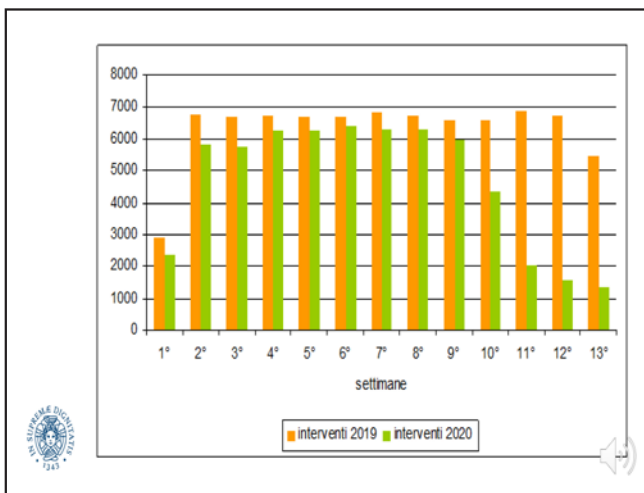


**IMPACT ON SURGERY DURING COVID-19 OUTBREAK IN NORTHERN ITALY**

- CANCELLATION OF SCHEDULED SURGERY**  
Unnecessary surgery should be cancelled in order to increase surge capacity
- SHORTAGE OF BLOOD COMPONENTS**  
Less donations due to containment and fear to get infected
- SHIFT OF SURGEONS TO OTHER AREA**  
Surge capacity needs and decrease of surgical activity shift surgeons to other area
- LIMIT VISITORS TIME**  
Communication system must be set in place to communicate with patients' relatives
- COVID-19 DEDICATED O.R.**  
Need to set up an O.R. for COVID-19 positive patients
- COVID-19 SURGICAL PATHWAY**  
Specific pathway to correctly cohort suspected COVID-19 patients
- POSTOPERATIVE SURGICAL CARE**  
COVID-19 respiratory complications might occur postoperatively

COMMENTARY: Surgery in COVID-19 patients: operational directives

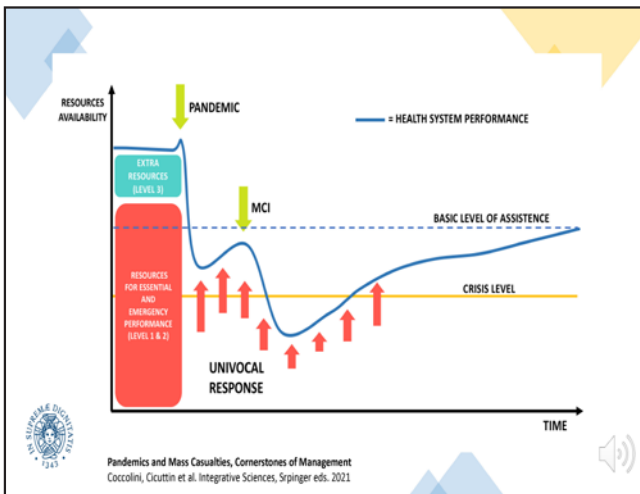
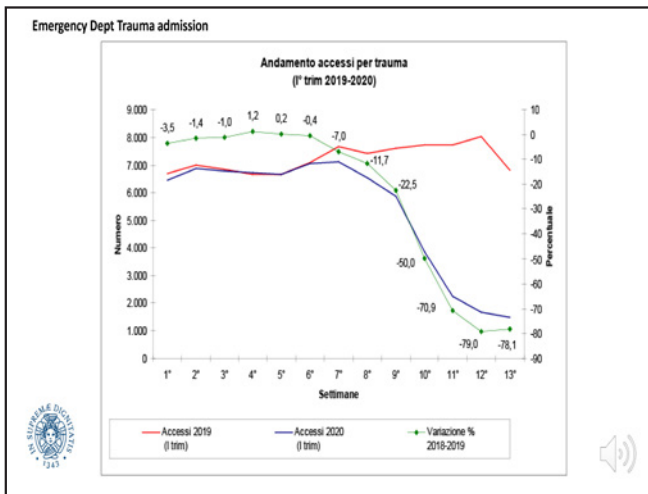
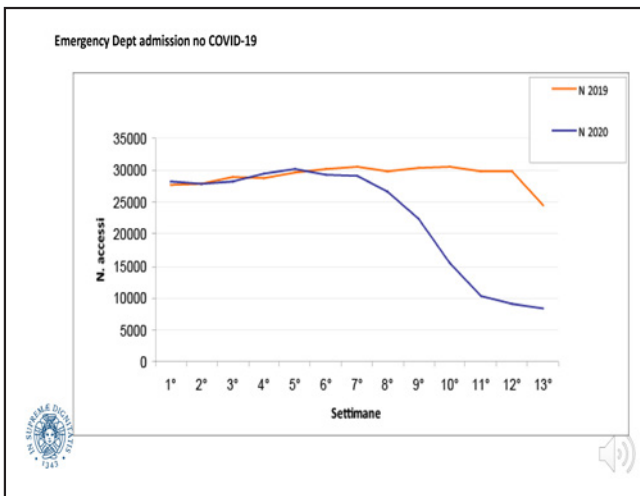
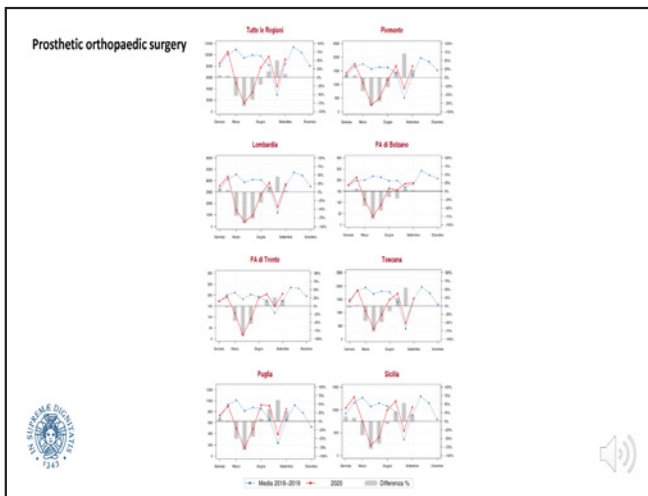
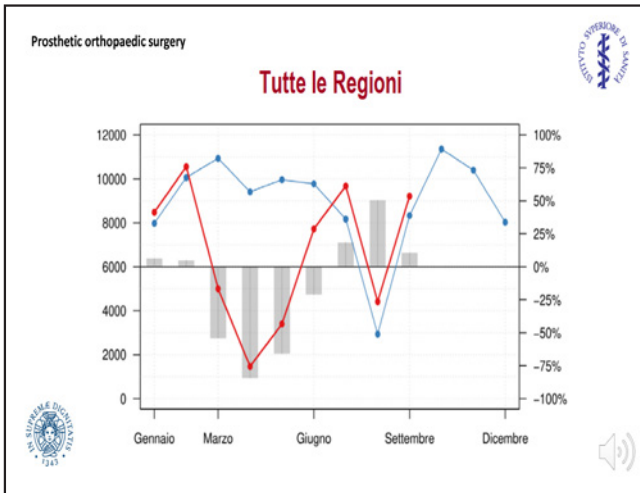
Courtesy of Dr Hayato Kurasa (Milan, Italy)



