Coping with Corona: The role of hospital care structures and capacity expansion in five countries

Mirella Cacace, Jan Böcken, Kristin Edquist, Tanja Klenk, Mario Martinez-Jimenez, Uwe Preusker, Karsten Vrangbaek, Ruth Waitzberg

Discussant – Laia Maynou, PhD

EHPG 21st May 2020

lse.ac.uk/health-policy

Outline

1. Introduction

2. Comments: pre-pandemic

3. Comments: response to pandemic

4. Discussion

1. Introduction

- Very interesting paper – touches on a relevant topic:

Hospital Care Structures and Capacity Expansion

- *Covid-19 perspective: pre-pandemic and response to pandemic*

- Comparative analysis across countries

- Contributes to the literature:

  - hospital care structure, efficiency, resilience and capacity expansion

  - the health system responsiveness in a pandemic (future)

  - international comparisons

1. Introduction

- Hospital efficiency, performance and structure – has been always important (with Covid-19 even more)

- E.g. in the NHS (England) there have been important efforts to improve hospital care and efficiency:

  - DRG system (2004)

  - Competition (patient choice) - 2006

  - Pay for Performance (P4P) – day case, readmissions…

  - Publishing hospital indicators

  - Private sector involvement (2000s)

1. Introduction

- Hospital capacity – pre-pandemic (relevant topic)

- Several papers – most of them looking at number of beds (ratios per population) and workforce– e.g. WHO, 2009

- With Covid-19 – even more important – looking at ICU beds, staff and ventilators (e.g. McCabe et al, 2020; Sen-Crowe et al, 2020 – global comparison)

1. Introduction

Related to Covid-19:

- The topic also of capacity constrains and health outcomes - already some studies looking at this perspective on mortality (e.g. Rocks and Idris, 2020 – the Health Foundation)

- Capacity from beds perspective

- Showing that capacity is linked to lockdown measures

- Higher capacity, lower deaths, but also earlier lockdown measures

1. Introduction

- In the paper – you divide it in pre-pandemic and response to pandemic

- Use several indicators to explain it

- You are aware that you are not capturing everything

- Objective – *"to understand the crisis reaction of five different health care systems during the first wave of the corona pandemic"*

- 5 countries: **Germany, Israel, Spain, Sweden and Denmark** (different systems) and they were hit differently in the first wave

- Why are you choosing them?

- SHI, tax-based systems, private health insurance – more emphasis

2. Comments: pre-pandemic

- *Indicators:*

    - **Hospital care structure:**

        - Beds available and occupied.

        - Workforce: Nurse-to-bed ratio.

    - **Specialisation and concentration**

    - **Intensive care capacities**

    - **Data availability (intensive care)**

2. Comments: pre-pandemic

- *Health care system context before Covid-19 in each country?* - can have an effect on the response

- **Spain** – due to 2008 financial crisis, austerity measures were implemented (2010/2012)

  - Reduction of public healthcare spending by 13%

  - Closure of hospital wards (reduction of beds)

  - Reduction of investment in new equipment

  - Reduction of wages and no replacement of retired workers

  - Non-residents were denied access to healthcare services

  - Co-payment and Privatisation

- Implications in health service quality and access --- also, small effects in health outcomes (Borra et al. 2019)

2. Comments: pre-pandemic

- Present the indicators in several tables and graphs.

- To make it comparable, I suggest a visual representation:

	Germany	Israel	Spain	Sweden	Denmark
Beds available per 1,000/occupancy rate	6%/79.8%	2.2%/93.3%	2.4%/75.3%	2%	2.5%
Nurse-to-bed ratio (Head counts)	0.8	1.1	1.2		3
Specialisation (pulmonary units)	128 (out of 1915)	few	474 (778)	38	10
ICU	33.9	10.3	9.7	5.2	7.8
Data (ICU) – pre-pandemic	Outdated	Outdated	Outdated	Yes	Outdated

3. Comments: response to pandemic

- *Indicators:*

  - **Governance**

  - **Patient pathways**

  - **Hospital capacity expansion**

  - **Increasing intensive care capacities**

  - **Health care personnel**

  - **Alternative / flexible approaches to deliver care**

  - In line with McCabe et al 2020 – Imperial College report

 - You can create a comparison table too

3. Comments: response to pandemic

- I missed some Covid-19 related measures

- These countries were hit differently – so, the number of cases, hospitalisations and deaths are needed

- The response can be different

- Moreover, the policies implemented were also different across countries (full lockdown in Spain vs few restrictions in Sweden)

3. Comments: response to pandemic

Daily new confirmed COVID-19 cases per million people

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

Source: Johns Hopkins University CSSE COVID-19 Data
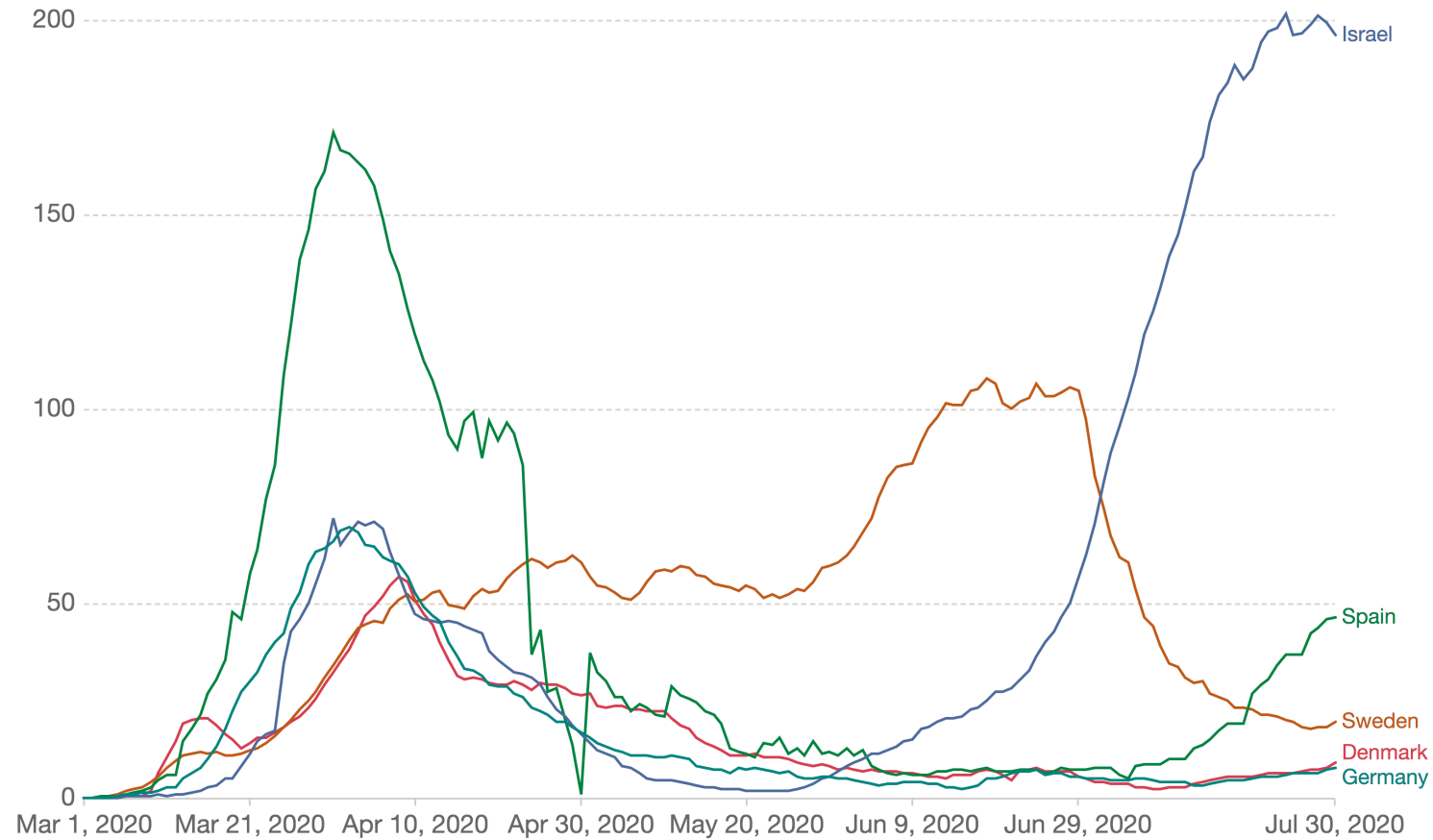
3. Comments: response to pandemic

Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. 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.