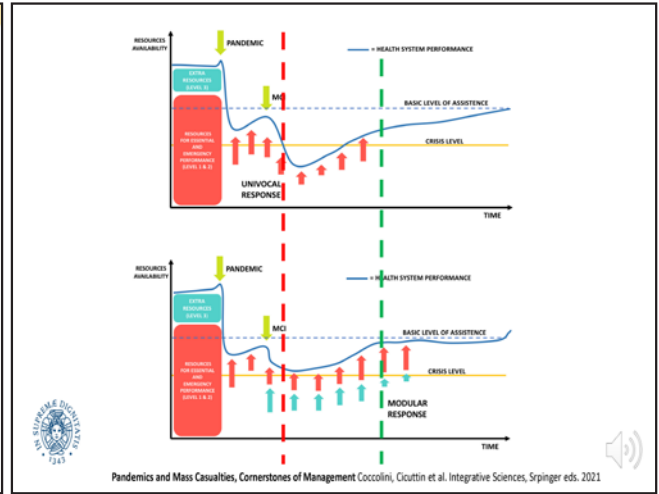
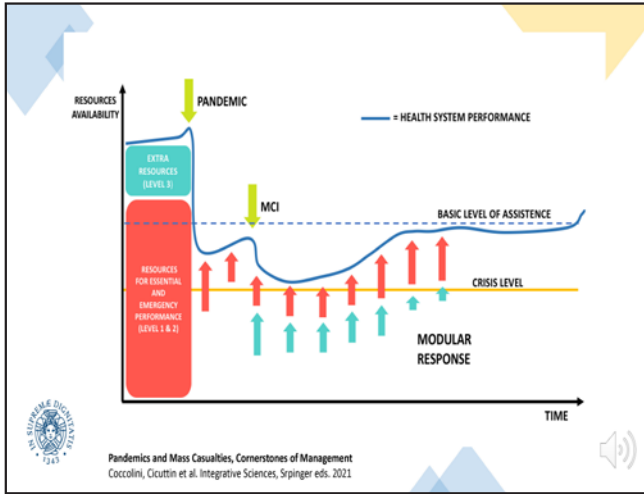


	Interventi in regime programmato 2019	Interventi in regime programmato 2020	differenza	Attesa mediana 2019 [giorni]	Attesa mediana 2020 [giorni]
TM mammella Breast	731	725	-0.8%	28	20
TM colo Colon	321	275	-14%	16	11,5
TM retto Rectum	151	104	-31%	22	17
TM tiroide Thyroid	276	238	-15%	28	27
TM polmone Lung	159	134	-16%	17	16
TM rene Kidney	218	256	+17%	38	35
TM prostata Prostate	301	257	-15%	51	41
TM utero Uterus	157	179	+10%	22	19

Difference between 2019 and 2020







Thank you fo the kind attention

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