Israel
Sweden
Denmark
Germany
Spain
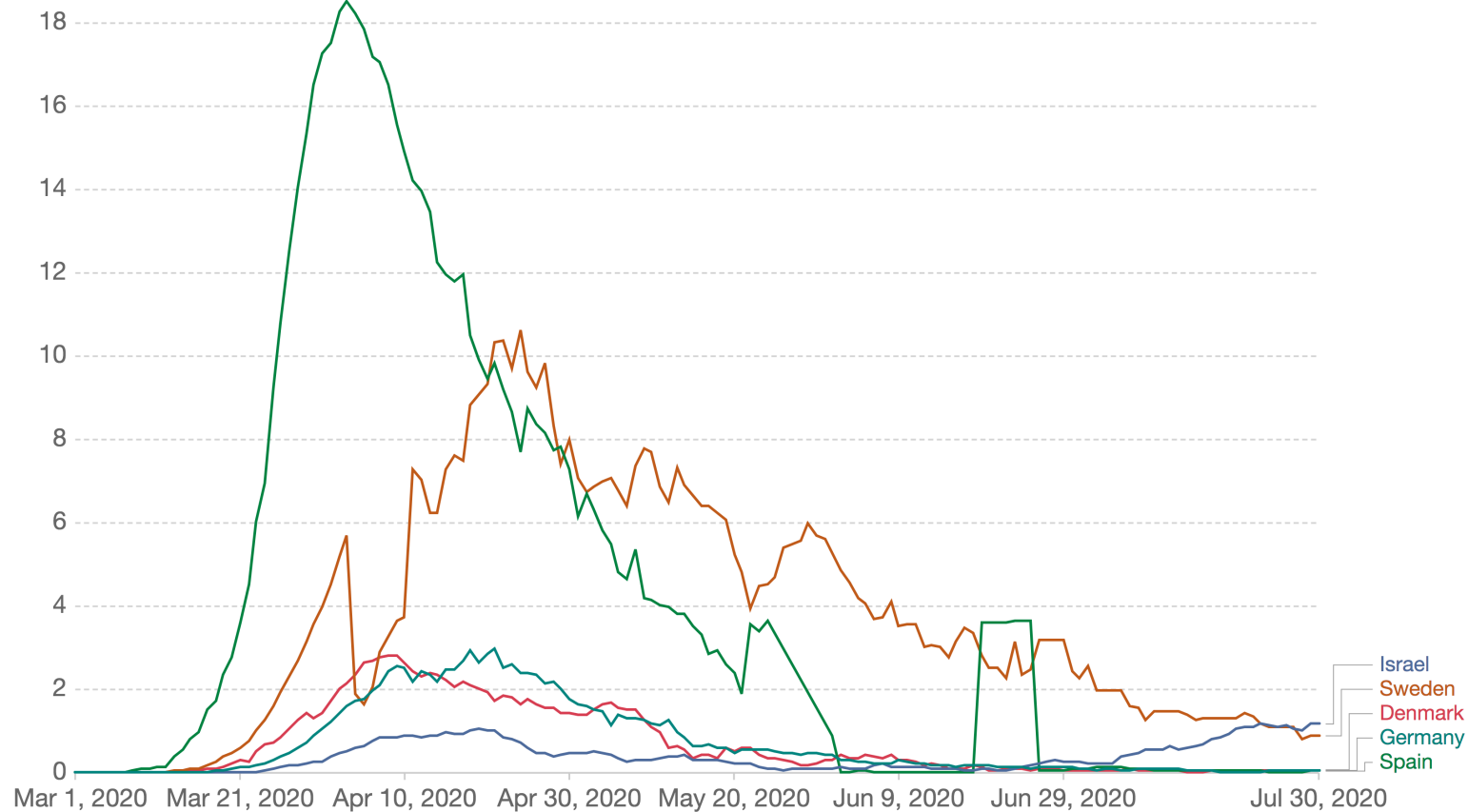
Source: Johns Hopkins University CSSE COVID-19 Data

CC BY

3. Comments: response to pandemic

- Very interesting part – with a lot of information

- Governance and politics – important part of the initial response (centralisation, PPE, face masks, policies)

- Elective surgeries were stopped in most of the countries (Spain too)

- Centralisation: London and Barcelona, some hospitals were only for Covid-19

- Use of private sector to reduce pressure in the public system

- New hospitals – in some cases not used because shortage of workforce or resources

- Care homes management (patients pathway) – Spain badly hit

4. Discussion

1. Learning curve – system and healthcare professionals (know how to treat the patient and effective drugs)

2. 2nd and 3rd wave? Implications of the first one

3. Waiting lists (elective surgery) – backlog. NHS needs 3 to 5 years to catch-up (NHS providers). *Planning future care: routine care + Covid-19 rapid response*

4. Non-diagnosed diseases – consequences?

5. Digital health – telecare, online appointments. Here to stay?

THANKS FOR YOUR ATTENTION

Laia Maynou, PhD

l.maynou-pujolras@lse.ac.uk